

# Up for the Challenge

## Lifetime Fitness, Healthy Decisions



**Health, Fitness, and Nutrition Curriculum**

4-H/Army Youth Development Project

## **Up for the Challenge:**

---

Lifetime Fitness, Healthy Decisions

The *Up for the Challenge: Lifetime Fitness, Healthy Decisions* curriculum is a support piece for the Army Child & Youth Services Program. The material is based upon work supported by the 4-H / Army Youth Development Project, a partnership of the U.S. Army Child & Youth Services and National 4-H Headquarters, Cooperative State Research Education and Extension Service, U.S. Department of Agriculture and the University of Maryland Extension, under special project number [2004-48606-03085](#).

This curriculum comes with a Resource Kit containing food models, posters, pedometers, fat and muscle models, music CD, yoga videotape, handwashing storybook, and arts and craft materials. This does not imply Army endorsement of these products or the vendors thereof. Army CYS staff should use their discretion in substituting or replacing these items.

Copyright 2006 AMWRF. All rights reserved. Photocopying or reproduction strictly prohibited except within the Department of Defense and National 4-H.

## Acknowledgements

Project Director	Debra Bowman, PhD, Extension Specialist, 4-H Youth Development, Volunteer Development, Maryland Cooperative Extension
Assistant Project Director	Rebecca Davis, Extension Educator, 4-H Youth Development, Maryland Cooperative Extension
Principal Authors from the Maryland Cooperative Extension	Cassandra Corridon, Extension Educator, Family & Consumer Sciences Rebecca Davis, Extension Educator, 4-H Youth Development Karol Dyson, Extension Educator, 4-H Youth Development Dianne Miller, Extension Educator, Family & Consumer Sciences
Contributing Authors from the Maryland Cooperative Extension	Laurie Morris, Extension Educator, 4-H Youth Development Sandi Roberts, Extension Education, 4-H Youth Development
Designer and Editor	Darcy Richards, The Creative Field, Frederick, MD
Army Project Leads	Donna M. McGrath Deb Marple
Army Content and Editorial Review Board	Darrin Allen Virginia Brown Nancy Campbell Kevin Montgomery Joan Resau
Special thanks to:	M.-A. Lucas, Director, Army Child & Youth Services Sharon K.B. Wright, National Program Leader Cooperative State Research, Education, and Extension Service 2005 Maryland 4-H Operation Military Kids Home Front Challenge Camp Kim West, Faculty Extension Assistant, 4-H Youth Development, Operation: Military Kids Program Coordinator and Camp Director Denise Frebertshauser, Extension Specialist, 4-H Camping and Environmental Sciences Program and Camp Evaluator

## **Up for the Challenge:**

---

Lifetime Fitness, Healthy Decisions

## Contents

Introduction .....	9
Chapter 1 Back to Basics .....	17
Lesson 1: Get in the Movement Groove .....	18
(School Age) .....	18
(Middle School • Teen) .....	22
Lesson 2: MyPyramid: The Beginning Challenge .....	26
(All Ages) .....	26
Lesson 3: The Importance of Good Hygiene .....	29
(All Ages) .....	29
Lesson 4: In Beat - The Heartbeat .....	33
(School Age) .....	33
(Middle School • Teen) .....	37
Lesson 5: Think Your Drink .....	40
(All Ages) .....	40
Lesson 6: Muscle Mania - Move it or Lose It .....	46
(All Ages) .....	46
Lesson 7: Picking Protein .....	51
(All Ages) .....	51
Lesson 8: Flexibility is Fabulous .....	56
(School Age) .....	56
(Middle School • Teen) .....	59
Lesson 9: Eating Rainbows .....	60
(All Ages) .....	60
Chapter 2 Healthy Decisions For Living Well .....	67
Lesson 1: Body Image .....	68
(Middle School • Teen) .....	68
Lesson 2: Calories In - Calories Out .....	72
(School Age) .....	72
(Middle School • Teen) .....	77
Lesson 3: Do You See What I See? .....	81
(School Age) .....	81
(Middle School) .....	84
(Teen) .....	86
Chapter 3 Fueling the Body .....	90
Lesson 1: Nutrient Knowledge .....	91
(All Ages) .....	91
Lesson 2: Break It Up – Breakfast First! .....	96
(All Ages) .....	96
Lesson 3: Snack Attack .....	100
(All Ages) .....	100
Lesson 4: Rainy Brainy .....	105

## Up for the Challenge:

Lifetime Fitness, Healthy Decisions

---

(All Ages).....	105
Lesson 5: Vegetarianism In A Nutshell .....	110
(School Age) .....	110
(Middle School • Teen) .....	113
Lesson 6: The Truth About Vitamins, Steroids, & Supplements .....	115
(School Age) .....	115
(Middle School).....	118
(Teen).....	122
Lesson 7: Energy Drinks and Foods .....	126
(School Age) .....	126
(Middle School • Teen) .....	130
Chapter 4 Consumer Challenge .....	136
Lesson 1: Selling or Telling .....	137
(School Age) .....	137
(Middle School • Teen) .....	141
Lesson 2: If The Shoe Fits .....	143
(School Age) .....	143
(Middle School • Teen) .....	146
Lesson 3: Which Sport, Which Shoe? .....	150
(All Ages).....	150
Lesson 4: Label Lingo .....	153
(All Ages).....	153
Lesson 5: Media Mania.....	158
(All Ages).....	158
Lesson 6: Eating Out .....	162
(All Ages).....	162
Lesson 7: New And Unusual Foods.....	168
(All Ages).....	168
Lesson 8: It's All About Size .....	171
(All Ages).....	171
Chapter 5 Activity for Life.....	176
Lesson 1: Walk Your Way To Fitness .....	177
(All Ages).....	177
Lesson 2: Let's Play Outside .....	183
(All Ages).....	183
Lesson 3: Jump Into Fitness .....	186
(All Ages).....	186
Lesson 4: Dancing For All Seasons.....	193
(School Age) .....	193
(Middle School).....	197
(Teen) .....	200
Lesson 5: Cooperative Play .....	203
(School Age) .....	203

## Up for the Challenge:

Lifetime Fitness, Healthy Decisions

(Middle School • Teen) .....	205
Lesson 6: Planning A Wellness Event .....	207
(All Ages).....	207
Appendix A Handouts .....	210
Using MyPyramid In Your Life – Children And Youth .....	211
Pyramid Kabobs.....	215
Heart Rate Log .....	216
Can You Guess How Much Fat Is In Each Cup Of Milk? .....	217
Three Fruit Drinks: Fruit Juice Spritzer, Juice Float, Power Me Up Smoothie .....	218
Make Your Own Yogurt.....	219
Ice Cream Personality Test .....	220
How Much Meat And Beans? .....	221
Let's Try Lentils .....	222
Fresh Spinach And Cilantro Salad .....	223
Kidney Bean And Tuna Salad .....	224
Good For You And Good Too Bean Tacos .....	225
Veggie Plant Parts .....	226
You Can Eat A Rainbow.....	227
Rainbow Fruit Kabobs .....	228
Crunchy Vegetable Burrito Banditos .....	229
Helping Terry .....	230
Calories Burned During One Hour Of Exercise.....	231
Famous Person Body Chart – Youth Perceptions .....	239
Eating Disorders Fact Sheet.....	240
Measure Your Frame Size Ruler .....	242
Sample Label for Macaroni and Cheese.....	243
The Big 6 .....	244
Pyramid Salsa.....	245
Building Better Breakfasts .....	246
Four Fun Breakfasts .....	247
Banana Split Cereal .....	248
Pyramid Pita Pizza .....	249
What Are Whole Grains? .....	250
Making A Model Of The Digestive System .....	251
How Many Grains? .....	252
Bread In A Bag .....	253
Tacos .....	254
Hummus.....	255
Losing Meat, But Keeping a Child's Diet Balanced.....	256
Where's the Beef? .....	260
Homemade Sports Drink .....	266
Identifying The Parts Of A Shoe.....	267
Can You Label The Shoe Parts? .....	268
Buying Shoes: Construction, Fit/Comfort, And Price .....	269

## Up for the Challenge:

Lifetime Fitness, Healthy Decisions

---

Shoe Part Definitions .....	271
Athletic Shoe Situations .....	272
Working On The Macaroni and Cheese Label .....	273
Label Scavenger Quest .....	274
Trans Fat Worksheet .....	275
Advertising Sells! .....	276
Ten Tips For Choosing Healthier Food When Eating Out .....	277
Fast Food - Line 'Em Up .....	278
Toaster Oven Pizza .....	279
Clarifying Menu Muddle .....	280
New Foods Taste Test .....	281
Portion Control: Sizing It Up! .....	282
A Measured Serving .....	283
Goal Setting Worksheet – School Age Youth.....	284
Goal Setting Worksheet – Middle School and Teen .....	285
Progressive Walking Marathon Log.....	286
Appendix B Resource Kit .....	288
Index .....	290



# Introduction

## A Growing Nation

The American population often makes unhealthy decisions concerning physical activity, health, and nutrition. These decisions occur in all communities and people of all ages. The result of these choices is that 67% of the population is overweight.

According to the Surgeon General, Health and Human Services, being overweight is a risk factor for health conditions seen more frequently in children such as increased blood pressure (hypertension), Type II diabetes, increased total cholesterol, insulin resistance, sleep apnea, bowed legs, joint problems, back pain, early puberty, depression, anxiety and weight cycling. These problems often stay with those who are overweight throughout their lives.

The National Health and Nutrition Examination Studies (NHANES) took a comprehensive look at USA health and nutrition beginning in the 1960's, using large samples of Americans. NHANES reported that today 15% of American youth are overweight. That is *nine million* youth. This percentage is even higher among minority youth populations.

Children who are properly nourished and physically fit are more likely to be active in their school classrooms and achieve higher standardized test scores. Unfortunately, we find that youth are increasingly sedentary. They often engage in entertainment that is technology-driven and requires little physical exertion.



Physical education may be limited or nonexistent in many schools. Many children eat too many processed foods containing too much sugar and fat for their health. According to the American Diabetes Association, around 20% of the total daily calorie intake for youth comes from snacks. Unfortunately, today's popular snacks have less calcium and more calories and fat than ever before.

## Strengthening Fitness and Health

To address these concerns, Army Child & Youth Services is strengthening the baseline programming for Sports, Fitness and Health activities. The result is a new curriculum called: *Up for the Challenge: Lifetime Fitness, Healthy Decisions*. This document is the Instructor Guide for Sports Directors in the Child & Youth Services programs. It will be used to deliver a curriculum for enhancing fitness and health outreach activities for all youth in the program.

Changes in family roles can leave youth preparing their own meals, and increasingly, acquiring food outside the home. The Child & Youth Services program has an exciting opportunity to create positive change in youth fitness and nutrition with an experiential educational program. *Up for the Challenge* provides learning that is specific to a child's individual needs and goals within a non-competitive setting. The curriculum follows a 4-H model that is structured around direct participation: experiencing, thinking, discussing, and applying what they've learned to their daily lives.

Parents know the eating and health habits of their children and the challenges youth face in the Army community. They can also be the most effective teachers and advocates of behavior changes in their children. Sports directors face a challenge informing families about how they

can get involved to support this curriculum and help their children develop healthy lifestyles. The Sports Director will need to develop an outreach strategy that realistically accounts for time pressures and job responsibilities of these Army families.

This curriculum is designed to answer four key questions:

- How can we help children and youth shift to healthier habits that can last a lifetime?
- How can we prevent eating problems and overweight youth?
- How can we reduce sedentary time by building physical activity into a child's or youth's day?
- How can we help each child and youth to be healthier at their current size?



*Up for the Challenge* takes a wellness approach -- encouraging youth to be active and make healthy decisions throughout their lifetime. There is no need for alarm, blame, or criticism. Wellness is not about perfection or achieving certain numbers. It is much more than warding off disease or avoiding discomfort. Wellness, in this curriculum, encompasses a youth's:

- Overall health and well-being, including physical, mental and social well-being, and not merely the absence of disease or infirmity
- Ability to combine physical, mental, and emotional health in a positive relationship with family and community
- Quality of life and the joy of living well

Directors and their staff need to be role models for the youth. Staff wellness initiatives can increase changes in youth, program wide.

## Up for the Challenge Objectives

The objective of this curriculum is to provide Sports Directors with tools to create an educational experience that allows them to:

- Assess youth's personal goals
- Plan physical activities for youth, especially those not athletically inclined
- Eliminate practices that may humiliate youth
- Incorporate other related curriculum such as the Boys and Girls Club of America's Triple Play<sup>1</sup> into programming
- Provide a variety of healthy choices: lifestyle, eating, and physical activity
- Provide developmentally appropriate nutrition concepts
- Model positive, simple, consistent nutrition and physical activity messages
- Focus on knowledge and skills to make healthy personal decisions

-----  
<sup>1</sup> Triple Play is an initiative of the Boys and Girls Clubs of America. Its aim is empowering young people to make informed decisions about their physical, emotional and social well-being.

- Teach self management skills for monitoring goals
- Teach cooperation, fair play, responsible participation and the joy of being active
- Promote and encourage healthy lifestyles through activities

*Up for the Challenge* lessons include fitness, nutrition, and health curriculum for each of three age groups: School Age - Kindergarten to 5<sup>th</sup> grade; Middle school – 6<sup>th</sup> to 8<sup>th</sup> grade; Teen - 9<sup>th</sup> grade and older. The five chapters in this curriculum are:

Chapter 1 – Back to the Basics

Chapter 2 – Healthy Decisions for Living Well

Chapter 3 – Fueling the Body

Chapter 4 – Consumer Challenge

Chapter 5 – Activity for Life

Each lesson provides expected youth outcomes, instructor essential information, preparation instructions, supplies, lesson time, handouts, and opportunities for reflection. Also included are activities for youth to do outside the Center. These activities encourage support from a parent, caring adult, or sibling. Each lesson has at least one Technology Challenge to apply the lesson to another situation. Instructors should consider the lessons in this Instructor Guide to be just the beginning in creating a wellness program that is fun and interesting for youth and staff.

## Defining Wellness

Wellness is like a tripod. It works best if all legs are equally balanced. Wellness is achieved when the mind and body work together to make decisions that benefit the whole. The three legs are: physical activity, good nutrition, and healthy lifestyle choices. The *Up for the Challenge* curriculum provides Sports Directors and youth educators with information to help children make healthy choices in all three areas. The mission of 4-H is to develop life skills in youth. Through participation in activities, lessons, discussions and application of ideas presented in the *Up for the Challenge* curriculum, youth will develop their technical, communication, social and leadership skills to become healthier, more productive citizens.



### PHYSICAL ACTIVITY

Physical activity is important for youth. The United States Department of Agriculture 2005 Dietary Guidelines recommend that children and teenagers get 60 minutes of moderately intense physical activity on most days to help control weight, build muscular strength, achieve aerobic fitness (heart and lung capacity), increase bone mass through weight-bearing activities, reduce stress, and build self-esteem. That may sound like a lot, but this hour of moderate-level activity does not have to be completed at one time. For example, a 10-year-old child might achieve this goal in one day by walking the dog for 15 minutes, playing soccer for 30 minutes, and running and jumping on the playground for 15 minutes. Broken out this way, it seems easy and natural.

This curriculum includes three types of physical activity:

- **Aerobic or cardiovascular** - Aerobic activity increases the heart and breathing rates and burns calories. Examples of aerobic activities include walking at a brisk pace, competitive soccer, or basketball, bicycling or swimming.
- **Strength training and weight-bearing** – This type of activity helps to build strong bones and muscles by working the musculoskeletal system against gravity or weights. Examples of weight-bearing or strength-building exercises for children include rope climbing, pull-ups, push-ups, walking, running, and typical playground activity. Weight training is not recommended for youth before puberty.
- **Flexibility and balance** - These activities reduce the risk of injury and should be incorporated into every moderate or vigorous activity, particularly as a warm-up and cool-down. Examples of flexibility exercises include stretching, yoga, and martial arts.



Ideally, children should have a combination of these types of activities throughout the week. After school programs can provide an informal, safe environment to support daily physical activity.

## NUTRITION

American children have an abundance of different kinds of foods available to them. Nutrition education provides knowledge and skills to allow youth to make healthy choices throughout their lives regarding which types, and how much food to eat.

Studies have found that up to two-thirds of adolescent girls and over one-third of adolescent boys are dissatisfied with their body shape and weight. These youth are at a greater risk for eating disorders and need positive body and food related experiences to help them feel good about themselves and others.



The United States Department of Agriculture presents new nutrition guidelines in the *MyPyramid* Plan. The plan reports that “One size doesn't fit all.” Youth and adults can use this guide to assess their physical activity level and then choose foods in amounts that are right for them.

The *Up for the Challenge* curriculum provides experiences to help youth:

- Make smart choices from every food group
- Find a balance between food and physical activity
- Get the most nutrition for the number of calories consumed

## HEALTHY LIFESTYLES

Youth lifestyle choices reflect their culture, family, community, peer, and personal values. Ultimately, they will be able to use their knowledge and experience to create their own values for healthy choices. A willingness to work toward wellness sometimes begins with an experience that gives youth a reason to change.

The Centers for Disease Control and Prevention (CDC) lists six categories of health-risk behavior in youth:

- Insufficient physical activity
- Poor diets
- Behaviors that result in injuries
- Alcohol and other drug use
- Sexual behavior resulting in HIV infection, other STDs, and unintended pregnancies
- Tobacco use

The *Up for the Challenge* curriculum focuses largely on the first three risk behaviors with specific fitness and nutrition lessons. The curriculum addresses the other risk behaviors indirectly by advocating healthier lifestyle decisions, which may help youth to resist “at risk” behaviors. Instructors who need to address some of the other high risk behaviors for youth 8 to 12 years old, can look at other curricula such as the National 4-H Council *Health Rocks*.

## Experiential Learning

An active learning format requires the instructor to be prepared, enthusiastic, and knowledgeable. The instructor must consider the needs of the youth as they move through the activity – matching the time allotted with the pace of actual learning. Instructors must be watchful and safety-conscious as the youth engage in the learning activities.

The *Up for the Challenge* instructional format is based on the *4-H Experiential Model* of learning which enables students to “Learn by Doing.” The *4-H 101* curriculum provides extensive resources and explanations for experiential learning. The foundation of experiential learning makes active hands-on learning more effective with these components:

- **DO** Start with a common experience that is age-appropriate to the learner and can be explored without showing and telling exactly how or what to do.
- **REFLECT** Reflect on what was done. An easy way to share the results, reactions and observations with others through discussion is to “Think, Pair and Share.” This provides the youth a structure in which they think about what they experienced, come together with others to discuss what happened, and finally to analyze the experience and reflect in a group setting.
- **APPLY** Take the learning and apply it to another situation. Through questions and activities, youth connect the learning experience with real life examples. They make generalized assumptions and draw conclusions. They apply the skill or knowledge learned to a decision or situation. This teaches them to take action when needed.

## Develop a Wellness Team

You are encouraged to develop a wellness team with internal and external partners to support the curriculum. This partnership should include youth and adults. Involving others will enrich and extend the curriculum beyond the written activities, providing additional diverse knowledge, skills, resources, facilities and opportunities.

Examples of partners could include Community Volunteer Coordinator, School Age and Youth Program Manager, Training and Programming Specialist (TAPS), Army 4-H Club Youth, Youth

Councils, Military Spouses Club, Youth Education Support Specialist, registered nurse, dietician, Extension Educator, Boys and Girls Club Contact, teachers, parents, and many more in the Army and civilian communities. These members can help others understand the importance of nutrition education and fitness to improve the health of youth in the community.

Providing youth with program ownership will improve their acceptance, and participation. It will also encourage others to participate. Members can be a source of new ideas, be a champion of change, information exchange, resource development, and support to the program.

## Risk Management

This program is designed to include all youth. All Army Child & Youth Services programs require the instructor to be aware of physical, mental, emotional, behavioral, and dietary restrictions among the youth in their care. If youth have any of these restrictions, instructors need to follow recommended procedures for youth with restrictions to provide a safe and healthy environment for learning. This may require that the instructor gather information about their special needs and make accommodations before each program.

## CHARACTER COUNTS!<sup>2</sup>

Modeling good character is important. Instructors need to teach character as it relates to the *Six Pillars of Character*. They are: Trustworthiness, Respect, Responsibility, Fairness, Caring and Citizenship. When we talk about being a person of character, we refer to how that person treats others. Yet, when we talk about fitness and making healthy choices, it is important to consider that these personal choices also reflect good character.



There are many ways to include the Six Pillars in the *Up for the Challenge* lessons. Each of the Six Pillars relates to instructional activities in these ways:

1. **Trustworthiness** – A trustworthy person has integrity. Integrity is best shown when our actions follow what we know is right. In this instance, we know that exercise and eating healthy foods is best for our bodies. Good character is modeled when we match that knowledge with the actions of eating right and exercising.
2. **Respect** – Part of being respectful means being considerate of others. Always encourage youth to live a healthy lifestyle. Never judge or criticize those who are struggling with eating or exercise issues. We also need to respect our bodies by eating appropriate foods and exercising regularly.
3. **Responsibility** – Being responsible means we do what we are supposed to, keep trying, always do our best, use self-control, be disciplined, and think before we act. This pillar is particularly important in nutrition and fitness. Wanting to maintain a certain image, using

-----  
<sup>2</sup> CHARACTER COUNTS! <sup>SM</sup> and the *Six Pillars of Character* are service marks of the CHARACTER COUNTS! Coalition, a project of the Josephson Institute of Ethics. See <http://www.charactercounts.org>.

illegal substances to fit in with a certain crowd, or “making” or “cutting” our weight for our favorite sport, can cause us to practice unhealthy, dangerous, or illegal habits. The responsibility to maintain a healthy body is far more important than looking a particular way, participating in a specific sport, or being a part of the “in group.” Make sure your success is achieved in a responsible way.

4. **Fairness** – Being fair means playing by the rules, listening to others, and not taking advantage of others. Fairness is about knowing and understanding the standards and then following them. We need to be fair to our bodies by not overindulging in some foods while neglecting others that are good for us. We can be fair to our bodies by getting enough exercise, and by not abusing our bodies with too much exercise.
5. **Caring** – Keeping healthy shows those who care for you that you also respect and care for them. Show others you care by encouraging them to live healthy lives too. Suggest that you exercise together and share a healthy snack with them.
6. **Citizenship** – Doing your share, cooperating, obeying laws, and rules and respecting authority demonstrates the pillar of citizenship. Show your citizenship by being a contributing and supportive part of the group. Respect those who share their knowledge and give you advice on staying healthy.

## Notes to Instructors

There are many web site references in *Up for The Challenge* in the Technology Challenge sections and in other lesson components. Although all the web site addresses were checked at the time of publication, web sites frequently move, change, or disappear.

Instructors should check any web sites to be used in a lesson before directing youth to go there. If a web site is no longer available, the instructor may find a substitute and note it in the guide.

## LESSON COMPONENTS

Each lesson includes one or more of the following components:

- Preparation (Set Up, Supplies, Handouts & Books)
- Outcomes
- Instructor Essential Information
- Discussion
- Activities
- Now We’re Cookin’
- Reflect
- Apply
- Technology Challenge

Lesson components may be broken out by age groups. Or, one or more age groups may be combined. Each lesson has one or more Outcomes sections describing the objectives for that lesson.



Lesson Outcomes are also marked with age group icons as follows:



All Ages



School Age





Middle School



Middle School • Teen



Teen

Most of the handouts used in the lessons can be found in Appendix A and will be indicated with an  symbol. Others can be downloaded from the web or found in the Resources Kit that accompanies this instructor guide. Whenever resources such as videos, books and supplies are included the accompanying Resource Kit, the resource will be indicated by an  symbol. Resource Kit contents are listed in Appendix B.

In the Preparation column, the instructor will find a description of how to get ready for the lesson. It includes:

- Preparation time
- Supplies
- Handouts & Books (also recipes, charts, and brochures)
- Set Up
- Facility

Instructors should review each lesson in its entirety before teaching to be sure to include all the lesson components for a specific age group. For some lessons, the class will benefit by having older children and youth get involved in setting up and leading some of the activities.

The duration and intensity of exercises in fitness lessons may need to be adjusted to accommodate different fitness levels of youth. The instructor should always provide water breaks during these activities. The breaks should be more frequent in warm weather.



# Chapter 1 Back to Basics

## Introduction

Chapter 1 introduces best practices in the areas of eating and exercising. It makes extensive use of *MyPyramid* as the basis for choosing the types and amounts of foods eaten. Youth learn how to create a healthy diet by learning the daily requirements for each food group. Back to Basics is designed to acquaint youth with these exercise fundamentals: warm-up, aerobic activity, and cool-down. A variety of activities are used to illustrate these types of physical exercise.

One of the most critical lessons in maintaining overall good health is The Importance of Good Hygiene. Youth learn proper handwashing and how often it is needed during ordinary daily activities.

Instructors will find both nutrition and physical activities marked specifically for each age group. Frequently the Middle School and Teen groups are combined. The lesson includes discussions and activities to do outside the Center, which helps to reinforce the learning.

## Lesson Summary

- |  |           |
|--|-----------|
| 1. Get in the Movement Groove - Introduction to Physical Activity  | Fitness   |
| 2. MyPyramid - The Beginning Challenge - Introduction to Nutrition | Nutrition |
| 3. The Importance of Good Hygiene                                  | Nutrition |
| 4. In Beat - The Heartbeat   | Fitness   |
| 5. Think Your Drink  | Nutrition |
| 6. Muscle Mania: Move it or Lose It                                | Fitness   |
| 7. Picking Protein   | Nutrition |
| 8. Flexibility is Fabulous   | Fitness   |
| 9. Eating Rainbows   | Nutrition |

## Lesson 1: Get in the Movement Groove

### Introduction to Physical Activity


#### PREPARATION

🕒 5 minutes

#### SET UP

- ❑ Before lesson begins, set up easel or use walls to hang self-stick easel paper
- ❑ Set up CD player
- ❑ Have youth sit in semi-circle around easel or wall

#### SUPPLIES

- ❑ Easel and markers
- ❑ Laminated Activity Pyramid 
- ❑ CD player
- ❑ A variety of upbeat and relaxing music
- ❑ Jump ropes, balls, hula-hoops, etc.

#### Outcomes (School Age)

The purpose of this lesson is to have the children:

- Explore the benefits of exercise
- Identify why participation in exercise/physical activity is important
- Share activities they can do with friends and families
- Understand the three types of physical activity
- Participate in a warm-up and cool-down activity
- Participate in a cooperative physical activity



#### Discussion

DO (School Age) 🕒 10 minutes

? Ask: Why is physical activity good for you? Use an easel to record answers. Have children share ideas. Possible answers: stronger bodies, better at sports, staying healthy, disease prevention, feel better.

? Ask: What physical activities do you do on a regular basis? Examples: dance, tumbling, soccer, T-ball, walking the dog, swimming, playing outside.



Talk about the importance of warming up/cooling down muscles before beginning exercise. It reduces risk for injury during strenuous activities, and increases flexibility and balance.

Explain that there are three kinds of exercise and describe how they benefit your body. Give examples of each. Use the Activity Pyramid to illustrate these examples.

- Exercise that increases heart and breathing rates (aerobic). Aerobic activity makes your heart, lungs, blood vessels and muscles stronger. Examples: running, fast walking, jumping rope, or swimming.
- Exercise that builds strong bones and muscles (strength training). Examples: push-ups, chin-ups, sit-ups, rope climbing, running or jumping.

## Lesson 1: Get in the Movement Groove

### SET UP

Set up CD player

### SUPPLIES

- CD player
- A variety of upbeat and relaxing music



- Exercise that stretches muscles, tendons and ligaments (flexibility) to improve balance and reduce injury. Examples: martial arts, yoga, dance, and stretching.

### Activity 1 - Warm-Up, Aerobics, Cool-Down

**DO** (School Age) ⌚ 25-30 minutes

This is a three-part activity. The children will participate in a warm-up activity, an aerobic activity, and a cool-down activity.

**Instructor Note:** The duration and intensity of the exercises in this lesson may need to be adjusted to accommodate different fitness levels of the children. The instructor should always provide water breaks during these activities. The breaks should be more frequent in warm weather.

#### WARM-UP ⌚ 5 minutes

Have the children stand in a large circle with plenty of room around each child to allow for movement. Tell children that they will be playing a game called Move to the Music. Explain that when the music starts you will give a command to start walking in a circle or marching in place. Tell them that when the music stops they need to stop and listen to instructions.

Tell the children to find a partner. Explain that they are to match the body parts you call out with their partner. For example, if you call out "sole of foot to sole of foot," they might face each other with one foot up touching their partner's foot. Or "elbow to knee" would allow one child to bend down and touch the other elbow to a partner's knee. Select body parts that require the children to stretch.

After the children have completed the matching portion of the exercise, start the music again and have them begin walking in a circle or in place. Continue stopping and starting the music and calling out body matching commands until the children have been active for at least five minutes.

You can increase the intensity of the warm-up activity by having the children skip, walk quickly, jump or jog between commands.

#### AEROBICS ⌚ 15-20 minutes

In this part, the children will play Make A Game<sup>3</sup>. Divide them into groups of four. Set out several pieces of play equipment such as jump ropes, hula-hoops, balls, scarves, etc.

## Lesson 1: Get in the Movement Groove

Have each group pick two to three pieces of equipment. Give each group 3-5 minutes to create a game or activity involving the whole group, and using each piece of equipment.

Tell the children that each member of the team must be an active participant in the game or activity that their group invents.

Have each group demonstrate their activity to the larger group. Remember, the purpose of this activity is to get the children moving in a cooperative environment.

### COOL-DOWN 🕒 5 minutes

In this part of the activity, the children will stretch and relax to music. Set up the CD player and play relaxing music.

Have the children gather in a large circle. Explain that they will be cooling down their muscles. Tell them that after strenuous activities, they need to give their bodies a chance to recover. Have them first stretch one arm to the ceiling, pushing their arm higher and higher. Repeat with the other arm.



Have the children stretch both arms, lifting them higher and higher, holding the stretch for at least 15 seconds. Next, have them sit on the floor with their legs stretched forward and their backs straight. Tell them to reach toward their legs while keeping their back straight and their head aligned with their spine. Have them hold this stretch for at least 15 seconds.

Finally, have the children lie on their backs with their arms extended overhead. Have them hold this stretch for at least 15 seconds.

### REFLECT (School Age)

? Ask: Who exercises regularly now? Have children share some of their activities.

? Ask: In what ways can you be more active? Share your reasons why it would be beneficial.

? Ask: In what ways can you be more active? Share your reasons why it would be beneficial.

-----  
<sup>3</sup> Adapted from *Jump Into Foods and Fitness*, Michigan State University Extension, 2003

## Lesson 1: Get in the Movement Groove

? Ask: What activities can you do with friends/family?

? Ask: How much time do you spend each day watching television, playing video/computer games?

? Ask: What other activities might you do instead of watching television, playing electronic games, or using the computer?

### **APPLY** (School Age)

Ask the children to discuss with family members, ways in which they can spend more time together being active.

Ask the children to keep a list of physical activities they do during the next 24 hours. Suggest that they use this list as a log to motivate themselves to gradually increase their physical activity.



## Lesson 1: Get in the Movement Groove


### PREPARATION

⌚ 5 minutes

### SET UP

- ❑ Set up easel or hang self-stick easel paper
- ❑ Have children sit around easel or in front of wall
- ❑ Ask for volunteer to record class ideas
- ❑ Set up CD player

### SUPPLIES

- ❑ Easel and markers
- ❑ Laminated Activity Pyramid 
- ❑ CD player
- ❑ A variety of upbeat and relaxing music

### Outcomes (Middle School • Teen)



The purpose of this lesson is to have youth:

- Examine the benefits of exercise
- Determine why participation in exercise/physical activity is important
- Share activities they can do with friends and families
- Identify the three types of physical activity
- Participate in a physical activity

### Discussion

DO (Middle School • Teen) ⌚ 10-15 minutes

? Ask: What are the benefits of exercise and increased physical activity? Have youth list examples on easel. Possible answers:

- Reduce risk for chronic diseases such as heart disease, osteoporosis, Type II diabetes, high blood pressure, and cancer
- Feel better, have increased energy and self esteem
- Look better, maintain weight or lose weight
- Help fight anxiety and depression

? Ask: Which of these things is most important to you? Have youth share some of the reasons they want to begin or increase their current physical activity program.

? Ask: What kinds of physical activities do you do on a regular basis? Examples: team and individual sports, dance, running, walking, bicycling.

Discuss briefly some of the different kinds of activities that youth may not think of as exercise, but that count as physical activity. Examples: cleaning your room, washing your car, dancing, walking the dog, gardening.

Explain why warming up/cooling down muscles before and after exercise is important. It reduces risk for injury during strenuous activities and increases flexibility

Describe the three different kinds of exercises and how they benefit

## Lesson 1: Get in the Movement Groove



your body. Give examples of each. You may use the Activity Pyramid to illustrate these examples.

- **Aerobic exercise** increases heart and breathing rates, burns calories and strengthens cardiovascular system (lungs and heart). Examples: running, walking briskly, jumping rope, swimming, etc.
- **Strength-training exercises** build strong bones and muscles. Examples: push-ups, chin-ups, sit-ups, rope climbing, weight lifting and running.
- **Flexibility exercises** stretch muscles, tendons and ligaments reducing the risk of injury and improving range of motion and balance. Examples: stretching, martial arts, yoga, dance.

### Activity 2 - Feel The Beat

**DO** (Middle School • Teen) ⌚ 25-30 minutes

This is three-part activity: warm-up, aerobic exercise, and cool-down.

**Instructor Note:** The duration and intensity of the exercises in this lesson may need to be adjusted to accommodate different fitness levels of the youth. The instructor should always provide water breaks during these activities. The breaks should be more frequent in warm weather.

**WARM-UP** ⌚ 5 minutes

Begin playing relaxing music such as jazz or slow contemporary music. Explain to youth that this is an exercise to get them moving. They should “feel” the rhythm of the music. Slow, rhythmic movements can take the place of warm-up and stretching exercises. Start with music that is medium-paced with a strong beat. Ask youth to “go with the flow,” moving their bodies as they like. Continue this activity for at least five minutes.

**AEROBICS** ⌚ 15-20 minutes

Increase the pace of music. Possible music suggestions might include hip-hop, rap, country, reggae or contemporary. As the beat picks up, youth should move more quickly. If necessary, suggest that they move their arms, feet and legs more.

The instructor can use this opportunity to point out how breathing and heart rate increases as movement increases. Continue this

## Lesson 1: Get in the Movement Groove

activity for 15-20 minutes, changing the music type often.

### Cool-Down 🕒 5 minutes

Return to more relaxing, slower music. Have youth move accordingly, placing emphasis on slow, controlled movements to cool-down their bodies. Continue this activity for five minutes.

### REFLECT (Middle School • Teen)

? Ask: What are some other ways to warm-up and cool-down before and after exercise?

? Ask: Can you think of ways you can be more active? Why should you be more active?

? Ask: How much time do you spend each day watching television, playing video/computer games?

? Ask: What other activities might you do instead of watching television or other screen time?

### APPLY (Middle School • Teen)

Ask youth to discuss with friends ways they can be more active while together. Some examples might be having active social get-togethers, walking at the mall, hiking, and impromptu pick-up games. Others? Ask youth to keep a list of physical activities they do during the next 24 hours. Review these activities when the youth next meet as a group.



## Technology Challenge

(All Ages)

To see how to rate your physical activities, visit the MyPyramid site: <http://www.mypyramid.gov> and follow these directions:

- Click on "MyPyramid Tracker," and go to "Assess Your Physical Activity." Follow instructions for "Registration" and fill in your "Personal Profile."
- Proceed to "Physical Activity" and enter activity type and description for your weekly schedule. Fill in "Duration."
- Select "Save and Analyze" to calculate your Physical Activity Score.

Are you more or less active than you thought you were? How can you improve your score?





## Lesson 2: MyPyramid: The Beginning Challenge

### Introduction to Nutrition

#### PREPARATION

🕒 10 minutes



#### SET UP

Circle for group discussion

#### SUPPLIES

MyPyramid poster 

#### HANDOUTS & BOOKS

- ❑ *Using MyPyramid – Children and Youth*  p. 211
- ❑ *MyPyramid Worksheet* 

#### Outcomes (All Ages)

The purpose of this lesson is to have youth:

- Use MyPyramid as a personalized guide for healthy eating and physical activity
- Recognize the significance of portion/serving size in making food choices



#### Instructor Essential Information

MyPyramid replaces the former Food Guide Pyramid. It can be found at: <http://www.mypyramid.gov>.

MyPyramid is based on the USDA 2005 Dietary Guidelines for Americans. The Guidelines are designed to help Americans choose diets that will meet nutrient requirements, promote health, support active lives and reduce the risks of chronic disease.



The MyPyramid guidelines represent the best advice available about how to choose healthful foods and be more active. Instructors should teach the same content to each age group, however their teaching strategies may vary by age group.

**Instructor Note:** You may choose a web video activity for (School Age) youth as an alternative to the Discussion. The web video can be found at: <http://www.MyPyramid.gov>. Click on “Tour MyPyramid” to see a video clip explaining the structure and purpose of this food guidance system.

#### Discussion

 (All Ages) 🕒 45 minutes

Introduce MyPyramid. Cover up the pictures of food groups on the *MyPyramid* poster. Direct youth to look at the pyramid symbol.

? Ask: What does the MyPyramid symbol represent? Answer: it represents the two key aspects of good health – healthful eating and physical activity. Each of the colors in the pyramid represents one of the five food groups.

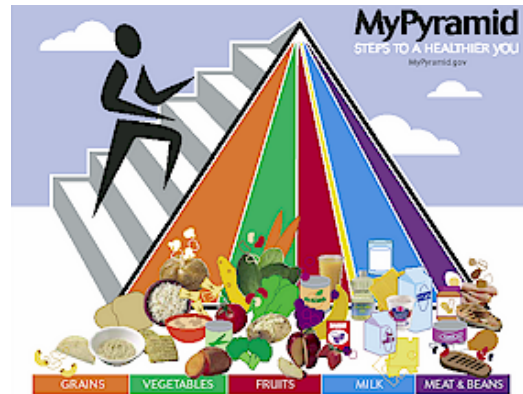
## Lesson 2: MyPyramid: The Beginning Challenge

? Ask: What are the different colors and which food groups do they represent? Have youth guess. Answers: orange = grains, green = vegetables, red = fruits, blue = dairy, purple = meat and beans.

? Ask: Why are the color bands different sizes? Answer: The widths show the proportions that we should eat from each food group.

? Ask: What do you think the yellow band represents? Answer: the yellow band is not a food group. It represents oils. Remind them that a small amount of oils are important for good health.

? Ask: What else do you see in the picture? A person is climbing the steps. What do you think it represents? Answer: It represents activity. This is a reminder that physical activity is important each day.



Look at the entire poster and name some foods in the colored bands.

### HANDOUTS & BOOKS

- ❑ *Using MyPyramid In Your Life – Children and Youth* p. 211
- ❑ *MyPyramid Worksheet*

### Activity 1 - Using MyPyramid

(All Ages) ⌚ 20-25 minutes

This activity has two steps. Youth will first estimate their daily calorie needs, then build an eating plan. The instructor may need to assist School Age youth in estimating their daily calorie needs (Step 1 below).

Youth need a copy of two handouts for this activity. Both are located on the University of Florida Institute of Food and Agriculture web site. Students will print them as part of the activity. The first handout, *Using MyPyramid In Your Life – Children and Youth* is also in Appendix A, so that the instructor may choose to skip the web download and make copies in advance.

- Download the first handout. Go to <http://fyics.ifas.ufl.edu/pyramid/index.htm> and click on "Youth." Scroll to the bottom of the page and click on

## Lesson 2: MyPyramid: The Beginning Challenge

### PREPARATION


#### SET UP

- ❑ Middle School youth and Teens can help with the set up.
- ❑ Lay food and pretzels out on plates.

#### SUPPLIES

See recipe for ingredients and utensils list.

### HANDOUTS & BOOKS

Recipe: *Pyramid Kabobs*  p. 215

“Using MyPyramid – Children and Youth.” This opens a four page PDF file titled *Using MyPyramid – Children and Youth*.

- Download and print the next handout. Go to <http://fycs.ifas.ufl.edu/pyramid/adobe/worksheet.pdf>. This opens a 1-page PDF file called *MyPyramid Worksheet*.

Have youth begin with *Using MyPyramid – Children and Youth*, by completing:

- Step 1 - Estimate Your Daily Calorie Needs
- Step 2 - Build Your Eating Plan.

Youth will need to use the *MyPyramid Worksheet* to complete Step 2. This will help youth to plan meals for the day based on their nutrient needs, including beverages and snacks.

**Instructor Note:** Have youth save these completed handouts, or keep copies in the classroom. They will be used again in other lessons.

### Now We’re Cookin’ - Pyramid Kabobs

(All Ages)  30 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Youth will make a snack called “Pyramid Kabobs.” The recipe is in Appendix A.

**REFLECT** (All Ages)

? Ask: Are you surprised at your caloric needs? Did you think your daily calorie needs would be more or less?



**APPLY** (All Ages)

Select a meal plan to take home and use for a family meal.

### Technology Challenge

(All Ages)

Visit <http://www.MyPyramid.gov> to help a family member discover how many servings they would need based on age and activity level using MyPyramid Plan.

## Lesson 3: The Importance of Good Hygiene



### PREPARATION

🕒 30 minutes

### SET UP

Make jelly bean jars.

### SUPPLIES

- ❑ Black light 
- ❑ GlitterBug lotion 
- ❑ Handwashing poster
- ❑ 4 lbs miniature jelly beans
- ❑ 5 graduated size plastic containers with tight fitting lids
- ❑ One flip chart
- ❑ Paper
- ❑ Tape
- ❑ Markers

### HANDOUTS & BOOKS

*Buddy Bear* book 



### Outcomes (All Ages)

The purpose of this lesson is to have youth demonstrate good personal hygiene through proper handwashing.



### Instructor Essential Information

The Partnership for Food Safety Education (PFSE), is your resource for food safety and safe food handling information. The Fight BAC! message is: Clean, Separate, Cook, Chill. This lesson deals with the “Wash Your Hands” part of the “Clean” message. Check out this website for more complete food safety messages <http://www.fightbac.org>.

We know that the primary way in which bacteria get into your food is from your hands. According to the Centers for Disease Control and Prevention, the single most important thing we can do to keep from getting sick and spreading illness to others is to wash our hands.

### PROPER HANDWASHING

Review the steps for washing your hands the right way.

1. Wet hands with warm running water prior to reaching for soap, either in bar or liquid form.
2. Rub hands together to make lather. Do this away from running water, so the lather isn't washed away. Wash the front and back of hands, between fingers and under nails. Continue washing for 20 seconds. Sing Happy Birthday twice or sing the ABC's as a way to count 20 seconds in a fun way.
3. Rinse hands well under warm running water.
4. Dry hands thoroughly with a clean towel or air dryer.
5. Note that alcohol-based hand sanitizers, gels or antibacterial wipes are useful alternatives if soap and water are not available.

### SET UP DETAILS

You will need five plastic containers filled with jelly beans (germ jars) to illustrate the 2-hour food safety rule for perishables. The miniature jelly beans represent germs. The five containers need these quantities of jelly beans: 5, 20, 80, 320, 1,280. You can use a measuring cup to estimate the number of jelly beans being placed into a container instead of counting the beans for each one.

## Lesson 3: The Importance of Good Hygiene

### Discussion

**DO** (School Age) ⌚ 15 minutes

Read *Buddy Bear's Handwashing Troubles*. Discuss the importance of proper handwashing. This will prepare children for the GlitterBug activity.

### Activity 1 - Cleaning 101

**DO** (Middle School • Teen) ⌚ 20 minutes

Go to the Soap and Detergent Association website <http://www.cleaning101.org> to find out how and when you should wash your hands. Click on "SDA Kids Corner." Download a handwashing page or poster to hang up by the handwashing sink.

### Activity 2 – Hygiene & Food Safety

**DO** (All Ages) ⌚ 20 minutes

Discuss the importance of good personal hygiene to food safety. Review the handwashing component of the Fight BAC! message. Have everyone take the Handwashing Challenge.

#### HANDWASHING CHALLENGE

You will be using the GlitterBug lotion and black lights to illustrate proper handwashing.

- Put a pearl-sized drop of glow lotion on youth's hands.
- View hands under the black light.
- Have the group wash their hands.
- Have them check their hands under the black light to see how thoroughly they have washed. Any areas that are still "glowing" illustrate an area that needs to be washed more thoroughly.

**Instructor Note:** Dry hands and calluses absorb some of the lotion so even after washing well you may see some "glowing."

#### GERM JARS

To illustrate the importance of the USDA two-hour food safety rule, which is "No perishables should be left at room temperature for more than two hours," show the "Germ Jars" and describe as follows. Pick up the jar with five jelly beans in it. Say, "We have

## Lesson 3: The Importance of Good Hygiene

five bacteria to start with." Point out the appropriate germ jars and say, "Every 15-20 minutes the number of bacteria doubles. At 0 minutes there are 5 bacteria; at 30 minutes, 20 bacteria; at 60 minutes, 80 bacteria; and at 90 minutes, 320 bacteria. After two hours there are 1,280 bacteria."

### Activity 3 – When To Wash Your Hands

**DO** (All Ages) ⌚ 20-30 minutes

It is important to wash your hands after certain activities. Divide youth into two groups. Have each group think about when they should wash their hands. Have them write their answers on strips of paper. Examples:

- When you are preparing food
- After you go to the bathroom
- After you blow your nose
- When you come in from play
- After you sneeze
- Before you eat
- After playing with your pet



Have a member of the group post each answer on the wall across the room. Have youth discuss their answers.

**REFLECT** (School Age)

? Ask: What did Buddy learn about germs? About handwashing? About when to wash?

**REFLECT** (Middle School • Teen)

? Ask: Why is handwashing so important?

### Technology Challenge

(All Ages)

Go to the Soap and Detergent Association website and get the recipe for Bubbles: <http://www.cleaning101.com/sdakids/> Read the Bubbles recipe and look at several activities to learn how to make bigger bubbles and to predict when bubbles burst!

## Lesson 3: The Importance of Good Hygiene

---

### (Middle School)

Check out the Centers for Disease Control's Cleanhands website and find the School Network for Absenteeism Prevention (SNAP) Toolkit. Take the toolkit to school and get your middle school involved in improving overall health by promoting clean hands!

<http://www.cdc.gov/cleanhands/>

### (School Age • Middle School)

Check out the Soap and Detergent Association website for tips on proper handwashing techniques. See website above.

---



## Lesson 4: In Beat - The Heartbeat

### Aerobic Physical Activity

#### PREPARATION

🕒 5 minutes

#### SET UP

Set up CD player.

#### SUPPLIES

- ❑ Laminated Activity Pyramid [RK](#)
- ❑ CD player
- ❑ A variety of upbeat music
- ❑ Jump ropes



#### Outcomes (School Age)



The purpose of this lesson is to have children:

- Understand the difference between aerobic and non-aerobic activities
- Calculate their heart rate before, during, and after exercise
- Participate in warm-up, aerobic, and cool-down activities

#### Discussion

**DO** (School Age) 🕒 15 minutes

? Ask: What aerobic activities have you done recently that made your heart beat faster?

Talk about the differences between exercises that make your heart beat faster for a longer period of time such as running, swimming, basketball, bicycling, and those that don't last as long such as push-ups, sit-ups, stretching, etc. Explain that healthy people need a combination of all exercises. You may wish to use the *Activity Pyramid* to illustrate this.

Tell the children that during aerobic exercise, your heart, lungs and blood vessels work harder because your body needs more oxygen and blood for the working muscles.

Explain the importance of time, intensity, and frequency of physical activity for youth. The USDA 2005 Dietary Guidelines recommend that youth be moderately active at least one hour each day. You may use the Activity Pyramid to show that moderate physical activity can mean anything from riding a bicycle to playing at the playground.

#### Activity 1 - Calculate Your Heart Rate

**DO** (School Age) 🕒 15 minutes

Demonstrate how to calculate a heart rate using either the carotid (neck) or wrist methods. Explain that your pulse is easier to find after you've been exercising.

- **Carotid method** – Using the carotid artery, lightly place your index and middle fingers together on one side of your neck just below your jawbone. Press lightly with your

## Lesson 4: In Beat - The Heartbeat



fingers until you feel your pulse. Have youth calculate their resting heart rate.

**Instructor Note:** If you see any youth pressing on both sides of their neck, reiterate that they should press on one side only. This caution relates to the possibility of passing out if both sides of the neck are pressed after exercise.

- **Wrist method** - Turn your right arm so that the palm of your hand is facing up toward the sky. Place your left index and middle fingers together on the right side of your right wrist. Press lightly until you feel a pulse. Using the second hand on a clock or watch, tell youth to begin counting their pulse when you say "start." Tell them to stop counting at 10 seconds. Youth will take this number and multiply it by six to find their resting heart rate. Example: your measured heart rate during 10 seconds is 12.  $12 \times 6 = 72$ . 72 is your resting heart rate.

Have youth practice calculating their heart rates as they move around the area, first walking and then jogging in place. Discuss how their heart rate increases as they change from walking to jogging.

### Activity 2 - Warm-Up, Aerobics, Cool-Down

**DO** (School Age) ⌚ 30 minutes

This is a three-part activity in which youth participate in a warm-up activity, an aerobic activity, and a cool-down activity.

**Instructor Note:** The duration and intensity of the exercises in this lesson may need to be adjusted to accommodate different fitness levels of the youth. The instructor should always provide water, especially in warm weather.

#### **WARM-UP - A WALK IN THE FOREST** ⌚ 5 minutes

Have group members stand facing you to mirror your movements. Each youth should have at least one arm's length of space on all sides to move about freely.

This activity is designed to warm-up the body prior to physical activity. Feel free to use your imagination as you narrate your Walk in the Forest and to add other events or features to your adventure!

The leader begins the A Walk In The Forest activity by saying "Imagine you are walking through the forest on a sunny day and you notice lots of beautiful clouds in the sky. Reach your arms up (arms go up) and stretch your fingers to touch the clouds. Keep

## Lesson 4: In Beat - The Heartbeat



stretching to try and feel those fluffy, beautiful clouds. Higher and higher you reach towards the clouds." Continue marching and stretching arms up overhead for 1-2 minutes.

While still marching, begin snapping your fingers and say, "All of a sudden, the rain starts to come down. At first, the rain is light (keep snapping fingers). Then the rain starts to fall harder and harder." Clap your hands softly, getting louder and louder. Continue marching and clapping for 1-2 minutes.

While still moving and marching say, "The forest is very overgrown in this part of the woods and you need to push tree limbs and bushes out of the way." Bend slightly and move your arms in large sweeping movements in front of you moving imaginary tree limbs out of your way.

Begin to jog in place slowly and progressively speed up while still clapping and say, "All of a sudden you see a bear in the woods and it is coming toward you! Run as fast as you can to get away from the bear. Hurry, hurry! The bear is catching up!" Continue running for one 1 minute.

"Whew! We finally lost the bear. Let's continue on our way through these beautiful woods. Look! The sun is coming out and the rain is stopping." Slow down to a walk and quietly snap fingers. "Oh, there are those beautiful clouds again. Let's stretch our arms up again to say hello to the sun and clouds." Walk slowly and stretch arms up.

### **AEROBICS - PROGRESSIVE JUMP ROPE** ⌚ 15-20 minutes

Play fast-paced music appropriate for jumping rope. Move to an area where each youth can jump freely without interference. Give each youth a jump rope and let them experiment jumping on one foot and then on two. Ask the youth to see if they can jump continuously using any method for one minute.

Next, challenge youth to jump for two minutes without stopping. After continuous jumping for several minutes, have youth stop and calculate their heart rates. To vary this activity, have youth come up with alternate ways to use their jump ropes. Suggest they form groups of 3-4 to develop jumping games or obstacles courses with their ropes. For more information on jumping, see Chapter 5, Lesson 3, Jump Into Fitness.

### **COOL-DOWN - USING THE JUMP ROPE** ⌚ 5 minutes

Play relaxing music for cool-down. While holding their jump ropes, have youth form a circle or stand at arm's length from each other.

## Lesson 4: In Beat - The Heartbeat



Tell youth to double or triple their ropes and hold the two ends above their heads. Pulling the ends of the rope tightly, have the youth stretch their arms upwards pulling the rope taut. Hold this stretch for at least 15 seconds. Repeat. Next, with the rope still overhead, have youth lean to the right and hold for 15 seconds and then repeat on the left side. Repeat stretch on both sides.

Tell youth to sit on the floor with legs straight out in front of them. Have youth loop the rope around the bottom of their feet, holding the ends of the rope in both hands. Have them gently pull their upper bodies towards their legs using the rope to pull their bodies forward. Have them keep their spines and neck straight and in alignment. Hold this stretch for 15 seconds and repeat two more times.

Tell youth to lie on their backs with their left leg bent and left foot flat on the floor. The right leg is held straight up. Place the doubled jump rope around the right calf and gently pull the right leg toward the body with the rope. Hold for 15 seconds. Repeat on the left leg. Repeat this exercise several times on both legs. Youth should be able to pull their legs in closer toward the body each time, but do not force this stretch.

### REFLECT (School Age)

? Ask: Did you notice other changes in your body when your heart rate increased during the jump rope activity. What were these changes?

? Ask: What are some of the different ways you can use jump ropes to exercise?

? Ask: Where does jumping rope fit into the Physical Activity Pyramid?

### APPLY (School Age)

Make a list of aerobic physical activities you can do at home that need little or no equipment. Calculate your heart rate several times over the next few days while you are doing different activities. Write these numbers down and determine which activities make your heart beat faster.

## Lesson 4: In Beat - The Heartbeat

### PREPARATION

🕒 10 minutes

### SET UP

- ❑ Place heart rate chart on wall
- ❑ Designate an official time keeper
- ❑ Have heart rate logs and pencils ready for each youth
- ❑ Divide youth into two groups
- ❑ Set up CD player

### SUPPLIES

- ❑ CD player
- ❑ A variety of upbeat and relaxing music
- ❑ Jump ropes
- ❑ Pedometers (RK has 5)
- ❑ Pencils
- ❑ Watch with second hand
- ❑ *Heart Rate Chart* poster (RK)

### HANDOUTS & BOOKS

*Heart Rate Log* (A) p. 216

### Outcomes (Middle School • Teen)



The purpose of this lesson is to have youth:

- Understand the difference between aerobic and non-aerobic activities
- Understand the importance of monitoring heart rate
- Calculate heart rate before, during and after exercise
- Participate in warm-up, aerobic, and cool-down activities
- Practice using a pedometer to measure steps

### Discussion

**DO** (Middle School • Teen) 🕒 15 minutes

Use the Discussion for School Age youth found on page 33.

### Activity 1 - Calculate Your Heart Rate

**DO** (Middle School • Teen) 🕒 15 minutes

Use instructions for Activity 1 - Calculate Your Heart Rate for School Age youth found on page 33. Give youth the *Heart Rate Log* handout, which can be found in Appendix A. Have them record their resting heart rate on their chart.



### Activity 2 - Warm-Up, Aerobics, Cool-Down

**DO** (Middle School • Teen) 🕒 30 minutes

This is a three-part activity where youth will participate in a warm-up activity, an aerobic activity, and a cool-down activity. Divide the youth into Group 1 and Group 2 so that each group can do a different aerobic activity.

#### WARM-UP - A WALK IN THE FOREST 🕒 5 minutes

Use the instructions for Activity 2 - Warm-up for School Age youth found on page 34.

#### AEROBICS 🕒 15-20 minutes

Follow these instructions to check your heart rate twice during the exercise:

- Have designated timekeeper stop activity after 10 minutes

## Lesson 4: In Beat - The Heartbeat

so youth can check heart rates.

- Have the timekeeper stop activity after 20 minutes so youth can check their heart rates.
- Have youth record their 10 and 20-minute heart rates on their logs at the end of the aerobics part.

**Group 1 - Progressive Jump Rope** Use the instructions for Activity 2, Aerobics - Progressive Jump Rope, for School Age youth found on page 35. Instruct the designated timekeeper to stop the activity after 10 minutes to do a group heart rate check. Have youth record their 10-minute heart rates on their logs.

**Group 2 - How Far is 1,000 Steps?** Remind youth that walking is an excellent form of exercise that needs little special equipment but has many benefits. This walking activity can be conducted outdoors or indoors, on a flat surface or on stair steps.

- Explain to youth that using a pedometer is a great motivator to get moving. Explain that walking with a pedometer can help you meet daily exercise goals, challenge yourself to improve, and have fun as you keep track of your steps!
- Have five volunteer youths attach pedometers to their waistband or belt. Clear the pedometer by pushing the reset button. Make sure pedometers are set to "Step" and not to miles or kilometers.
- Instruct the designated timekeeper to stop the activity after 10 minutes to do a group heart rate check. Have youth record their 10-minute heart rates on their logs.
- Have youth walk around the designated area, beginning slowly, then gradually walking more briskly. Challenge youth to see if they can register 1,000 steps on their pedometers.

**COOL-DOWN - USING THE JUMP ROPE** ⌚ 5 minutes

Use the Activity 2 - Cool-down instructions for School Age youth found on page 35.

**REFLECT** (Middle School • Teen)

Ask youth to compare resting heart rates with heart rates after 10 and 20 minutes of exercise as recorded on their logs.

? Ask: Looking at your heart rate log, did you find a difference between the heart rates in the jump rope group and the walking group? Why or why not?

## Lesson 4: In Beat - The Heartbeat

? Ask: Is your heart working in the beneficial range? Find out by comparing your exercising heart rate with the heart rate chart. If not, how might you increase your exercise intensity?

? Ask: Were you surprised by how many or how few steps your pedometer registered?

### **APPLY** (Middle School • Teen)

Make a list of aerobic physical activities you can do at home that need little or no equipment. Take a friend or family member for a walk and see if you can walk at least 20 minutes without stopping. Calculate your heart rate several times over the next few days while you are doing different activities. Write these numbers down and look at which activities make your heart beat faster.

### **Technology Challenge**

(Middle School • Teen)

Find out how to increase your heartbeat. Visit <http://www.presidentschallenge.org> and click on "Kids or Teens." Click on *Presidential Champions* and learn more about increasing physical activity and how to keep track of your progress. Register and select "Presidential Champions Program" or "Active Lifestyle Program." Remember, every journey begins with a first step.



## Lesson 5: Think Your Drink

### PREPARATION

🕒 2¾ hours

Includes grocery shopping, classroom set up, and making fat test tubes (60-90 minutes to prepare stations)

### SET UP

See Set Up Details.

### SUPPLIES

- ❑ See recipes for ingredients and utensils list
- ❑ Poster or picture of skeleton

### Fat Test Tubes

- ❑ 4 test tubes or small containers with lids (baby food jars, plastic containers)
- ❑ Vegetable shortening
- ❑ Measuring spoons
- ❑ Microwaveable container
- ❑ Labels
- ❑ Markers

### Make Mine Orange

- ❑ Empty 20 oz. bottles: orange soda, orange drink, orange juice, orange beverage or punch with tops
- ❑ Teaspoon measure
- ❑ Sugar
- ❑ Funnel

### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Describe how empty calories in sodas often replace the healthier beverages such as milk, water and juice
- Refer to nutrition labels to compare drink choices
- Compare the taste and fat content of different types of milk and be encouraged to select low-fat dairy
- Prepare a quick and simple nutritious drink

### Instructor Essential Information

This lesson helps youth understand why beverages are important. Beverages are mostly water, a nutrient that's essential to life. In fact, a lot of your body is water -- from 55 to 75 percent of your total body weight. Every one of our body functions depends on water. You can only live a few days without it.

Make drinks count as healthful beverage choices! Pick more drinks that have a lot of calcium (milk group) or vitamin C (fruit and vegetable groups). Rely less often on drinks that supply mostly calories. When you are thirsty, drink water. It is convenient and thirst quenching.

### JUICES, SODAS, PUNCHES, JUICE-LIKE DRINKS

Juice is an easy way to enjoy fruit. It provides vitamin C to help heal cuts and bruises, fight infection and use iron from food. Vitamin A, found in some juices, contributes to healthy eyes and skin. Carbohydrates (sugars and starches) are used for energy. However, one serving of juice a day (¾ cup) is enough. Juice has many calories (from fruit sugar). Read the label and look for 100% fruit juice, rather than fruit drinks or punches. Avoid the empty calories in sodas.

The new MyPyramid suggests that we eat three low-fat or fat-free dairy foods every day to get enough important nutrients such as calcium, protein, Vitamin A, Vitamin D, magnesium, and potassium. Unfortunately, many Americans fail to consume the currently recommended three daily servings of milk, cheese or yogurt.

Combining physical activity with three servings of low-fat or fat-free dairy foods helps build strong bones to last a lifetime. Youth need plenty of calcium for their growing bones (3 cups low-fat dairy per day). Youth's bones grow the most between ages 11 and 18.



## Lesson 5: Think Your Drink

### Soda Anyone?

- ❑ Empty Coke bottle
- ❑ Sugar
- ❑ Funnel
- ❑ Measuring spoons

### Taste It And Decide!

- ❑ Small cups
- ❑ Full milk cartons and empty cartons of whole milk, 2% milk, 1% milk, fat-free milk, low-fat chocolate milk, lactose-free milk

### HANDOUTS & BOOKS

*Can You Guess How Much Fat Is In Each Cup of Milk?* [A](#) p. 217



Sodas are mostly water, sugar or sugar substitute, and a little flavoring. Sugared sodas are a source of empty calories. Drinking sodas with meals and snacks often replaces nutrient dense beverages such as milk or juice, which contain nutrients such as calcium and vitamin C. Vitamin C helps fight infection and keeps you healthy in other ways.



### REGULAR FAT VS LOW-FAT

What is the difference between regular fat and low-fat dairy foods? Dairy foods can be high in fat, especially the harmful kind - saturated fat. Low-fat dairy products, which are 1% fat or less, are the best choice.

### SET UP DETAILS

Have youth help with the set up whenever possible. Prepare the four stations: Fat Test Tubes, Soda Anyone?, Make Mind Orange, and Taste It and Decide! using the supplies listed at left.

Fat Test Tubes This station provides a visual representation of the amount of fat contained in four kinds of milk. Use vegetable shortening to represent fat. Weigh or measure the amount of fat needed for each tube using the list of fat in each kind of milk below. For example, use 8 grams of vegetable shortening for whole milk since that contains 8 grams of fat. Note that 5 grams of fat is equivalent to 1 teaspoon of shortening.

Different kinds of milk have different amounts of fat. Here is the fat content for one cup (8 oz.) of several kinds of milk.

- Whole milk – 8 grams of fat (1.6 teaspoons)
- 2% milk – 5 grams of fat (1 teaspoon)
- 1% milk – 2.5 grams of fat (1/2 teaspoon)
- Fat-free – 0 grams of fat

Place a few tablespoons of vegetable shortening into a microwaveable container and melt it in the microwave. This will only take a few seconds. Pour the melted shortening into the fat tubes.

Find a safe and sturdy place where test tubes can cool in an upright position. Put the lid on each tube and set in a safe place while it cools to become a solid. Label the tubes describing the number of grams of fat in each. The tubes can be stored in the freezer for future use.

## Lesson 5: Think Your Drink

**Instructor Note:** When you store the test tubes, remember that warm temperatures will melt the shortening and make them messy to use. You may substitute paraffin wax for shortening.

**Make Mine Orange** Make a visual representation of the amount of sugar in different drinks. Refer to the labels on the empty bottles of these drinks to determine the amount of sugar they contain: orange soda, orange drink, orange juice, and fruit beverage or punch. Four grams of sugar equals 1 teaspoon. Pour the total amount of sugar into each bottle. Put tops on tightly.

**Soda Anyone?** Place the supplies shown at left at the station.

**Taste It And Decide!** Read the supply list at left and have supplies ready in the refrigerator. Make copies of the handout *Can You Guess How Much Fat Is In Each Cup of Milk?* Label cups with the letters A, B, C, D, E, and F, to correspond with the different types of milk as shown below. Do not let the youth see which type of milk goes into the cups. Pour these different types of milk into cups.

- A = whole milk
- B = 2% milk
- C = 1% milk
- D = fat-free (skim) milk
- E = chocolate milk
- F = low-fat chocolate milk



### Activity 1 - Low-Fat Or Fat-Free Dairy

**DO** (All Ages) ⌚ 45 minutes



Show youth a model or photo of a skeleton. Explain that the skull is a bone. Point out the ribs.

? Ask: Which organ does the skull protect? Answer: the brain.

? Ask: Which organs do the ribs protect? Answers: heart, lungs, and parts of the stomach, spleen, and kidneys. It is important to have strong bones to protect vital organs.

Describe the difference between regular and fat-free sour cream, yogurt, and cheese. Explain that it is important to choose the low-fat or fat-free dairy products because they have less fat.

## Lesson 5: Think Your Drink

? Ask: How many of you drink 1% or fat-free (skim, non-fat) milk? Stress that 1% and fat-free milk are considered low-fat choices whereas 2% and whole milk are not.

There are important nutrients in milk that help us create and maintain strong bones. The USDA recommends three cups of low-fat or fat-free dairy per day to meet our daily requirements.

Go to the Fat Test Tubes station. Use the test tubes and empty milk cartons to illustrate the different amounts of fat found in one cup of different types of milk. Explain that youth can look at the labels to get the nutrition facts for each product.

Go to the Taste it and Decide! station. Give each youth a copy of the handout *Can You Guess How Much Fat Is In Each Cup Of Milk?* Have youth taste the milk and record their choices. The point of this activity is to demonstrate that they may find that lower fat milk is just as acceptable as a higher fat choice. Once youth have completed their forms, reveal the labels.

? Ask: Who in the group would be willing to drink a lower fat milk choice based on this tasting? How would you encourage your family members to purchase lower fat milk products? How many grams of fat would you save by drinking the lower-fat choice?

### Activity 2 - Look At All That Sugar!

**DO** (All Ages) ⌚ 20 minutes

At the Soda Anyone? station, have one youth measure the amount of sugar in a 20-ounce bottle of Coke. Next, display the visual representations of the amount of sugar in the five different drinks in the Make Mine Orange station that you set up before class.

? Ask: How many sodas do you drink in a week?

? Ask: If you multiply the number of sodas you drink in a week times 52, how many sodas do you drink in a year? Calculate how much sugar you drink from sodas in a year.

**REFLECT** (All Ages)

? Ask: What happens when you drink a lot of soda? Answers: excess empty calories, tooth decay, replaces healthy drinks.



## Lesson 5: Think Your Drink

? Ask: What can you do to make smart drink choices? Answers:

- Drink milk with meals, for snacks, smoothies, etc.
- Drink juice from vending machines, for snacks, juice floats, frozen juice boxes, etc.
- Drink soda only occasionally, not with meals; pour a glass rather than drink from large bottle
- Drink water
- Don't super-size

### SUPPLIES

See recipes for ingredients and utensils list.

### HANDOUTS & BOOKS

- ❑ Recipe: *Three Fruit Drinks: Fruit Juice Spritzer, Juice Float, Power Me Up Smoothie* [A](#) p. 218
- ❑ Recipe: *Make Your Own Yogurt* [A](#) p. 219

### Now We're Cookin' – Three Fruit Drinks

**DO** (All Ages) ⌚ 15-30 minutes depending on recipes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Have youth break into groups to prepare the following recipes. See the recipes in Appendix A for ingredients and steps.

- *Fruit Juice Spritzer*
- *Juice Float*
- *Power Me Up Smoothie*



Put samples of all three drinks into small cups and have youth taste these delicious and healthy drinks.

**APPLY** (All Ages)

Check the kind of milk in your home refrigerator. How can you influence your family to select lower fat milk?

Make your own yogurt at home. Directions can be found in the [Make Your Own Yogurt](#) recipe in Appendix A.

### HANDOUTS & BOOKS

*Ice Cream Personality Test* [A](#) p. 220

### Technology Challenge

(All Ages)

Take the *Ice Cream Personality Test* on the University of North Dakota Kids Nutrition website (also in Appendix A).

Go to <http://www.ext.nodak.edu/food/kidsnutrition/kids-2.htm> , under "Dairy," select "Ice Cream Personality."

Go to: <http://www.got-milk.com>. In the "Trivia and Games" area

## Lesson 5: Think Your Drink

take a trivia quiz. Report back to the group: Which quiz did you take? How did you do? In the "Better Bones" area find out how much of your bone is formed during your "growth spurt." Play games, take the body tour, and discover *Why Milk* at <http://www.whymilk.com/facts.htm>.



## Lesson 6: Muscle Mania - Move it or Lose It

### Strength and Weight-Bearing Activities



#### PREPARATION

🕒 20 minutes

#### SET UP

Set up circuit training stations with the equipment needed, see Set Up Details.

#### SUPPLIES

Amounts determined by number of youth in each group.

- ☐ Dyna bands or light hand weights (1-5 lbs)
- ☐ Cones or other markers
- ☐ Floor or masking tape
- ☐ Mats or towels
- ☐ Jump ropes
- ☐ Large balls
- ☐ Stop watch or watch with second hand
- ☐ Fat and muscle models [RK](#)

#### Outcomes (All Ages)

The purpose of this lesson is to have youth:

- Understand the relationship between strong bones, muscles, and exercise
- Participate in a warm-up activity
- Participate in a strengthening activity
- Participate in a cool-down activity

#### Instructor Essential Information

If the space required for this program is unavailable, the instructor may divide the lesson into parts and do only two to three stations at a time.

**Instructor Note:** The duration and intensity of the exercises in this lesson may need to be adjusted to accommodate different fitness levels of the youth. The instructor should always provide water, especially in warm weather.

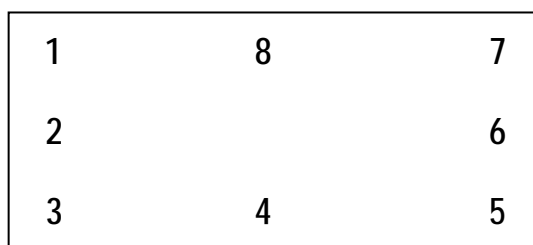
#### SET UP DETAILS

Before the lesson begins, set up the eight circuit training stations shown below either in a large room or in a large level outdoor area. The area can be grassy or paved. The area should be large enough to allow a shuttle run to take place in the middle and an endurance run around the outside of the stations.

#### CIRCUIT TRAINING STATIONS

- |                |                  |              |
|----------------|------------------|--------------|
| 1. Push-ups    | 4. Endurance Run | 7. Ball Pass |
| 2. Shuttle Run | 5. Crunches      | 8. Jump Rope |
| 3. Wall Sits   | 6. Bicep Curls   |              |

Follow the diagram below to set up the circuit training stations. The specific equipment needed at each station is described in Activity 1 on page 48.



## Lesson 6: Muscle Mania - Move it or Lose It

### Discussion

**DO** (All Ages) ⌚ 5 minutes

Talk about the importance of diet and weight-bearing exercise for growing strong bones in children, adolescents and teens. Show youth the 5 pound fat and muscle models and ask them to describe the differences. Point out that while both models weigh the same, the fat model is larger and bumpy, while the muscle is smoother and denser. Tell youth that muscle burns more calories than fat.

? Ask: What are some examples of weight-bearing activities?

Examples: running, rope jumping, basketball, weight lifting

? Ask: What are the benefits of weight-bearing or strengthening activities? Answers: improves balance, increases muscle mass, increases metabolism, increases strength, strengthens bones, decreases risk for diseases such as osteoporosis, arthritis, and Type II diabetes, i.e., improves glucose control.

### Activity 1 Circuit Training

**DO** (All Ages) ⌚ 45-50 minutes

**WARM-UP** ⌚ 5 minutes

Ask for a volunteer to lead the group in a game of Simon Says. The leader stands in front of group and gives commands for movement. For example, the leader says "Simon says take three giant steps." All youth do this.

The leader continues with simple stretches of arms and legs including things like "giant steps, arm "pinwheels," marching, etc.

**STRENGTHENING** ⌚ 35-40 minutes

Introduce group to the eight-station Circuit Training course. First, lead youth through each station and demonstrate the activity. Explain that youth will do each activity for two minutes, walk for two minutes, then rotate to next station until all stations have been completed.

Explain that the object is to do each activity in good form; it is not a race to see who can be the fastest. Be sure that youth understand that the instructor is the official timekeeper.

## Lesson 6: Muscle Mania - Move it or Lose It

Divide youth into eight equal groups (Have youth count off by 8's to make groups). Assign each group a different station to begin the activity. Youth must wait for the "start" and "stop" signals.

The instructor will begin by saying "Start." Each activity will last two minutes, then the instructor will say "Stop." At the end of each activity, youth will walk around the perimeter of the circuit training area for two minutes until the instructor says "Stop." At the end of each walk, youth rotate clockwise to the next station. Have youth repeat this process until each group completes all stations.

- **Station 1 - Push-Ups**

(builds arm, shoulder and upper back strength) Youth lay face down, palms down under the shoulders and legs slightly apart with toes "propped" against floor. The youth pushes their arms up until they are straight and then lowers body until elbows reach a 90° angle. The head and spine stay aligned. Do not let the head drop. If needed, youth can do a modified push up with weight on knees rather than toes.

- **Station 2 - Shuttle Run**

(builds overall endurance and leg strength) Determine a starting line and mark several spots progressively farther away. Use lines on gymnasium floor if you have access to a gym. You can also use cones or whatever is available to mark the spots. Have youth sprint to the first marked spot on the floor, then sprint back to the starting line. Youth turn around and sprint to the next marked spot. Sprint back to the starting line, then forward to the third marked spot. Continue this pattern until youth have worked their way across the room or field.



- **Station 3 - Wall Sits**

(builds thigh muscle strength) Youth sit with their backs against a wall with knees bent at a 90 degree angle (thighs parallel to floor). Have youth hold for two full minutes or as long as possible.

- **Station 4 - Endurance Run**

(builds aerobic strength) Youth jog around the perimeter of the area for two full minutes without stopping.

- **Station 5 - Crunches**

(builds abdominal strength) Youth lie on their backs on the floor with knees bent and feet flat on floor. Arms are straight out at their sides or supporting (but not lifting!!) the neck. The youth should bring shoulder blades off the mat using their abdominal muscles to lift and then slowly lower their shoulder blades back to the floor.





## Lesson 6: Muscle Mania - Move it or Lose It



- **Station 6 - Bicep Curls**  
(builds upper arm strength) Using Dyna Bands or light hand weights, have youth step on one end of the Dyna Band with the right foot to hold it securely in place. Hold the other end of the Dyna Band tightly in right hand. Keeping elbows tucked in close to the body, have youth pull up the right arm in a bicep curl. The curl should begin with right arm hanging straight, pointing toward the floor. Slowly "curl" the arm up ending with fist at shoulder level. Keep the wrist even with the forearm while curling up. Do two sets of 10 repetitions on both arms. One repetition is the complete lifting of the arm from the straight position to the curled position and down to the straight position again. Each repetition should be done to a slow count of 1-2-3-4 to the curled position and 1-2-3-4 to the down position.
- **Station 7 - Ball Pass**  
(builds chest and arm strength) Two youth stand approximately 10 feet apart. Using a ball, the youth will pass the ball at chest level back and forth as many times as possible in two minutes.
- **Station 8 - Jump Rope**  
(builds leg and aerobic strength) Allow youth to jump any way they wish as long as they are all moving during the two minute period.

**COOL-DOWN** ⌚ 5 minutes

Have a second youth lead another round of Simon Says. Focus on large, slow motion movements such as swimming, stretching, or reaching.

**REFLECT** (All Ages)

? Ask: Which station did you like the best? Why?

? Ask: What is the connection between the circuit training activities and strengthening exercise?

**APPLY** (All Ages)

? Ask: Which of these activities could you do at home?

? Ask: What are some of the problems you would encounter at home trying to do these activities? Examples: not enough space, lack of equipment, can't make too much noise

? Ask: How could you change the exercises to make them easier to

**Lesson 6: Muscle Mania - Move it or Lose It**

---

do at home?

**Technology Challenge**

(All Ages)

Being strong is cool! Learn more about strong bones at <http://www.cdc.gov/powerfulbones>. Click on "*Staying Strong*" and see all the fun ways to build strong bones. How can you make your bones strong?



---

## Lesson 7: Picking Protein

### PREPARATION

🕒 15 minutes

### SUPPLIES

- ❑ MyPyramid poster 
- ❑ Deck of cards
- ❑ Plastic food models or Dairy Council food model pictures: meat, chicken, fish, beans, nuts, eggs, veggie or tofu burger, etc. 
- ❑ 2 brown paper grocery bags, labeled: "Animal Protein," "Plant Protein"



### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Differentiate between the two types of protein sources – animal and plant
- Describe the contribution of protein to the development of strong muscles
- Prepare and sample plant sources of protein
- Learn the recommended amount of protein for daily needs

### Instructor Essential Information

All foods made from meat, poultry, fish, dry beans or peas, eggs, nuts, and seeds are considered part of the protein food group. Dry beans and peas are part of this group as well as part of the vegetable group. Most meat and poultry choices should be lean or low-fat. Fish, nuts, and seeds contain healthy oils, so choose these foods frequently instead of meat or poultry.

### SET UP DETAILS

To prepare for the Animal/Plant Protein Relay, arrange the plastic food models or food model pictures of protein sources such as fish, chicken, burger, eggs, peanut butter, beans, nuts or seeds on one table at one end of the room. Mix the plant and animal types. You will need at least two protein items for each student, so you may need to cut out more pictures of protein foods from food or cooking magazines.

At the other end of the room, place two paper grocery bags - one labeled PLANT PROTEIN, the other labeled ANIMAL PROTEIN.

### Discussion

 (All Ages) 🕒 30 minutes

? Ask: What is the meat/protein food group? Identify the protein group on the MyPyramid poster. Talk about the relative size of each band on the pyramid.

? Ask: What kinds of foods are in the meat/protein group? Explain that there are two types of protein: animal-based and plant-based.

## Lesson 7: Picking Protein

? Ask: Can you name some plant-based protein foods? Answers: nuts, seeds, legumes, dry beans, soy products.

Show youth food (models or pictures) of animal-based proteins, such as chicken, beef, pork, veal, poultry, fish, or eggs. The benefits of eating lean meat and protein include: helping to build strong muscles, glowing skin, and healthy hair. Show youth plant-based proteins, such as beans and nuts.

Remind the group that legumes (e.g., beans) are in the vegetable group too. They fall under both groups because they are plant-based, and they provide a good source of protein. Legumes (beans), tofu, and nuts are all sources of plant protein.

Explain that MyPyramid recommends that we get at least one to two servings (3-7 ounces) from the meat/protein group. Protein provides us with important vitamins and minerals such as vitamin B12, B6, zinc, iron and niacin. Meat and poultry should be lean, low-fat, or fat-free.

Hold up a deck of cards that illustrates a 3-ounce serving size. Hold up your hand and show that the palm of your hand is approximately the size of a 3-ounce burger.

### Activity 1 Animal/Plant Protein Relay

**DO** (School Age • Middle School) ⌚ 15-20 minutes



Divide youth into teams and run a relay race. The object of the race is to grab the food models or food model pictures of plant or animal protein foods from the table at one end of the room and place them in the correct grocery bag at the other end. Bags are labeled by their protein type: "PLANT PROTEIN," "ANIMAL PROTEIN".

Be sure to have enough protein foods to have students run at least twice. At the end of the game, check the bags to determine if youth properly categorized the protein sources.

#### PREPARATION

⌚ 5 minutes

#### SUPPLIES

- ❑ Pencils
- ❑ Paper



### Activity 2 How Much Meat And Beans?

**DO** (All Ages) ⌚ 20 minutes

Have students calculate how much protein (meat and beans) they need based on calorie requirements. They can use the handouts from Lesson 2, *Using MyPyramid – Children and Youth*. They will also need the handout *How Much Meat and Beans?*

## Lesson 7: Picking Protein



### HANDOUTS & BOOKS

- ❑ *Using MyPyramid In Your Life – Children and Youth*  p. 211
- ❑ *How Much Meat and Beans?*  p. 221

### PREPARATION

 5 minutes

### SUPPLIES

- ❑ 5 lb muscle model 
- ❑ 5 lb fat model 
- ❑ Tape measure
- ❑ Scale
- ❑ Flipchart or blackboard
- ❑ Pencils
- ❑ Paper



### Activity 3 - Muscle vs. Fat

 (All Ages)  30 minutes

Display the five pound fat and muscle models. Select four youth to record the following for each model on a flipchart or blackboard:

- Weight
- Length
- Circumference
- Describe muscle
- Describe fat





Compare muscle vs fat. Muscle tissue is more “alive.” It contains more blood and has more metabolic activity than fat. A pound of muscle needs between 35-50 calories a day to function, but a pound of fat needs only three calories a day! Muscle tissue burns a lot more calories than fat, by a ratio of about 14 to 1!

## Lesson 7: Picking Protein

### SUPPLIES

See recipes for ingredients and utensils list.

### HANDOUTS & BOOKS

- ❑ Recipe: *Let's Try Lentils*  p. 222
- ❑ Recipe: *Fresh Spinach and Cilantro Salad*  p. 223
- ❑ Recipe: *Kidney Bean and Tuna Salad*  p. 224
- ❑ Recipe: *Good for You and Good Too – Bean Tacos*  p. 225



## Now We're Cookin' – Lentils, Spinach Salad, Tuna Salad, Bean Tacos

(All Ages) ⌚ 35-45 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Have youth break into groups to prepare any of the following recipes.

- *Let's Try Lentils*
- *Fresh Spinach and Cilantro Salad*
- *Kidney Bean and Tuna Salad*
- *Good for You and Good Too – Bean Tacos*



Have each youth taste every recipe made.

### REFLECT (All Ages)

Have the group name all the protein sources in the recipes they just prepared.

? Ask: Can you name the foods you typically eat that are sources of protein? As each protein source is named, classify it as a plant protein or an animal protein.

Determine whether it is a low fat or high fat protein source. Have each person think of the amount of protein they consume.

One serving is the size of a deck of cards, or the palm of a hand. Ask youth if their serving sizes are appropriate. They might need to refer to the handouts used at the beginning of the lesson.

### APPLY (All Ages)

At home, share the many choices in the meat and bean group. Try a meal that uses a different type of protein such as beans or lentils. Share the recipes you just prepared with your family and friends.

## Technology Challenge

(All Ages)

Have youth go to <http://www.MyPyramid.gov> and click on "Inside the Pyramid." Explore the meat and beans sections. Find out how much you need each day. Look at the many choices of protein sources. Make a list of items you haven't tasted.

## **Lesson 7: Picking Protein**

Have youth go to the American Egg Board's website and explore another good protein source – eggs. Enjoy the music, the kid's page, the recipes, and activities. <http://www.aeb.org/index.html>

Visit the soy website and list the health benefits of eating soy. <http://www.soyinfo.com/benefits.shtml>

### **Resources**

2005 Dietary Guidelines for Americans, U.S. Department of Agriculture, Center for Nutrition Policy and Promotion:  
<http://www.cnpp.usda.gov/DietaryGuidelines.htm>.

## Lesson 8: Flexibility is Fabulous



### PREPARATION

- ⌚ 60 minutes to view video

### SET UP

- ❑ Distribute towels or yoga mats
- ❑ Place TV where all can see
- ❑ Set up CD player

### SUPPLIES

- ❑ Mats and/or towels for each youth
- ❑ Streamers  or scarves
- ❑ CD Player
- ❑ A variety of upbeat and relaxing music
- ❑ TV with VCR
- ❑ 1 chair for each youth
- ❑ Video: *Basic Yoga Workout for Dummies* 



### Outcomes (School Age)



The purpose of this lesson is to have the children:

- Understand the importance of stretching for overall fitness and health
- Participate in a yoga activity

### Instructor Essential Information

#### SET UP DETAILS

The instructor should view and practice the *Basic Yoga Workout for Dummies* video before beginning the lesson. Distribute towels or yoga mats to each youth. Have the children stand far enough apart to allow for movement.

If you are using a television, place it in a central location where all the children can see the monitor. The children will be using different colored streamers or colored scarves. If you are using scarves, use bright, lightweight fabrics for best results.

### Discussion

 (School Age) ⌚ 5 minutes

? Ask: Can you name some benefits of stretching and flexibility exercises? Examples: decreases risk for injury, helps body warm-up or cool-down after vigorous activity, increases balance, increases stability and coordination, makes you feel better.

Review stretching activities such as jump rope stretching or the Feel the Beat warm-up activity from Lesson 1, Activity 2 on p. 23. Have the children list other activities that might improve flexibility. Examples: dancing (ballet), martial arts (karate, tai chi, etc.), yoga. Share with the children that yoga is an ancient mind/body exercise that stretches and strengthens the body. It is more than 5,000 years old and originated in India. The exercises, called postures, are done in conjunction with controlled breathing. Yoga is practiced by athletes, dancers, and anyone wishing to increase flexibility.

### Activity 1 - Yoga Postures

 (School Age) ⌚ 35-45 minutes

Have each child choose a streamer or scarf and find a space where they can move freely without interfering with any one else or slipping on a yoga mat or towel. Demonstrate to the children how



## Lesson 8: Flexibility is Fabulous



to move the streamer<sup>4</sup> in a variety of arm movements making different patterns in the air. Some suggestions might include forming figure 8's, and writing letters of the alphabet. Remind them to change hands frequently to stretch both sides of the body.

### WARM-UP 🕒 5 minutes

Select music that has a range of tempos to inspire different movements. Play music and have the children make their streamers "dance." Remind them that they need to keep moving the entire time the music is playing. Continue movements for five minutes.

### YOGA POSTURES 🕒 30-40 minutes

Practice the basic yoga breathing technique. Have children stand with eyes closed practicing even, slow breathing through the nose. Each posture is held for six breathes (breathes are taken in and exhaled through nose). Have the children sit on towels or yoga mats in front of instructor with legs crossed in front of them ("Indian style"). Sit upright with shoulders back and chest up. The instructor will demonstrate each pose first. The children will then perform each of the postures described below, holding each one for six breaths:

- **Cat Pose** - Have youth get on hands and knees with flat or "neutral" spines. Hands are placed under shoulders. While inhaling, chest and head go up. When exhaling, round back like a cat. Repeat six times.
- **Mountain Pose** - Have youth stand with stomach and pelvis tucked in. Feet are under shoulders and are "grounded to the floor." Inhale and reach your arms over head with palms facing each other; exhale and bring arms down to the side. Repeat six times.
- **Standing Forward Bend** – Begin in the mountain pose. Bend knees slightly and bend over from the hips reaching fingertips to floor. Place fingertips on outside of foot keeping knees slightly bent at all times. Once in this position, do the following: inhale, slightly raise your upper body while keeping your spine straight and aligned with head. Exhale, lowering your head and back. Repeat six times.



-----  
<sup>4</sup> Adapted from *Jump Into Foods and Fitness*, Michigan State University Extension, 2003

## Lesson 8: Flexibility is Fabulous

- **Tree** – Begin in mountain pose. Stand on the right foot with chair on right side of body for support. Bring left foot up to right ankle or knee, resting sole of foot flat against leg. Bring hands up together in front of chest, palms touching. Inhale and push right foot into floor; exhale and press left foot into leg. Repeat six times. Reverse sides.
- **Downward Facing Dog** – Begin in the Standing Forward Bend position with knees bent and finger tips on outside of foot. Walk your hands forward until your body is in an inverted U position. Keep head and spine aligned. Inhale and push floor away; exhale and press heels down. It's fine if your heels don't completely touch the floor. Continue for six breathes.
- **Cobra** - Lie on belly with stomach pulled in, hands under shoulders. Straighten your arms until your chest and stomach are lifted off the ground. Inhale and lift chest; exhale and squeeze shoulder blades together. Repeat six times.



Note: Since yoga is a stretching and strengthening exercise. No cool-down is necessary.

### REFLECT (School Age)

? Ask: What do you think about this breathing technique? How is it different from how you breathe during other activities?

? Ask: When do you think this breathing technique might be useful or helpful?

### APPLY (School Age)

Ask youth to practice this breathing technique during the next 24 hours.

## Lesson 8: Flexibility is Fabulous

### PREPARATION

See School Age Preparation, Set Up, and Supplies.



### Outcomes (Middle School • Teen)



The purpose of this lesson is to have youth:

- Understand the importance of stretching and flexibility to overall fitness and health
- Participate in a yoga activity
- Understand the benefits of controlled breathing and its relationship to stress reduction

### Activity 2 - Yoga Postures

**DO** (Middle School • Teen) ⌚ 35-45 minutes

Have the youth do the Yoga Postures in Activity 1 for School Age youth, on page 56.

**REFLECT** (Middle School • Teen)

? Ask: What do you think about this breathing technique? How is it different from how you breathe during other activities?

? Ask: When do you think this breathing technique might be helpful? Is controlled breathing a good substitute for other physical responses? When?

**APPLY** (Middle School • Teen)

Ask youth to practice this breathing technique during the next 24 hours. Suggest that they try to use it during a stressful situation.

### Technology Challenge

(All Ages)

Check out these ideas about ways to have fun. Go to: <http://www.bam.gov> and find lots of exciting ideas to increase activity, and have fun. Get tips on ways to look better and feel good about yourself and others. To create an Exercise Calendar, click on "Activity Calendar," then scroll to the bottom and select "Create My Calendar." You can set your own activity goals around what you like to do and check your progress each day. Reward yourself at the end of the week for meeting your goals!

## Lesson 9: Eating Rainbows

### PREPARATION

🕒 10 minutes

### SUPPLIES

See Set Up Details.

- ❑ Pencils
- ❑ Paper
- ❑ Plastic food models [RK](#)
- ❑ Dairy Council food model pictures [RK](#)
- ❑ Grocery bag
- ❑ Pictures of fruits and vegetables
- ❑ Index cards
- ❑ Box or hat for index cards
- ❑ Fruit and vegetable descriptors
- ❑ MyPyramid poster [RK](#)

### HANDOUTS & BOOKS

- ❑ *Using MyPyramid In Your Life – Children and Youth* [A](#) p. 211
- ❑ *MyPyramid Worksheet* [RK](#)

### Outcomes (All Ages)

The purpose of this lesson is to have youth:

- Identify a variety of fruits and vegetables
- Describe the reasons why we need to eat more servings of fruits and vegetables each day
- Describe why color is an important component in vegetable and fruit choices
- Prepare healthful snacks



### Instructor Essential Information

Using <http://www.mypyramid.gov> as a reference, click “Inside the Pyramid” to visit the fruits and vegetable pages. Fruits and vegetables are a colorful gateway to good health. Studies have shown that risks of heart disease, cancer, and other chronic diseases are lowered for people who eat plenty of fruits and vegetables. The pigments that give fruits and vegetables their color are the same compounds that help protect us from disease.



### SET UP DETAILS

Decorate Bag - Before class, decorate a grocery bag with pictures of fruits and vegetables. Then fill the bag with different fruits and vegetables or have youth do it. You can use the plastic food models, food model pictures, or real fruit and vegetables. Try to choose fruits and vegetables that will be in the *Rainbow Fruit Kabobs* and *Crunchy Vegetable Burrito Banditos* recipes.

Fruit and Vegetable Descriptors - Write down words that describe characteristics of fruits and vegetables on slips of paper and put in a hat or small box. Examples: red, green, yellow, blue, white, orange, round, oval, tubular, stringy, bumpy, fuzzy, smooth, fibrous, rough, sour, sweet, chewy, tart, juicy, and crunchy.

Index Cards - On an index card write the recommended amount of fruit and vegetables per day for each of the youth named in the *Food Requirements Vary* activity on page 63.

### Discussion

**DO** (All Ages) 🕒 5-10 minutes

Discuss why fruits and vegetables are important. Refer to the MyPyramid poster to identify the fruit and vegetables color bands.

## Lesson 9: Eating Rainbows

Review the concept of band width as it relates to amount to be consumed.

? Ask: What fruits and vegetables did you eat yesterday? Write them down. Have youth refer back to completed worksheets from Chapter 1, Lesson 2, *Using MyPyramid – Children and Youth* and *MyPyramid Worksheet*, to determine if fruit and vegetable requirements have been met. If youth haven't done that lesson, refer to the MyPyramid poster to determine serving range.

### PREPARATION

⌚ 5 minutes

### SET UP

See Set Up Details.

### SUPPLIES

- ❑ 2 white plates
- ❑ Plastic food models or Dairy Council food model pictures: all the food groups [RK](#)

### Activity 1 - Kaleidoscope Of Colors

DO (All Ages) ⌚ 30 minutes

Use plastic food models or food model pictures for this activity. Give each youth two plates. On Plate 1, have them place only food from the Grain, Dairy, and Meat food groups. On Plate 2 have them place food from all food groups, including at least 3 types of fruits and vegetables. Remind youth that the meat group (protein) also includes poultry, dried beans, eggs and nuts.

#### Plate 1

Grains  
Dairy  
Meats

#### Plate 2

Grains  
Dairy  
Meats  
Fruits  
Vegetables



? Ask: What differences do you see between the two plates in terms of colors, textures, and tastes?

? Ask: Do you see any other differences?

? Ask: What are some other fruits and vegetables that would add color to the plates?

? Ask: Do you normally eat the recommended amount of fruits? Of vegetables? Why is that important for your health? Emphasize that a variety of colorful vegetables and fruits will result in a more nutritious meal.

## Lesson 9: Eating Rainbows

### PREPARATION

🕒 5 minutes

### SET UP

See Set Up Details.

### SUPPLIES

Decorated bag filled with models of fruits and vegetables or real food.

### PREPARATION

🕒 5 minutes

### SUPPLIES

Streamers [RK](#) or scarves in many colors

### Activity 2 - Catch A Rainbow Everyday

[DO](#) (School Age) 🕒 15minutes

Take out the decorated grocery bag filled with fruits and vegetables. Have each youth reach in the decorated bag, touch a food and try to guess what it is, what color they think it might be, and whether it is a fruit or vegetable. After describing the item, pull it out of the bag to determine if they were correct.

### Activity 3 - Color Is Important

[DO](#) (School Age) 🕒 15 minutes

Select one of the streamers or scarves used in the warm up activity in Chapter 1, Lesson 8, and have youth name some fruits or vegetables that are the same color as the streamer. Remind them why color is important.

## Lesson 9: Eating Rainbows

### PREPARATION

⌚ 30 minutes



### SET UP

Make copies of handouts.

### SUPPLIES

- ❑ White paper plates
- ❑ Colored pencils, markers, or crayons

### HANDOUTS & BOOKS

- ❑ *Veggie Plant Parts*  p. 226
- ❑ *You Can Eat a Rainbow*  p. 227

### Activity 4 - Veggie Plant Parts

 (School Age) ⌚ 30 minutes

For this activity, use the *Veggie Plant Parts* handout. Read the handout and have children do the Word List Game.

 (School Age)

? Ask: How many fruits should you eat each day?

? Ask: How many vegetables should you eat each day?

 (School Age)

Using the *You Can Eat a Rainbow* handout, color the rainbow bands and then have children write the names of fruits and vegetables in the bands that match the band colors.

On a white paper plate draw the fruits and vegetables you would like to eat tomorrow. Do you have a variety of colors?





### PREPARATION

⌚ 30 minutes

### SUPPLIES

See Set Up Details.

- ❑ Index cards
- ❑ Box or hat for index cards
- ❑ Fruit and vegetable descriptor words
- ❑ Paper plates
- ❑ Plastic food models: fruit and vegetables 
- ❑ Dairy Council food model pictures 

### Activity 5 - Descriptor Words

 (Middle School • Teen) ⌚ 15 minutes

Get out the hat or box with descriptor words that you prepared before class (see Set Up Details). Have each youth pick a descriptor word from the box or hat and name a corresponding fruit or vegetable to which it applies.

### Activity 6 - Food Requirements Vary

 (Middle School • Teen) ⌚ 30 minutes

The recommended amounts of fruits and vegetables per day vary according to your age and sex. There are many different ways to get the number of servings you need for good health. The index cards for the following activity indicate the youth's age and sex and how many cups of fruits and vegetables they should eat each day.

Divide youth into five groups. Give each group a paper plate. Using the food pictures or models, have them fill the plate with fruits and

## Lesson 9: Eating Rainbows

vegetables for one of the following youth:


- **Jill and Jeremy** (age 4-8) – needs 1 to 1½ cups of fruit, and 1½ cups of vegetables.
- **Josh** (age 9-13) – needs 1½ cups of fruit, and 2½ cups of vegetables.
- **Jenny** (age 9-13) – needs 1½ cups of fruit, and 2 cups of vegetables.
- **Jason** (age 14-18) – needs 2 cups of fruit, and 2½ cups of vegetables.
- **Jennifer** (age 14-18) – needs 1½ cups of fruit, and 2½ cups of vegetables.

Note that the plastic food models are made in serving sizes but the pictures may be estimates. Youth may need to estimate whether they have the correct serving sizes.

### SUPPLIES

See recipes for ingredients and utensils list.

### HANDOUTS & BOOKS

- ❑ Recipe: *Crunchy Vegetable Burrito Banditos*  p. 229
- ❑ Recipe: *Rainbow Fruit Kabobs*  p. 228

## Now We're Cookin' – Rainbow Fruit Kabobs, Crunchy Vegetable Burrito Banditos

(All Ages) ⌚ 45 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Separate youth into two groups and have each group prepare one of the two recipes: *Rainbow Fruit Kabobs* or *Crunchy Vegetable Burrito Banditos*. The recipes are in Appendix A.



### REFLECT (Middle School • Teen)

Have youth brainstorm ways to incorporate more fruits and vegetables into their daily meals and snacks.

### APPLY (All Ages)

Work with your parents to develop a menu for one day that includes the appropriate number of fruits and vegetables for you. Give youth the *Using MyPyramid In Your Life - Children and Youth* handout, and the *MyPyramid Worksheet* handout as a reference.



## Lesson 9: Eating Rainbows

---

### Technology Challenge

(All Ages)

Design a plate for better health. Visit <http://www.aicr.org> and click on "*The New American Plate*." Use it as a sample for designing a meal. Focus on color, taste and texture as you design your own individual plate. Select foods you like to eat.

Visit the *5 a day* website <http://5aday.com/> to determine how to "eat your colors to stay healthy and fit."

---



## Chapter 2 Healthy Decisions For Living Well

### Introduction

In this chapter, youth learn that many different factors affect body weight. They learn that exercise and proper nutrition can help maintain a healthy body. Youth also learn that some factors affecting body weight are out of their control.

Body image is a concern among youth, particularly in the middle school and teen years. In several activities, youth discuss popular views about “ideal” body types and whether they represent realistic or healthy goals. Youth learn how many calories are burned during exercise and how to balance caloric intake with energy output.

Youth learn that it is helpful to set small, realistic goals when trying to make changes to their diet or exercise habits. They learn how many calories are in fats, proteins and carbohydrates, and then examine food labels to see how many calories are in their typical snacks.

### Lesson Summary

- |   |           |
|---|-----------|
| 1. Body Image: Healthy Comes in Lots of Sizes | Fitness   |
| 2. Calories In and Calories Out               | Nutrition |
| 3. Do You See What I See?                     | Fitness   |

## Lesson 1: Body Image

### Healthy Comes in Lots of Sizes


#### PREPARATION

🕒 1-2 minutes

#### SET UP

Before lesson begins, display the "What is Normal Supposed to Look Like Anyway?" poster on the wall.

#### SUPPLIES

- ❑ Tape
- ❑ Small stuffed beanbag or ball
- ❑ *What is Normal Supposed to Look Like Anyway?* poster 

#### HANDOUTS & BOOKS

*Helping Terry*   
p. 230

#### Outcomes (Middle School • Teen)

The purpose of this lesson is to have youth:

- Examine ideas and stereotypes about body size
- Understand that many factors affect body weight
- Understand that healthy eating habits, regular physical activity, and less screen time can help keep a body healthy
- Participate in a goal setting activity



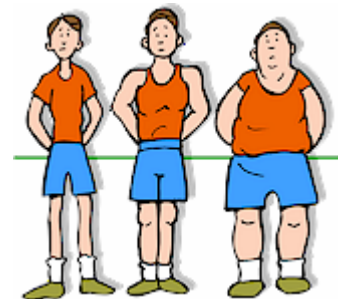
#### Discussion

 (Middle School • Teen) 🕒 10-15 minutes

Show youth the "What is Normal Supposed to Look Like" poster. Begin a discussion of the factors that affect body size and weight. Examples:

- **Heredity** - genetics determine many things about our bodies such as color of skin, eyes and hair; height, and body shape.
- **Eating habits** - youth might overeat as a response to stressful situations or might frequently eat a lot of fast food or other high fat or high calorie foods instead of regular, balanced, meals.
- **Activity habits** – ask whether youth regularly participate in physical activities such as sports, or spend their free time watching television and playing computer games?

? Ask: Now that we've taken a look at the different body types represented in this poster, do you think all the body types are "normal?" Explain that some factors, like genetics (your family), strongly influence how a body is shaped. Youth have no control over such things. However, they do have control over other factors affecting their weight such as eating habits and physical activity patterns.



? Ask: How does our society influence our ideas about body image? Do we have different ideas about how some groups should look based on their occupations? How about athletes, models, actors/actresses, dancers, musicians and others?

## Lesson 1: Body Image



? Ask: Do you think that an athlete or a fashion model has a body that is attainable by the average person? Why or why not?

? Ask: How do famous people get their bodies to stay "in shape?" Do models and film stars really look in real life as they do in magazines and movies?

? Ask: Does a thin body mean an individual is healthy? Why or why not?

Review the earlier discussion, emphasizing that youth have some control over what and how much they eat, and their levels of physical activity. Stress that it is important to remember that there are many reasons to eat healthfully and be active. Maintaining and/or losing weight is just one of them. Maintaining a healthy weight depends upon setting realistic goals. Setting healthy lifestyle goals is the first step to a healthier life!

### Activity 1 – Goal Setting

**DO** (Middle School • Teen) ⌚ 20-25 minutes

Before beginning the activity, have the youth sit in a large circle. One youth will read the scenario, then the other youth will, in turn, make suggestions as to how to help the person in the story. Tell youth that only the person with the beanbag may speak. The beanbag will be thrown to each person in turn.

The instructor holds the beanbag and chooses a youth who reads the following scenario from the *Helping Terry* handout. To start the discussion, the instructor might say: "One realistic goal Terry can make is to serve at least one vegetable when she is helping prepare dinner."

The instructor then throws the beanbag to one of the youths in the circle who makes another suggestion. The activity continues until each youth has offered at least one suggestion or goal for Terry.

**Instructor note:** If someone suggests that Terry set a goal that is not very realistic, such as joining an expensive gym, ask for a more realistic alternative without seeming to criticize the suggestion. Say, for example, "Suppose Terry couldn't afford a membership to a gym, what could she do instead?" A sample answer might be: "Check out exercise videos from the public library." Question the

## Lesson 1: Body Image

group in this way to see if they find their suggestions to be realistic.

Emphasize that real change happens slowly and to make lasting changes, Terry needs to take "baby steps." A sudden drastic change in diet and physical activity level for Terry and her family will probably not be successful.

### REFLECT (Middle School • Teen)

? Ask: What is a healthy body image?

? Ask: Can you name some cultural differences that determine how we define the "perfect" body?

? Ask: Do you think that things like historical trends, technology, climate, or fashion influences our ideas about the "ideal" body?

? Ask: How do the bodies of athletes today differ from 25 years ago?

? Ask: Are the expectations for females different than males?

### APPLY (Middle School • Teen)

Ask youth to set one small goal for improving their health. Ask for volunteers to share their goal if they wish to. Sharing their goal should be strictly voluntary – no pressure. If they wish to share their goals, have them report back in the upcoming weeks about their progress in making lasting change.

## Technology Challenge

(Middle School • Teen)

Challenge one of your friends or family members to a "BETCHACAN'T" activity at <http://www.kidnetic.com>.



Find out how far you can speed walk without stopping or how long it takes you to walk around your house or the block. Calculate your time using the computer stopwatch and challenge your friends to beat it! Or, participate in a fun scavenger hunt with your friend and get active at the same time. You can design your own game and submit it to <http://www.kidnetic.com> so others can play too!

What is a "BMI" and how do I find out mine? If you would like to find out more about the body mass index tool, what it means and how to use it, plus lots of other great information about teen health issues, go to <http://www.kidshealth.org/teen>.

## Lesson 1: Body Image

Click on "Food and Fitness." Go to "*What's the Real Weight for my Height*" and calculate your BMI on a special chart just for people under 20 years old. Learn more about how genes, puberty and growth affect a person's weight and height. Learn how to take steps toward a healthier you!



## Lesson 2: Calories In - Calories Out

### When Your Balancing Act Is Out of Whack


#### PREPARATION

🕒 30 minutes

#### SET UP

- ❑ See Set Up Details
- ❑ Place plastic food models or real food samples in discussion area
- ❑ Have youth sit in semi-circle
- ❑ Set out snacks
- ❑ Create four aerobic activity stations
- ❑ Review the Activity: *How Many Calories Are In A Snack?*

#### SUPPLIES

- ❑ See Set Up Details
- ❑ Plastic food models  or real food samples
- ❑ Snacks with food labels
- ❑ Aerobic station equipment: basketballs, jump ropes, aerobic dance video, hacky sacks
- ❑ TV with VCR
- ❑ Stopwatches
- ❑ Masking tape to mark off activity stations

#### Outcomes (School Age)



The purpose of this lesson is to have the children:

- Understand that food supplies the calories needed for daily activities
- Look at differences between high-and low-calorie foods
- Understand how physical activity, type of food, and quantity of food are all related to weight gain/loss
- Discover that individual calorie needs are different for everyone
- Read a food label and discuss the contents of a snack food
- Participate in a "calorie-burning" activity

#### Instructor Essential Information

The duration and intensity of the exercises in this lesson may need to be adjusted to accommodate different fitness levels of the children. For example, continuous jumping is very difficult, particularly for children who are not in good shape. Explain to them that they may not be able to jump rope continuously for 20 minutes. This may be something they have to work up to and that they should take short rests when they are tired. For younger children, you may wish to shorten the time at each station and have children rotate through the stations twice.

The instructor should always provide water breaks during these activities. The breaks should be more frequent in warm weather.

#### SET UP DETAILS

Instructors will need the following for this lesson:

- Food models - This lesson requires plastic food models or real food samples such as potato chip bags, fast food wrappers, yogurt and milk containers, soda bottles, etc.
- Snacks – Lay out snacks on a table or in a basket near the discussion area. Be sure to have one small bag or snack for each child. The snacks need to have clearly marked food labels. Examples are: potato chips, pretzels, small candy bars, granola bars, etc.
- Aerobic Stations – Set up four stations around the room that will allow youth to perform aerobic exercise. Obtain any equipment needed for these exercises. Examples: jump ropes, basketballs/basketball hoop, hackey sacs, or dance video produced for youth, such as hip-hop or salsa.



## Lesson 2: Calories In - Calories Out

- Calories Burned During Exercise – Make one copy per youth of the handout: *Calories Burned During One Hour Of Exercise*.

### Discussion

**DO** (School Age) ⌚ 15 minutes

? Ask: What is a calorie? Explain that a calorie is a unit of measurement that scientists use to describe how much energy is contained in foods. Different kinds of foods contain different amounts of energy (calories).

Hold up a variety of plastic food models and have students guess if foods are high or low in calories. Ask the children to give examples of some high-calorie foods. Examples: ice cream, whole milk, cheeseburger with bacon, potato chips, French fries, cake.

Discuss foods lower in calories and use food models to illustrate the examples such as: low-fat yogurt, low-fat or skim milk, small hamburger, pretzels, fruit, popcorn, and vegetables.



Explain to the children that a well-balanced diet must include food from all food groups and should be high in fruits, vegetables, whole grains, low-fat dairy, and lean sources of protein such as beans, poultry and fish. These kinds of foods contain the nutrients necessary for growing healthy bodies and are lower in calories than some other food choices.

Emphasize that there are calories in all the foods we eat and it is from these calories that we get the energy we need to work, play and think. Make it clear to the children that they should not be too concerned about counting calories in foods. It is more important to remember that all children grow at different rates and require different amounts of calories.

We only need to worry about calories when our “balancing act gets out of whack.” By that we mean eating too many high-calorie foods such as sweets and fast food and not getting enough exercise.

? Ask: Why do some foods have more calories than others? For example, why does a steak contain more calories than a piece of grilled chicken? Explain that steak is higher in calories than baked or grilled chicken or fish because it has a lot of fat.

## Lesson 2: Calories In - Calories Out

Fat contains a lot of calories. Foods with less fat contain fewer calories.


Emphasize that some fat is necessary for bodily functions, particularly during growth periods, but most Americans get too much fat in their diets. This results in too many calories and weight gain.

? Ask: What other kinds of foods do you like to eat that add a lot of calories to your diet? Explain that foods high in sugar such as soft drinks, sweets, etc. also provide an excess number of calories in most American diets.

? Ask: What do you think it means when we say your calorie balancing act is "out of whack?" Explain that healthy bodies need a balance between what they eat (calories in) and how much they exercise (calories out). If there is an excess of calories taken in, those calories will be stored as body fat.

Finally, stress to the children that counting calories is never advisable for growing children and teenagers. However, they need to be aware that good health is a balancing act; the calories that go into their bodies have to be in balance with their physical activity levels.

### HANDOUTS & BOOKS

*Calories Burned  
During One Hour Of  
Exercise*   
p. 231

### Activity 1 - How Many Calories In A Snack?

 (School Age)  20 - 25 minutes

Divide youth into four groups by birthdays:

- Group 1 January - March birthdays
- Group 2 April - June birthdays
- Group 3 July - September birthdays
- Group 4 October - December birthdays

Have each child choose a snack that they like from the snack selection. Encourage them to eat the snack if they choose. Tell them to save the wrappers for later.

? Ask: How many calories were in the snacks that you just ate? Have them check the food labels.

Send each group to an aerobic activity station. Make sure that each member is an active participant in the activity. Tell youth that they are performing an experiment to see how long and how hard they have



## Lesson 2: Calories In - Calories Out

to exercise to "work off" their snack. Have each group do their activity for approximately 20-25 minutes. Circulate among the groups to ensure that everyone is active.

- **Basketball Activity Station** - Make sure that each youth has a basketball. The goal of this activity is to keep youth moving. Some youth will have more advanced skills than others so stress to youth that the point of this activity is simply to keep moving.
  - Basketball Drill 1 Using a predetermined line, have all youth begin walking while dribbling their basketballs to the line. Once at the line, have them return to the beginning. Repeat, having youth run to the line while dribbling and return to the beginning.
  - Basketball Drill 2 Using the same turnaround line as in Drill 1, have youth dribble half way to the line and then chest pass the ball to one of the other group members. Everyone passes their ball to another member. Youth continue dribbling to the turnaround line and back to the beginning.
  - Basketball Drill 3 Everyone in the group plays a basketball game. Have the group divide into 2 smaller groups. Each of the smaller groups gets one basketball. Make sure that youth with more advanced skills are evenly distributed between the groups. The object of the game is to have all group members touch the ball, dribble twice, and pass the ball to a teammate before a shot is taken. No points are scored until everyone has touched and dribbled the ball before shooting.
- **Jump Rope Activity Station** - Have youth position themselves around the room to allow for plenty of space for individual jump-rope activities. The point of this activity is to keep youth continuously active for at least 20 minutes; encourage them to jump on one foot, two feet or any other moves that will keep them moving.
  - Jump Rope Drill 1 Have youth begin jumping rope and challenge them to remain jumping for one minute without stopping. After they have completed one minute, have them take a short rest of one minute.
  - Jump Rope Drill 2 Next, ask them to try to jump rope



## Lesson 2: Calories In - Calories Out



for two minutes without stopping. After two minutes of continuous jumping, have them take a short rest of one minute or so.

- **Jump Rope Drill 3** After youth have jumped individually for as long as they can, have them lay a long rope across the floor and ask them to jump from one side of the rope to the other back and forth until they have reached the end of the rope.
- **Jump Rope Drill 4** Arrange two long ropes parallel to each other about two feet apart and have youth jump between and back and forth across the ropes from one end to the other.
- **Jump Rope Drill 5** Continue to arrange the jump ropes in different patterns on the floor and have the youth jump back and forth between the ropes.
- **Dance Video Activity** - Arrange a television with a video/DVD player and a dance video in one corner of the room. Make sure youth have plenty of space for dancing. Have youth follow the instructions given by the video dance instructor. If some youth find the dance moves too difficult to follow, encourage youth to move in any way they like (jump, skip, hop in place, move their arms).
- **Hackey Sack Activity** - Have youth form a small circle. Ask for a volunteer to begin moving the hackey sack around the circle. The object of this activity is to move the hackey sack around the group using a pre-designated body part without allowing the hackey sack to touch the floor. After all members of the circle have touched the hackey sack using that body part, have them start with a new body part. For example, start moving the hackey sack using the knee. Have the first volunteer move the hackey sack to another youth using his/her knee. After everyone has "thrown" the hackey sack with their knee, switch to head, shoulder, elbow, etc.

When finished with all activities, have all youth reconvene in the middle of the room for discussion with the wrappers from the food they ate earlier. Give the group several copies of the handout *Calories Burned During One Hour Of Exercise*. Tell them to find the table that corresponds to their own weight and spend a few minutes looking at the calories burned for different activities.

**REFLECT** (School Age)

## Lesson 2: Calories In - Calories Out

? Ask: Which group burned the most calories? Why? Which group burned the fewest calories? Why? Do they think they burned off the snack they ate earlier?

? Ask: Which activities burn the most calories in an hour? Which ones burn the least? Are you surprised by any of these numbers?

? Ask: Who can estimate how long it would take to “burn off” the 760 calories from a Burger King Cheese Whopper?

Emphasize that fat and calories are necessary for growing bodies, but too much of either can cause excess weight gain and risk chronic diseases. The amount of calories needed in a day is different for everyone and depends upon age, activity level, and gender.

### APPLY (School Age)

Ask the children to keep a log of the different kinds of exercise they get during a one-week period. Emphasize that they should spend about one hour each day doing physical things they enjoy such as riding their bikes, playing soccer or playing outside with their friends.

### PREPARATION

⌚ 15 minutes

### SET UP

See Set Up Details.

### Outcomes (Middle School • Teen)

The purpose of this lesson is to have youth:


- Describe how a calorie is used by the body
- Describe the differences between high-and low-calorie foods




## Lesson 2: Calories In - Calories Out

- ❑ Place plastic food models or samples in discussion area
- ❑ Have youth sit in semi-circle
- ❑ Place snacks near lesson area
- ❑ Create four aerobic activity stations
- ❑ Review *How Many Calories Are In A Snack?* Activity

### SUPPLIES

- ❑ See Set Up Details
- ❑ Plastic food models  or real food samples
- ❑ Snacks with food labels
- ❑ Aerobic station equipment: basketballs, jump ropes, aerobic dance video, hackey sacks
- ❑ TV with VCR
- ❑ Stopwatches
- ❑ Masking tape to mark off activity stations

### HANDOUTS & BOOKS

*Calories Burned During One Hour Of Exercise*   
p. 231

- Understand how physical activity, type of food, and quantity of food are all related to weight gain/loss
- Discover that individual calorie needs are different for everyone
- Look at how "budgeting" food and activity can help maintain a healthy weight
- Participate in a "calorie-burning" activity

## Instructor Essential Information

### SET UP DETAILS

See Set Up Details for this lesson for School Age on page 72.

## Discussion

 (Middle School • Teen) ⌚ 10-20 minutes

? Ask: What is a calorie? Explain that a calorie is a unit of measurement that scientists use to describe how much energy is contained in foods. Different kinds of foods contain different amounts of energy (calories).

Hold up a variety of food models and have students guess if foods are high or low in calories. Ask youth to give examples of some high-calorie foods. Examples: ice cream, whole milk, a double cheeseburger with bacon, potato chips, French fries, cake. Discuss foods lower in calories and use food models to illustrate examples. Examples: low-fat yogurt, low-fat or skim milk, a single hamburger, pretzels, fruit, popcorn, vegetables.



Explain to youth that a well-balanced diet should include food from all food groups and should be high in fruits, vegetables, whole grains, low-fat dairy, and lean sources of protein such as beans, poultry and fish. These foods tend to contain lots of nutrients necessary for growing healthy teenagers and they are lower in calories than some other food choices.

? Ask: Why do some foods have more calories than others? For example, why does a rib-eye steak contain more calories than a piece of grilled chicken? Explain to youth that the reason some foods are high in calories is because a food like steak is high in saturated fats.

### CALORIES IN ONE GRAM OF:

Fat = 9 calories

Carbohydrate = 4 calories

Protein = 4 calories

Fat contains more calories per gram than carbohydrates and protein do. In other words, if you were to eat one gram of pure fat, you would get more than twice as many calories as you could from one gram of pure protein or pure carbohydrates. Explain that this is why when eating a high-fat food, such as a steak, a smaller portion is the wiser, healthier choice.

## Lesson 2: Calories In - Calories Out

### Activity 1 - How Many Calories Are In A Snack?

**DO** (Middle School • Teen) ⌚ 20 - 25 minutes

See the Activity 1 in this lesson for School Age on page 74.

**REFLECT** (Middle School • Teen)

? Ask: Which group burned the most calories. Why? Which group burned the fewest calories? Why? Have youth calculate the approximate number of calories they burned using the *Calories Burned During One Hour Of Exercise* handout. Did they burn off the snack they ate earlier? If not, how long would it take them to burn those calories?

Calculate how long it would take you to burn off the 760 calories from a Burger King Cheese Whopper if you were doing the activity you just did with your group.

**Instructor's Note:** Emphasize that fat and calories are necessary for growing bodies but too much of either can cause excess weight gain and risk for chronic diseases. Calorie amounts are different for everyone and depend upon age, activity level and gender.

**APPLY** (Middle School • Teen)

Ask youth to estimate the number of calories they are getting from the snack foods they eat between meals. Have them estimate how much activity they need to do during one week to exercise off these extra calories.

Ask youth to keep track of their activities and calories for one week and to decide if their "calories in" are equal to, less than, or more than, their "calories out."

### Technology Challenge

(Middle School • Teen)



To find out how many calories you burn riding your bike, go to <http://www.dsf.health.state.pa.us/health/cwp/view.asp?a=174&q=238752> and click on "Calorie Burner." Next, enter your weight and time and then click on "Calculate." You'll be surprised to see that simple household chores like vacuuming and cleaning your bedroom or playing some pick-up basketball for 30 minutes or so may burn the equivalent of a candy bar or other snack.

## **Lesson 2: Calories In - Calories Out**

---

### **Resources**

- Calories Burned During Exercise  
<http://www.shapefit.com/calories.html>
  - How many calories does physical activity use?  
[http://www.mypyramid.gov/pyramid/calories\\_used.html#](http://www.mypyramid.gov/pyramid/calories_used.html#)
-



## Lesson 3: Do You See What I See?

### PREPARATION

🕒 5 minutes



### SET UP

- ❑ Hang self-stick easel paper on easel or walls
- ❑ Set up CD player
- ❑ Have youth sit in semi-circle around posters

### SUPPLIES

- ❑ Poster paper
- ❑ A variety of upbeat and relaxing music
- ❑ Tape or easels
- ❑ Magazines with pictures of people
- ❑ Glue and scissors for each child
- ❑ Different colors of construction paper
- ❑ Fine line markers
- ❑ Balls, hula-hoops, jump ropes
- ❑ Variety of items to be used as weights such as food cans (14-16 oz.), peanut butter, beanbags, etc.

### HANDOUTS & BOOKS

- ❑ *Famous Person Body Chart*  p. 239
- ❑ *Eating Disorders Fact Sheet*  p. 240

### Outcomes (School Age)



The purpose of this lesson is to have the children:

- Recognize that people come in all shapes and sizes
- Understand that people of different weights and sizes can be healthy
- Learn that people can be too thin as well as too fat for optimum health
- Recognize that culture and family can be an important determinant for size
- Understand that the images we see on TV, in videos, etc. are not always healthy

### Instructor Essential Information

Today, children as young as eight years old are being diagnosed with eating disorders including anorexia, unhealthy dieting, and binge eating. It is imperative that children understand at an early age that people come in diverse shapes/sizes and should be appreciated and understood just as we appreciate diversity in race, religion, gender, etc. Wanting to be really thin can become an emotional disorder that may require professional help to overcome.

### Discussion

DO (School Age) 🕒 15 minutes

? Ask: Have you ever known someone who was teased about their size or physical characteristics? Have you ever teased anyone else about how they look?



? Ask: How do you think the person being teased about their appearance feels? Why do you think people tease other people? Next, remind children that people have different body types and each different type can be healthy.

? Ask: How can you know if you are a healthy weight? Have children discuss this. Some possible answers might include:

- It is easy to play physical games
- You do not tire easily when playing games
- People comment on your size (family or friends)
- You do not get tired in school doing every day activities

## Lesson 3: Do You See What I See?

Remind children that regardless of their weight they must exercise and eat healthy foods to be fit. Review the three different types of exercise: flexibility, aerobic, and strengthening. Explain that all three types of exercise are equally important for maintaining a healthy body. (See Chapter 1.)

### Activity 1 - What Does Attractive Mean To You?

**DO** (School Age) ⌚ 45 minutes

Give each child a piece of colored construction paper of their choice, glue and scissors. Ask them to cut out pictures of different body types from magazines (i.e., athletes, movie personalities, teens, politicians, etc.). Tell them to select 3-5 different body types and glue the pictures onto their paper.

Ask the children to write two to three words under each picture describing the person. You might want to give them suggestions such as muscular, athletic-looking, short, etc. They could also use descriptive words such as busy, sleepy, happy, etc.

Divide children into small groups and ask them to share their pictures and explain how the words fit the person.

**Instructor Note:** Ideally, the children will have a variety of body types represented by their pictures. Lead them through a discussion of why they think certain physical characteristics make people appear more healthy than others. Remind them that “model” thin is not necessarily healthy, nor is a heavier person necessarily unhealthy.

### Activity 2 - Freeform Physical Activity

**DO** (School Age) ⌚ 30 minutes



Put on fast-paced, energetic music. Offer a variety of equipment to use such as balls, hula-hoops, light weights, etc.

Ask children to use the equipment to demonstrate a physical activity that they enjoy and that they believe would be good exercise to help a child who wanted to lose weight. Have them continue for at least 15-20 minutes. Some possible activities might be a pick-up game of soccer or basketball, dancing, or any other activity that elevates their heart rates.

Change the music to something with a slower beat that is quieter

### Lesson 3: Do You See What I See?

and smoother. Again, ask the group to select movements that would provide good exercise for youth who are trying to gain weight (build muscle).

#### REFLECT (School Age)

? Ask: Think about some famous people you admire. Do you think any of them are too fat, too thin, or “just right?”

? Ask: Why do you think that many musicians and actresses are often very thin, and athletes in some sports are very heavy? Mention animated and fantasy characters they watch—the Incredibles, cartoons, the X-men. Are these reasonable body images?



#### APPLY (School Age)


Ask children to pay attention to the body shapes and sizes of their favorite TV and movie characters. Ask them to keep track of their observations using the handout: *Famous Person Body Chart*. Also, ask them to track the TV or movie favorites of their older siblings or other family member to see if they view these characters differently.

## Lesson 3: Do You See What I See?

### PREPARATION

🕒 5 minutes



### SET UP

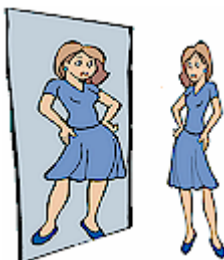
- ❑ Hang flip chart or poster paper on walls or attach to easels
- ❑ Cut out the rulers from *Measure Your Frame Size Ruler* 

### SUPPLIES

- ❑ Flip chart or poster paper
- ❑ Markers
- ❑ Tape or easels
- ❑ 8-inch paper rulers

### HANDOUTS & BOOKS

- ❑ *Eating Disorders Fact Sheet*  p. 240
- ❑ *Measure Your Frame Size Ruler*  p. 242



### Outcomes (Middle School)



The purpose of this lesson is to have youth:

- Understand that people are born with some body characteristics that they can't change, such as bone size, skin color, height, etc.
- Understand that fashion models weigh approximately 15-25% less than is considered a safe and healthy weight
- Recognize warning signs of eating disorders and know what to do if they are concerned about a friend or relative or themselves
- Understand why bingeing and purging is unhealthy and dangerous

### Instructor Essential Information

#### SET UP DETAILS

Make several eight-inch paper rulers to be used for measuring wrists by cutting out the rulers in the handout: *Measure Your Frame Size Ruler*.

Today, youth as young as eight years old are being diagnosed with eating disorders including anorexia, unhealthy dieting, and binge eating. As they move into middle school, appearance becomes more important and youth begin to experiment with ways to alter characteristics they don't like about themselves. It is imperative that youth at this age understand that wanting to be really thin can be an emotional disorder and that professional help is available.

Also emphasize that this is the time of their life that will be their fastest growth spurt since they were newborns. They may go through periods where they don't like their looks. They will continue to change for several more years. Remind youth that the thing they don't like about themselves today may be different in six months.

### Discussion

 (Middle School) 🕒 15-20 minutes

? Ask: What is bulimia? Anorexia? Binge eating? Use the *Eating Disorders Fact Sheet* handout as a reference for this discussion.

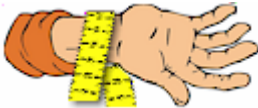
Have youth list the characteristics of these disorders on flip chart or poster paper taped to wall. Ask them to explain the differences

### Lesson 3: Do You See What I See?

between the three types of eating disorders.

On a clean piece of flip chart paper, have youth list behaviors that may indicate an eating disorder. Some answers might include:

- Frequently saying they are fat
- Frequently going to the bathroom during or after meals (may indicate bulimia)
- Playing with food, measuring servings
- Excessive exercise
- Extreme dieting and fasting
- Eating huge amounts of food at one sitting, often “junk” food
- Being extremely thin, having brittle hair, nails.



Distribute the eight-inch paper rulers, which will be used to measure the youth's wrists to determine frame size. Be sure that youth understand that these measurements are for those who have reached puberty and have started their adult growth spurt. After youth measure their wrists, give them the following guidelines to determine their frame sizes:

- **Small frame** - less than 6 inches for males and females
- **Medium frame** - 6 to 6 ½ inches for female, 6 to 7 inches for males
- **Large frame** - greater than 6 ½ inches for females, greater than 7 inches for males

Explain that frame does not determine how tall you will be or the amount of muscle that you can develop. For example, tall people can have small or medium frames and short people can have large frames. Point out that some sports attract those with certain body characteristics: gymnasts are often very small; football players tend to be quite large, basketball players are usually tall. However, there are always exceptions.

Discuss famous athletes, both male and female, and have the youth guess what frame size they might have. For example, Michelle Kwan (ice skater) is probably small-framed; Lance Armstrong (cyclist) medium-framed; Juan Dixon (basketball player) small-framed, but tall; Santana Moss, (football) medium-framed; Serena Williams (tennis), medium- or large- framed; Mia Hamm (soccer), small-framed. Others?

### Lesson 3: Do You See What I See?

Discuss the impact of media figures, especially music stars and fashion models, on the popular notion of what is considered to be a desirable body type. Point out that in earlier days, models were approximately 10% thinner than the average person of a desirable weight. Today a model is 25% thinner than is thought to be healthy.

#### **REFLECT** (Middle School)

? Ask: Without telling us who the people are, can you share any experiences regarding friends or relatives who may have had unhealthy attitudes about eating or body type?

? Ask: What actions could you take if you knew or suspected that someone had an eating disorder? Answer: talk with a school nurse, school counselor, parents, or a doctor.

#### **APPLY** (Middle School)

Have youth make a chart to post on the mirror they most frequently use at home. The chart can have two columns, one with a check, one with a minus sign. Have youth tape a pencil to the chart. Every time they look in the mirror and think something negative about themselves, they should make a mark under the minus sign. When they have a positive thought, they should check under the plus sign.

At the end of the week, if they have more minuses than pluses, they should PURPOSEFULLY look for positives in themselves in the mirror and add plus signs for all the positives they can think of. If they have more pluses than minuses, they are doing a good job of liking themselves! Ask them to continue this activity for four weeks.

#### PREPARATION

#### **Outcomes** (Teen)

The purpose of this lesson is to have youth:



## Lesson 3: Do You See What I See?

⌚ 5 minutes



### SET UP

- ❑ Hang flip chart or poster paper on walls or attach to easels
- ❑ Get out paper rulers

### SUPPLIES

- ❑ Flip chart or poster paper
- ❑ Markers
- ❑ Tape or easels
- ❑ 8-inch paper rulers

### HANDOUTS & BOOKS

- ❑ *Eating Disorders Fact Sheet*  p. 240
- ❑ *Measure Your Frame Size Ruler*  p. 242

- Understand that fashion models (both male and female) weigh approximately 15-25% less than is considered a safe weight
- Understand that diet pills are dangerous
- Recognize the warning signs of eating disorders and know what to do if they are concerned about a friend or relative
- Understand why bingeing and purging is an unhealthy weight management tactic
- Realize that body size and shape are partially determined by genetics (body frame) and not just what people eat or how much they exercise

## Instructor Essential Information

### SET UP DETAILS

See Middle School Set Up Details on page 84.

## Discussion

 (Teen) ⌚ 15 minutes

? Ask: Can you define bulimia? Anorexia? Binge eating? Use the *Eating Disorders Fact Sheet* handout for reference. Have the youth list characteristics of these disorders on poster paper taped to wall. Ask youth to clarify the differences between the three types of eating disorders.

Working as a group, have youth list the observable results of eating disorders. Use the *Eating Disorders Fact Sheet* for discussion. Some possible answers might include:

- Brittle hair and nails
- Internal organ problems as body nourishes itself by first using fat, then muscles, then organs
- Poor performance in school and sports due to insufficient amounts of nutrients needed for optimum mind and body function
- Often feel cold
- Bones weak and break easily
- Skin dry and easily bruises; may develop fine layer of new hair for insulation (lanugo)

On a third sheet of paper, have youth list associated behaviors that may indicate an eating disorder. See the *Eating Disorders Fact Sheet* handout for discussion. Some answers might include:

### Lesson 3: Do You See What I See?



- Frequently saying they are fat
- Frequently going to the bathroom during or after meals (may indicate bulimia)
- Playing with food, measuring servings
- Excessive exercise
- Extreme dieting and fasting
- Eating huge amounts of food at one sitting, often “junk” food
- Being extremely thin, having brittle hair, nails.

Discuss the impact of media figures, especially music stars and models, on the public perception of what is considered to be a desirable body type. Point out that models used to be approximately 10% thinner than the average person. Today, models are 25% thinner than a healthy weight.

Explain that some athletes and other public figures have been known to use “diet pills” and other medications to lose weight. Emphasize that there are short- and long-term side effects of using these medications.

These side effects can occur even when used according to the label. They include:

- Headaches
- High blood pressure
- Heart palpitations, dizziness
- Anxiety, nervousness, restlessness, insomnia
- Depression, fatigue
- Vomiting, diarrhea, nausea
- Hyperactivity

#### **REFLECT** (Teen)

Invite youth to share their experiences about someone they know who frequently uses diet pills or may have had problems with an eating disorder. The youth should not identify who the person is. Ask youth what actions they might take if they know or suspect that someone has an eating disorder or is abusing diet pills.

#### **APPLY** (Teen)

Ask teens to observe their favorite musicians and TV characters during the week. Ask them to make a list of those who look healthy and are at a “normal” weight, as well as those who are “overweight”



## Lesson 3: Do You See What I See?

---

or “too thin.”

### Technology Challenge

(All Ages)

Check out these web sites for information about dieting, fitness, and eating disorders. There are many other articles and resources that can help youth feel better about themselves. Ask youth to research these sites, and report back to the group at the next session about what they learned about eating disorders.

(School Age)

[http://www.kidshealth.org/kid/feeling/thought/fat\\_thin.html](http://www.kidshealth.org/kid/feeling/thought/fat_thin.html)

(Middle School)

[http://www.bam.gov/sub\\_yourbody/yourbody\\_bodysmartz.html](http://www.bam.gov/sub_yourbody/yourbody_bodysmartz.html)

(Teen)

<http://www.caringforkids.cps.ca/teenhealth/TeenDieting.htm>

---

# Chapter 3 Fueling the Body

## Introduction

Chapter three provides an overview of the importance of the essential nutrients for the body. The lessons emphasize the need for whole grains for good health. Youth learn that breakfast is a very important meal. They are given several opportunities to prepare and sample healthy breakfasts. The instructor leads them through a discussion of why children and youth typically skip breakfast, and why they shouldn't. Youth learn that snacking can be a good thing when the snack is a healthy one.

This chapter introduces youth to different kinds of vegetarian diets. In the We're Cookin' Now activity, youth prepare several vegetarian dishes and report whether they already eat some vegetarian meals at home. Youth discuss some of the issues that arise when eating a vegetarian diet. They learn that some nutrients, which are critical to good health, must be obtained in supplements because they can't be found in a non-meat diet.

Youth have an opportunity to learn about vitamins and steroids. They discuss the pressures that may lead some athletes to abuse these drugs to enhance their performance. Youth sample sports drinks, energy food bars, and gels and discuss their usefulness. They also evaluate the value and cost of these quick "energy" foods.

## Lesson Summary

- |   |           |
|---|-----------|
| 1. Nutrient Knowledge                       | Nutrition |
| 2. Break It Up - Breakfast First!           | Nutrition |
| 3. Snack Attack                             | Nutrition |
| 4. Rainy Brainy                             | Nutrition |
| 5. Vegetarianism In A Nutshell              | Nutrition |
| 6. The Truth About Steroids And Supplements | Fitness   |
| 7. Energy Drinks And Foods                  | Nutrition |

## Lesson 1: Nutrient Knowledge


### PREPARATION

⌚ 60 minutes

### SET UP

- ❑ Draw an outline of a child on a piece of poster paper
- ❑ Prepare food cards
- ❑ Prepare baskets
- ❑ Set up large classroom

### SUPPLIES

- ❑ Marker
- ❑ Index cards, plastic food models, or Dairy Council food model pictures 
- ❑ Two baskets



### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Discover the importance of nutrients to a healthy body
- Understand that essential nutrients come from the foods we eat
- Discover that good health requires nutrient dense foods
- Prepare a healthy snack

### Instructor Essential Information

The foods you eat supply the nutrients your body needs to build and repair itself, and keep all parts working. There are over forty nutrients. Six of them are called the essential nutrients. The six essential nutrients are: carbohydrates, fats, protein, vitamins, minerals, and water. Because no one food contains all the essential nutrients, we say there are no “perfect” foods. However, many foods provide more than one essential nutrient. For overall health, it is important to eat a variety of foods.

### Discussion

 (All Ages) ⌚ 10 minutes

? Ask: What does it mean when we say “You are what you eat?” Think about your body. Squeeze your hand. It feels pretty solid doesn’t it? Yet it contains a lot of water.

? Ask: Does anyone know what percentage of your body is made of water? Answer: Your body is 60 - 70% water. The rest of your body is made up of carbohydrates, proteins, fat, and minerals. These same components are in the food you eat.

? Ask: Why do we need food? Answer: food supplies the energy needed for growth and repair. It keeps your body going!

Remind youth that there are two sources of food: animals and plants.

? Ask: Can you name some examples of food that comes from animals and plants? Youth may give specific answers under these categories: plants (grain, vegetables, fruits, beans), animal (meat, dairy).

## Lesson 1: Nutrient Knowledge



### Activity 1 – What Do You Eat?

**DO** (School Age) ⌚ 45 minutes

Place a large piece of poster-sized paper on the floor and draw a large outline of a child on it. Fill the outline with index cards of pictures of different foods, or the names of different foods. Have two baskets at the end of the room – one labeled “FOODS FROM PLANTS” and the other “FOODS FROM ANIMALS.”

Divide youth into teams and have them run a relay race. Each youth will select a food card from the outline of the child, run to the baskets, and place it in the appropriate basket.

When the relay is finished, determine whether all the cards have been placed in the right baskets.

**REFLECT** (School Age)

? Ask: What did you eat for breakfast? Did the foods come from a plant or an animal source?

**APPLY** (School Age)

At the dinner table tonight, discuss which foods are from plant sources and which are from animal sources.

### PREPARATION

⌚ 30 minutes

#### SET UP

- ❑ Draw *The Big 6* on flipchart or use copies of *The Big 6* handout. [A](#)
- ❑ Collect food labels or make copies of the Macaroni and Cheese label shown in this lesson.

#### SUPPLIES

- ❑ Flip chart
- ❑ Marker
- ❑ Macaroni and Cheese food label

### Discussion

**DO** (All Ages) ⌚ 15 minutes

Discuss the six essential nutrients. Refer to *The Big 6* handout.

? Ask: What are the six essential nutrients? Answer: carbohydrates, fat, protein, vitamins, minerals, and water.

- **Carbohydrates** – Carbohydrates are the body's main source of energy. On food labels, the total carbohydrates are listed. They are further broken down as “Sugars” and “Fiber.”
- **Fat** – The second source of energy for the body is fat. Fat helps transport other nutrients and is a part of body cells.
- **Protein** – Proteins help build, repair, and maintain all body tissues.



## Lesson 1: Nutrient Knowledge

or other food labels



### HANDOUTS & BOOKS



*The Big 6*  p. 244

- **Vitamins & Minerals** – Vitamins boost the immune system and support normal cell growth and development. They also help cells and organs do their jobs.
- **Water** – Water regulates your body temperature, carries nutrients to the cells, and carries waste out of your body.

? Ask: Why are the 6 essential nutrients important to good health?  
Answer: since no one food contains all the nutrients we need, we need to eat a variety of foods from different food groups.

### HANDOUTS & BOOKS

 *The Big 6*  p. 244

 *Sample Label for Macaroni Cheese*  p. 243

### Activity 2 – Macaroni And Cheese Label

 (School Age • Middle School) ⌚ 20-30 minutes



For this activity, youth will need these two handouts: *The Big 6*, and *Sample Label for Macaroni Cheese*. Take a look at the *Sample Label for Macaroni Cheese* handout and identify which of the six nutrients are found in this food. Use *The Big 6* handout and record the amounts of each essential nutrient listed on the Macaroni and Cheese label. For School Age children, you might want to enlarge it and use it as a poster for the group discussion.






Nutrition Facts		Quick Guide	
Serving Size: 1 cup		% Daily Value	
<b>Total Fat</b>	10g	20%	20% or less is low
<b>Cholesterol</b>	20mg	40%	20% or more is high
<b>Sodium</b>	100mg	20%	
<b>Total Crap</b>	10g	20%	
<b>Get Enough of these Nutrients</b>			
Vitamin A	100%		
Vitamin C	20%		
Calcium	20%		
Iron	20%		

When checking the water content, review the ingredients list and simply write “yes” or “no” in that section of *The Big 6*. Use this activity to illustrate that foods contain different nutrients.

### SET UP

-  Put all the Dairy Council food model pictures in the front of the room
-  Place flip chart and marker some distance from the food models so youth can run from one to the other

### SUPPLIES

-  Flip chart
-  Marker
-  Dairy Council food model pictures:

### Activity 3 – Nutrient Scramble

 (School Age) ⌚ 20 minutes


On the blackboard or flip chart, list the following essential nutrients: fats, carbohydrates, protein, calcium, vitamin c.

Divide the group into two relay teams. Have youth first run to the food model pictures and select one. They take their picture and run to the flip chart or blackboard and write down the name of that food under a nutrient. The youth then runs back to the team and puts the food pictures down.

After all the food pictures have been chosen, the teams add up their points (1 food model = 1 point).

Next, have the group look at the placement of each food item on

## Lesson 1: Nutrient Knowledge

milk, orange juice, bread, poultry, beans, nuts, eggs, and pasta 

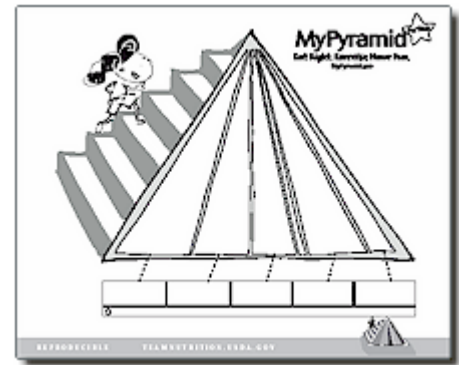
the flip chart. If it is placed accurately (e.g., chicken is under "protein") the team keeps the point for that food item. If the food is listed incorrectly (e.g., broccoli is under fats) then the team with that food model loses one point. When the review is finished, the team with the most points wins. Check the back of the Dairy Council food model pictures for nutrient information.

### Technology Challenge

(School Age)

Have youth log onto <http://www.mypyramid.gov>. Click on "For Kids." Select "MyPyramid for Kids Coloring Page." Download and print a copy of the blank pyramid. Using the information on The Nemours Foundation's Center for Children's Health Media website: <http://www.kidshealth.org>, select "Kids Site" then select "Staying Healthy." Scroll down to "Fabulous Food."

Label the sections of the MyPyramid coloring page (grains, vegetables, fruits, etc.) and write the names of actual foods that are in that nutrient group on the MyPyramid page as well. At the end of the session compare the MyPyramid pages and share with one another all the different food sources for nutrients that you found.



### Technology Challenge

(Middle School • Teen)

Divide youth into five small work groups. Visit the web site: <http://www.kidshealth.org>. Click on "Kids Site," then click on "Staying Healthy." Scroll down to "Fabulous Food." Each group will work on a different nutrient and give a short report when they are finished.



- **Group 1** – Click on "Learning about Carbohydrates." Learn about the two different types of carbohydrates and some of the rich sources of each.
- **Group 2** – Click on "Learning about Fats." Learn why we need fats and the types of fats. List examples of each.
- **Group 3** – Click on "Learning about Protein." Discover why the body needs protein. Give examples of animal and plant

## Lesson 1: Nutrient Knowledge

protein sources.

- **Group 4** – Click on “Minerals.” Name two types of minerals and give an example of each. Describe the importance of minerals to the body.
- **Group 5** – Click on “Vitamins.” List fat-soluble vitamins and water soluble vitamins. Find out which vitamins are stored and where. List foods rich in Vitamin A, B, C and D

### Technology Challenge

(Middle School)

Have the youth log onto this web site:


[http://www.exhibits.pacsci.org/nutrition/noflash\\_nutrition.html](http://www.exhibits.pacsci.org/nutrition/noflash_nutrition.html).

In the Nutrition Café menu, select “Nutrition Sleuth.” Play the game to find the missing nutrients.

#### SUPPLIES

See recipe for ingredients and utensils list.

#### HANDOUTS & BOOKS

Recipe: *Pyramid Salsa*   
p. 245

### Now We're Cookin' - Pyramid Salsa

(All Ages) ⌚ 45 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Prepare *Pyramid Salsa* to illustrate that you need variety to get your “Big 6.” Divide the youth into cooking groups, then divide the recipe preparation tasks such as vegetable chopping, can opening and draining, among the groups. The recipe is found in Appendix A.



As the youth eat the salsa, have them name the ingredients in the salsa and identify from which food group they come. Don't forget the chips! Then, identify the nutrients in the different ingredients.

### Technology Challenge

(Teen)

The instructor should go to the following website and print out the two-page activity sheet:

<http://www.ars.usda.gov/is/kids/teachers/FoodCompTeacher.pdf>

Give the activity sheet to the youth and have them follow the instructions on-line. The answer key and teacher guidelines can be found on the teacher site.

## Lesson 2: Break It Up – Breakfast First!

### PREPARATION

⌚ 20 minutes

### SET UP

See Set Up Details.

### SUPPLIES

Jumper cables

### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Discover the importance of starting each day with breakfast
- Demonstrate the ability to select a healthy breakfast
- Prepare quick and easy breakfasts

### Instructor Essential Information

Research findings confirm that eating breakfast contributes to good health, increased test scores, and weight management. Youth who skip breakfast are almost twice as likely to be overweight as youth who eat breakfast.

Youth who eat breakfast do better in school. They tend to have better language skills, better problem solving skills, and increased recall ability. Eating breakfast may also help with memory and creativity. Youth who eat breakfast have better math and reading scores, better classroom behavior, and better attendance. Breakfast restores the blood sugar levels that drop overnight that are essential for good physical performance.

### SET UP DETAILS

Write the “Benefits of Breakfast” list shown below on one piece of flip chart or poster paper and the “Reasons Kids Skip Breakfast” list on another. Keep both lists hidden until the youth have finished their brainstorming process in Activity 1.

- **Benefits of Breakfast**
  - Score higher on tests
  - Have more energy for sports
  - Work faster
  - More cooperative
  - Less likely to be tardy to school
  - Less likely to go to the nurse’s office
  - Have better concentration
  - More creative
  - Less likely to be absent
  - Make fewer errors
  - Helps prevent colds and flu
- **Reasons Kids Skip Breakfast**
  - Not hungry in the morning
  - Don’t have time





## Lesson 2: Break It Up – Breakfast First!

- Want to lose weight
- Don't like breakfast
- Would rather watch TV
- Don't feel like making something
- Overslept

### Discussion

**DO** (All Ages) ⌚ 10 minutes

? Ask: What boosts your physical and mental performance? What keeps your weight in check and improves your diet? What starts your day off right? The answer to these questions is breakfast! Explain that the term breakfast means “breaking the fast.”

Tell youth: “I brought along something today that doesn't really have anything to do with breakfast. Or does it? Does anyone know what this is? (Hold up jumper cables.) It is a jumper cable and it charges your car battery if the energy drains out.”

? Ask: Can you think of another kind of battery that needs charging? Answer: your body. In the morning, the jumper cable that gives you a quick charge is breakfast.

Explain that breakfast delivers the energy your body needs to get started on your daily routine, just like these jumper cables deliver energy to a dead battery.

? Ask: Has anyone ever heard someone say: “Breakfast is the most important meal of the day?” Why is that? When you wake up, it has been between 8 and 12 hours since you ate dinner or had a bedtime snack. Imagine waiting that long to eat during the day! Even though you might think you're not doing anything while you sleep, your muscles need an energy boost from the nutrients in breakfast foods in order to think, be alert, and stay active right into late morning.

? Ask: Which nutrient gives your body energy by replenishing blood sugar levels? Answer: carbohydrates. Our brain needs carbohydrates to help it think.

? Ask: Can you name any other nutrients you might get from breakfast? Answers: protein, fat, vitamins, and minerals.



## Lesson 2: Break It Up – Breakfast First!

### PREPARATION

⌚ 30 minutes

### SET UP

- ❑ See Set Up Details
- ❑ List on flip chart: “Benefits of Breakfast”
- ❑ List on flip chart: “Reason Kids Skip Breakfast”

### SUPPLIES

- ❑ Flip chart
- ❑ Marker

### Activity 1 – Brainstorming Breakfast

**DO** (All Ages) ⌚ 15 minutes

? Ask: Can anyone describe the benefits of eating breakfast? Record youth responses on the flip chart or blackboard.

Using the Benefits of Breakfast list you created earlier, discuss the importance of eating breakfast. Compare youth responses to the “Benefits of Breakfast” list.

? Ask: Do you have any idea what percentage of kids skip breakfast in the morning? Answer: almost 1/3. In junior high and high school, the percentage is even higher, especially for teenage girls. As students get older, they skip breakfast more often.



? Ask: What are some of the reasons you skip breakfast? Use a flip chart to list the youth's ideas. Have youth vote on the top three reasons they skip breakfast.

Compare the youth responses to the “Reason Kids Skip Breakfast” list.

### Activity 2 – Plan A Breakfast

**DO** (School Age) ⌚ 30 minutes

If the class is large enough, break youth into groups. Give each group a copy of the *Building Better Breakfasts* handout. Have each group plan at least one breakfast using three different food groups.

When they have finished, write their breakfast ideas on the flipchart. Youth may draw pictures to illustrate their breakfast choices. Post the breakfast ideas around the room.

Have the groups compare their breakfasts with MyPyramid to determine variety.

? Ask: Which food groups were represented in your breakfasts?

**REFLECT** (School Age)

? Ask: Did your breakfasts have a variety of foods?

? Ask: Which of you would be able to prepare that breakfast?

### PREPARATION

⌚ 5 minutes

### SET UP

Make copies of the handout.

### SUPPLIES

- ❑ Flip chart paper
- ❑ Markers
- ❑ Tape
- ❑ MyPyramid poster

### HANDOUTS & BOOKS

- ❑ *Building Better Breakfasts* [A](#)  
p. 246

## Lesson 2: Break It Up – Breakfast First!



### PREPARATION

⌚ 45 minutes



### SET UP

- ❑ Read the recipes in the handout
- ❑ Set up 4 cooking stations

### SUPPLIES

See recipes for ingredients and utensils list.

### HANDOUTS & BOOKS

- ❑ Recipe: *Four Fun Breakfasts*  p. 247
- ❑ Recipe: *Banana Split Cereal*  p. 248

### APPLY (School Age)

Have each child work with members of their family to plan three easy, nutritious breakfasts that they could fix for themselves before school. Try for at least three different food groups in each breakfast menu. Give them each a copy of the *Building Better Breakfasts* handout to take home.

## Now We're Cookin' - Four Fun Breakfasts

(All Ages) ⌚ 45 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Separate youth into four groups as shown below to prepare the following recipes, which you will find in the handout *Four Fun Breakfasts*.



- Group 1: Fruit and Nut Oatmeal
- Group 2: Breakfast Smoothie
- Group 3: Banana Dogs
- Group 4: Breakfast Taco

Optional: As an alternative cooking adventure, try *Banana Split Cereal*. The recipe is in Appendix A. The recipe takes about 30 minutes to prepare.

### REFLECT (All Ages)

? Ask: What are some other quick and easy breakfasts that you could make that combine at least three food groups?

### APPLY (All Ages)

Encourage youth to make some of these breakfast ideas at home for themselves and their family members.

## Lesson 3: Snack Attack




### PREPARATION

🕒 5 minutes

### SET UP

Place the MyPyramid poster where all can see.

### SUPPLIES

- ❑ MyPyramid poster 
- ❑ *Pack Your Snacks and Go* 
- ❑ *Grab Quick & Easy Snacks* 

### Outcomes (All Ages)

The purpose of this lesson is to have youth:

- Learn how to use food labels to make healthy snack choices
- Make an easy snack with a variety of foods
- Practice making wise snack choices



### Instructor Essential Information

Most youth don't get all the nutrients they need to grow strong and stay healthy from just three meals a day. Therefore, snacking can be a healthful way to fulfill nutrient needs. Snacks are a great way to get more fruits, vegetables, whole grains, and low-fat dairy foods into a child's diet. The nutrition facts on food labels can help youth to compare snacks and make healthy choices.

Obtain the handouts shown below for use in Activity 1. You may download them in color from the websites below, or copy them from the black and white copies in the Resources Kit.

- Download *Pack Your Snacks and Go* from:  
[http://www.fns.usda.gov/eatsmartplayhard/collection/kids\\_activity.html](http://www.fns.usda.gov/eatsmartplayhard/collection/kids_activity.html)
- Order *Grab Quick & Easy Snacks* free of charge at:  
<http://www.fns.usda.gov/eatsmartplayhard/Collection/Files/powerpac-order.pdf>

### Discussion

 (All Ages) 🕒 15-20 minutes

? Ask: What are your favorite snacks? Explain that growing youth need more nutrients than some adults. Snacking can help meet those nutrient needs when you choose low-fat, nutrient dense foods. Nutrient dense foods are foods that are low in calories, but high in nutritional value.

? Ask: Do you think snacking is a good idea? Why or why not?

? Ask: Can you name some snacks that you think are "nutrient dense?" Stress that regardless of age, snacks can fill in the nutrient gaps you might have if you follow the recommended MyPyramid eating plan. Make your snacks count toward your food-group needs.



## Lesson 3: Snack Attack

### PREPARATION

⌚ 15 minutes

### SET UP

- ❑ Place the MyPyramid poster where all can see
- ❑ Make copies of the handouts

### SUPPLIES

- ❑ MyPyramid poster [RK](#)
- ❑ Three signs: "GO," "SLOW," & "WHOA"
- ❑ Assorted snacks (pretzels, candy bar, fruit) or Dairy Council food model pictures [RK](#)

### HANDOUTS & BOOKS

- ❑ *Grab Quick And Easy Snacks* [RK](#)
- ❑ *Pack Your Snacks & Go* [RK](#)

### PREPARATION

⌚ 5 minutes

### SET UP

Two signs: "BEST" and "POOREST"

### SUPPLIES

Assorted snacks in bags - pretzels,

Display the MyPyramid poster or MyPyramid Kid's poster. Go through each food group on the pyramid and ask the youth to name some healthy snacks from each food group.

### Activity 1 – Go/Slow/Whoa

**DO** (All Ages) ⌚ 20-30 minutes

Stress the importance of making healthy choices for snacks. Explain that youth will be running in a relay race where each one will select a snack from the plastic food models or bag of actual snack foods and categorize it as belonging in the GO, SLOW, or WHOA categories. Be sure to select snacks that are popular with the age group of youth you are teaching. Here are some of the types of foods that fall into each of the categories:

- WHOA - Candy bars, potato chips
- SLOW - Chocolate milk, pudding
- GO - Low fat, low sugar, foods such as fruits, vegetables and pretzels



This could be designed as a relay race with two bags of snacks and two sets of signs on different tables. Have each team member select a snack then run to the table and put it under the proper sign. The team that has the most snacks in the right categories wins. Discuss as a group which snacks fit into which category. Stress the importance of nutrient dense foods vs. empty calories when categorizing snacks.

**APPLY** (All Ages)

Give youth one of the handouts – *Grab Quick and Easy Snacks* or *Pack Your Snacks & Go* to use when making snack decisions at home or school.

### Activity 2 – Check The Snack Label

**DO** (All Ages) ⌚ 20 minutes

Have each youth select a snack. Use actual pre-packaged snacks or Dairy Council food model pictures, which have nutrition information on the back of them. Put the "BEST" sign at one end of a table or room. Put the "POOREST" sign at the other end.

Have the youth line up with the snacks they chose, in a continuum from BEST snack choice to POOREST snack choice. The criteria could be amount of fat, calories, sugar, or nutritive value.

## Lesson 3: Snack Attack

candy bar, fruit, chips



When they are finished, have the group evaluate their positions in the line. You might have them read the labels and re-align themselves according to the amount of calories per serving, and/or amount of fat or salt or sugar per serving.

### CALORIES IN ONE GRAM OF:

Fat = 9 calories

Carbohydrate = 4 calories

Protein = 4 calories

### REFLECT (All Ages)

? Ask: Were any of you surprised at your position in the snack line-up? Why or why not?

### APPLY (All Ages)

At the next session, bring in wrappers from three healthy snacks that you or your family members have eaten during the week.

### PREPARATION

⌚ 20 minutes

### SET UP

Set out the snacks that each group will test.

### SUPPLIES

- ☐ Brown paper towels or brown grocery bags
- ☐ Markers
- ☐ Regular potato chips
- ☐ Pretzels (or baked potato chips)
- ☐ Graham crackers
- ☐ Bakery or homemade cookies
- ☐ Banana
- ☐ Candy bar
- ☐ Cheese stick
- ☐ Carrot stick
- ☐ Peanut butter
- ☐ Fat-free yogurt

## Activity 3 – Which Has More Fat?

**DO** (Middle School • Teen) ⌚ 20 minutes

? Ask: Why should we care about the amount of fat in our snacks?

Answer: Because per gram, fat is higher in calories than carbohydrates and protein. Some fats have been linked with certain chronic diseases. Too much fat in our diets is considered unhealthy. Using actual snacks, youth will discover that fat “hides” in many of their favorite snack foods.

Show the snacks that each group will test (listed below). Ask youth which snack they think would have less fat.

- Regular potato chips vs. pretzels (or baked potato chips)
- Graham crackers vs. cookies
- Banana vs. candy bar
- Cheese stick vs. carrot stick
- Peanut butter vs. fat-free yogurt

Youth will perform a quick test for the presence of fat in foods. Divide youth into small groups of 2 to 4. Give each group a pair of snacks to test for fat.

Have youth rub each type of snack on brown paper or brown towel. The snack will leave a grease spot on the towel if it contains a lot of fat. Label the spots left by both types of snacks.



## Lesson 3: Snack Attack

### PREPARATION

⌚ 5 minutes

### SET UP

Place flip chart in front of room

### SUPPLIES

- ❑ Flip chart
- ❑ Markers

### PREPARATION

⌚ 30 minutes

### SUPPLIES

See recipe for ingredients and utensils list.

### HANDOUTS & BOOKS

Recipe: *Pyramid Pita Pizzas* [A](#) p. 249

### REFLECT (Middle School • Teen)

? Ask: What did you find out? How do the spots differ? What does this tell you? Which snack has more fat?

### APPLY (Middle School • Teen)

Repeat this exercise at home with some of your snack choices.

## Activity 4 – Snacking Dilemmas

**DO** (Middle School • Teen) ⌚ 15 minutes

This activity is designed to give teens practice in deciding which snacks to eat. You have a snack dilemma whenever it is easier to choose a snack that is not very healthy versus preparing one that is better for you. Record youth answers to the question below on a flip chart.

? Ask: When do you have snack dilemmas? Examples: when running late, at someone else's house, at school, or waiting for the bus.

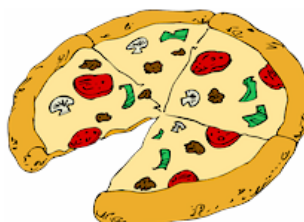
Beside each "snack dilemma" determine what a good snack choice might have been in that situation OR determine an alternate activity to eating at that time.

? Ask: Could a little planning have made it possible to have a healthy snack? Which of these dilemmas might be avoided if the person in this situation had eaten a good breakfast or lunch?

## Now We're Cookin' - Pyramid Pita Pizzas

(All Ages) ⌚ 45 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Divide youth into working groups to prepare Pyramid Pita Pizzas. The recipe is found in Appendix A.





## Lesson 3: Snack Attack

### Technology Challenge

(All Ages)

Visit <http://www.cspinet.org/nutrition/>. Under "Kids Stuff," click on "The Top 10 Best and Worst Foods." Which ones are your favorites? If your choices were in the "worst" list – what could you substitute as a healthier option? Under "Kids Stuff," click on "Smart-Mouth.org" and scroll through the "Snacktoids." Share what you learn with your family.

(Teen)

Go to <http://www.aarp.org/health/>. In the SEARCH box, type in "healthy snacking" and find the article with that name. Read the article and find out:

- Why snacking is a good idea
- How you can avoid gaining weight when snacking
- Why you should avoid fatty and salty snacks
- Which snacks from their list are good ones?



## Lesson 4: Grainy Brains


### PREPARATION

⌚ 5 minutes



### SET UP

- ❑ Place the MyPyramid poster on the front wall
- ❑ Make MyPyramid handouts for all youth
- ❑ Have youth in a circle for the discussion

### SUPPLIES

- ❑ Rope (clothesline works well)
- ❑ MyPyramid poster 

### HANDOUTS & BOOKS

- ❑ *What Are Whole Grains?*  p. 250
- ❑ *Using MyPyramid In Your Life – Children and Youth*  p. 211



### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Discriminate between refined grain products and whole-grain products
- Learn the contribution of whole grains to good health
- Select whole grain products by learning to read whole grain descriptors on the nutrition labels
- Use whole grain choices to prepare food
- Use <http://www.MyPyramid.gov> as a means to identify and select whole grains
- Know how to identify high-fiber foods and recognize the health benefits of fiber

### Instructor Essential Information

Whole grains are an important source of fiber and other nutrients. Whole grain foods are made from the entire grain seed which is called the kernel. The kernel has three components: bran, germ, and endosperm. In the grain-refining process, most of the bran and some of the wheat germ is removed, resulting in the loss of dietary fiber, vitamins, and minerals.

Most refined grains are enriched, meaning some of the nutrients are put back. Enriched refined grain products are required by law to be fortified with folic acid, as well as thiamin, riboflavin, niacin, and iron. Consuming three or more one ounce-equivalents (one slice of bread) of whole grains per day can reduce the risk of several chronic diseases, and may help with weight maintenance. The USDA recommends a daily intake of at least three ounce-equivalents of whole grains per day. However, because three servings may be difficult for youth to achieve at younger ages, it is recommended that they increase the amount of whole grains in their diets as they grow.

All age groups should consume at least half their grains as whole grains to achieve the fiber recommendation. For more information, See the handout: *What Are Whole Grains?* in Appendix A or go to the <http://www.bellinstitute.com> site and select "Whole Grains."

### SET UP DETAILS

The grain bags may be made from grains obtained in health food stores. The wheat stalk may be obtained from a craft store featuring dried flowers and plants.

Make the sample digestive track using the handout: *Making A Model*

## Lesson 4: Grainy Brains

of *The Digestive System*. Or, have youth construct the digestive model at the beginning of Activity 3. Here are more instructions:

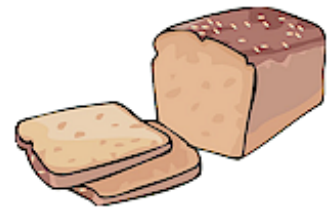
- Make the 20 feet of small intestine by braiding three 30-foot lengths of rope.
- Make the 5-foot long large intestine, by braiding five 7-foot lengths of rope.
- From the plastic food models or Dairy Council food model pictures, select 1 slice of white, 1 whole wheat bread, ½ bagel, ½ cup spaghetti, 3 cups popcorn, ½ English muffin, 1 cup wheat flakes, ½ cup rice, 1 tortilla, 5 crackers.

### Discussion

**DO** (All Ages) ⌚ 20 minutes

Introduce the grains section from MyPyramid. Use the handout: *Using MyPyramid In Your Life – Children and Youth*, if needed. Discuss the size of the grain requirement compared to the other food groups. Discuss healthy choices from this group.

? Ask: What is a grain? Explain that half of our recommended daily serving of grains should be whole grains. Tell youth that later we will discuss how to identify whole grains.



### PREPARATION

⌚ 5 minutes

### SET UP

Circle for group discussion

### SUPPLIES

An inexpensive wind-up toy

### Activity 1 – Grains Are A Source of Energy

**DO** (All Ages) ⌚ 30 minutes

? Ask: Did anyone have toast, a bagel, or cereal for breakfast today? Who had pizza, rice, spaghetti, or tacos for lunch or dinner yesterday?

? Ask: These foods all have something in common. What is it? They are all foods made from various types of grains. Explain that these foods are all grouped together in the grain group, and that they provide energy for our bodies.

Wind up a wind-up toy and let it move across the floor until it stops.

? Ask: Why did this toy stop? Answer: it ran out of energy or fuel.

? Ask: How are our bodies like cars? Answer: they need fuel. Explain that our fuel is food, and grains are a wonderful source of energy for our brain and muscles.

## Lesson 4: Grainy Brains


### PREPARATION

🕒 10 minutes

### SET UP

- ❑ Sit in a circle for group discussion
- ❑ Make a handout for each child

### SUPPLIES

- ❑ Grain bags
- ❑ Wheat stalk
- ❑ Slice of white and whole wheat bread
- ❑ Bags of white and brown rice
- ❑ Enriched and whole wheat flour
- ❑ Empty white and whole wheat bread bags
- ❑ *Kernel Of Wheat* poster 



### Activity 2 – The Components Of Wheat

 (All Ages) 🕒 30 minutes

**Instructor Note:** As an alternative to the discussion presented below, youth may use the Internet to obtain information about wheat. See Activity 3 – Using The Internet To Find Out About Wheat.

Show the youth the various types of grains: wheat, rice, oats, barley, rye, corn. Today you will learn about the “great grains.” The farmer plants wheat kernels and they grow into plants that look like grass. The wheat develops into a stalk that yields about 50 more wheat kernels. Kernels are ground into flour. Show the group a slice of enriched white and whole wheat bread. Explain that they are both made from the grain called wheat.

? Ask: What is the difference between these two slices of bread? Tell the class that they going to look at one wheat kernel and describe its parts. Show the class the *Kernel Of Wheat* poster. Explain that a kernel contains the bran, which gives us fiber, the germ which has lots of vitamins, minerals and protein, and the endosperm which gives us carbohydrates for energy.

When the kernel is milled (ground), the result is whole-wheat flour (whole means “all”). Explain that white bread is made from flour in which the wheat bran and germ are removed. This removes the fiber and all those wonderful vitamins and minerals that our bodies need! Manufacturers then put some of these nutrients back and call it enriched. Not all of the nutrients are replaced, and definitely not the fiber.

Show youth the bags of white and brown rice, and then the enriched and whole-wheat flour.

? Ask: Can you tell which contains whole grains? How? Next, hold up the two slices of bread again.

? Ask: Which is the healthiest choice? Tell youth that when they are looking for whole grain products, they must read the label carefully. Sometimes foods look like whole grain products but they really are not. Or, sometimes a package will say “whole grain,” but very few of the ingredients come from whole grains. Share with the class two empty bread bags - one from a whole grain loaf and one from a loaf that looks brown, but is actually not a whole grain product. Show them the ingredient labels.

## Lesson 4: Grainy Brains

### PREPARATION

⌚ 2 minutes

### SUPPLIES

Paper and pencils

### Activity 3 - Using The Internet To Find Out About Wheat

**DO** (All Ages) ⌚ 30 minutes

This is an Internet alternative to Activity 2, The Components Of Wheat, and covers the same material. Go to <http://www.MyPyramid.gov> click on "Inside the Pyramid," then click on the orange section of the Pyramid, then click on "Learn More."

Ask youth to identify the two different sub-groups of grains. Go to the "whole grains" list. Make a list of five whole grain foods. Write a menu for your family for one day incorporating at least three whole grains that your family would enjoy.

### PREPARATION

⌚ 60 minutes

### SET UP

See Set Up Details for making the digestive system model.

### SUPPLIES

- ❑ 1 set of plastic teeth
- ❑ Empty ½ gallon jug
- ❑ Small intestine and large (ropes)
- ❑ Plastic food models or Dairy Council food model pictures [RK](#)
- ❑ Grain bags
- ❑ Bags of white and brown rice
- ❑ Enriched and whole wheat flour

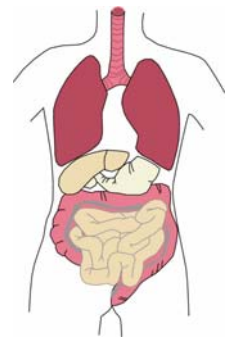
### HANDOUTS & BOOKS

*Making A Model Of The Digestive System*  
[A](#) p. 251

### Activity 4 – Fiber And The Digestive System

**DO** (All Ages) ⌚ 25 minutes

**Instructor Note:** You can make the digestive system model in advance or have youth construct the model as part of the activity. See both the Instructor Essential Information and *Making A Model Of The Digestive System* for details.



Ask for two volunteers. Give each person one end of the handmade digestive tract and have them move apart. Show the students where the food goes after it is swallowed.

Explain that after we chew and swallow our food it goes down the esophagus, into the stomach and then to the intestines.

Show them the 20 feet of small intestine, and 5 feet of large intestine. That's a long way for the food to go and but there is something in whole grains that helps move the food through the digestive tract. It's called fiber.

? Ask: Where is fiber found in the kernel? Answer: in the bran.

Show youth what a one-ounce portion of whole grain food would look like. Examples:

1 slice of bread	½ cup spaghetti	3 cups popcorn
5 crackers	1 tortilla	½ English muffin
½ bagel	½ cup rice	1 cup wheat flakes

## Lesson 4: Grainy Brains

### PREPARATION

🕒 5 minutes

### SUPPLIES

See recipe for ingredients and utensils list.

### HANDOUTS & BOOKS

- ❑ *How Many Grains?*  
📖 p. 252
- ❑ Recipe: *Bread In A Bag* 📖 p. 253
- ❑ *Using MyPyramid In Your Life – Children and Youth*  
📖 p. 211
- ❑ *MyPyramid Worksheet* 📄

Show the group the whole grains you displayed in Activity 2. Ask youth to identify foods made from the whole grains shown in the display. Explain that the new recommendation is that we consume at least three one-ounce equivalents of whole grains each day. The rest of our grain servings should come from a combination of enriched and whole grain products.

### Now We're Cookin' – Bread In A Bag

(All Ages) 🕒 30 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Have youth prepare *Bread in a Bag*. The recipe is found in Appendix A.



### Technology Challenge

(All Ages)

Use the resources on <http://www.MyPyramid.gov> to determine how much grain you need in a week. Record how many whole grains you have eaten in the last week. Make a meal plan to help your family eat whole grains using MyPyramid Plan. Refer to the handout *How Many Grains*, and to Chapter 1, Lesson 2, Activity 1. – Using MyPyramid. Download the handouts from Chapter 1, Lesson 2, : *Using MyPyramid In Your Life – Children And Youth* at: <http://fyics.ifas.ufl.edu/pyramid/adobe/ythhandout.pdf> and the *MyPyramid Worksheet*: <http://fyics.ifas.ufl.edu/pyramid/adobe/worksheet.pdf>

## Lesson 5: Vegetarianism In A Nutshell

### PREPARATION

🕒 5 minutes

### SUPPLIES

- ❑ Flip chart or blackboard
- ❑ Marker or chalk

### Outcomes (School Age)



The purpose of this lesson is to have youth:

- Learn that there are different kinds of vegetarians and they eat different kinds of food
- Understand that there are different reasons for becoming vegetarian
- Learn that vegetarians need to eat non-meat sources to obtain several vital nutrients
- Prepare and sample a vegetarian recipe

### Instructor Essential Information

Some people choose to eat a vegetarian diet. They do this for cultural or religious reasons, or out of concern for their health. A vegetarian diet can be a very healthy one. Sometimes people reduce their meat consumption for health or ethical reasons. Instead, they eat more fruit, vegetables and grains.

There are several kinds of vegetarians. Those who eat milk products and eggs are called lacto-ovo vegetarians. Those who eat only food from plants are called vegans.

Everyone needs to eat an adequate variety and amount of different kinds of foods to get enough protein and vitamins - particularly vegetarians. In a typical American diet, several important nutrients - iron, zinc, and B vitamins - are largely obtained by eating meat, fish, and poultry. Therefore, those who follow a vegetarian diet need to get these nutrients in another way.

Vegans especially need to pay close attention to whether their daily requirement of vitamin B12 is met because animal products are the only natural food sources of vitamin B12. Vegans must supplement their diets with a source of this vitamin.

Vegans also need to ensure that they get an adequate amount of vitamin D and calcium, which most Americans obtain from milk products. This is particularly important for youth on a vegan diet.



## Lesson 5: Vegetarianism In A Nutshell

### Discussion

**DO** (School Age) ⌚ 20 minutes

? Ask: What did you have for breakfast today? For lunch yesterday? For dinner?

? Ask: Do you know what we call people who never eat meat, chicken or fish? Answer: vegetarians.

Write the words "Vegetarian" and "Meat" on the board or flipchart. Ask youth to write down under the correct header, examples of foods they ate in the last 24-hours. Or place two signs on a table: "Vegetarian" and "Meat," and let the youth put food pictures or models in the right area.

? Ask: Does anyone know any vegetarians? Can you name any foods they like to eat? Examples of well-known people who are vegetarians: Benjamin Franklin, Brad Pitt, Gwyneth Paltrow, Reese Witherspoon.

Explain that there are two kinds of vegetarians: lacto-ovo, and vegans.

? Ask: Can you think of any reasons why someone wouldn't want to eat meat? Examples: religious reasons, high cholesterol, they don't want to kill animals, they don't like the way livestock are treated.

Explain that following a vegetarian diet can be very healthy but there are some special concerns that they have to pay attention to such as getting enough iron, zinc, and B vitamins.



## Lesson 5: Vegetarianism In A Nutshell



### PREPARATION

🕒 30 minutes

### SUPPLIES

See recipes for ingredients and utensils list.

### HANDOUTS & BOOKS

- ❑ Recipe: *Tacos*  p. 254
- ❑ Recipe: *Hummus*  p. 255

### Now We're Cookin' – Tacos and Hummus

(All Ages) 🕒 30 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Have youth prepare the recipes for *Tacos* and *Hummus*. This recipe comes from <http://www.vegkitchen.com>. Select "Kid Friendly Recipes," then "Fun Food For Young Kids." Click on "Taco Party." The recipes can also be found in Appendix A.



### APPLY (School Age)

Tonight ask your family to think of all the meatless meals they eat. Share your examples with the class.

### Technology Challenge

(School Age)

Go to <http://www.eatveg.com> and find a recipe that your family might enjoy.





## Lesson 5: Vegetarianism In A Nutshell

### PREPARATION

🕒 10 minutes

### HANDOUTS & BOOKS

- ❑ *Where's The Beef?*  p. 260
- ❑ *Losing Meat, But Keeping A Child's Diet Balanced*  p. 256

### Outcomes (Middle School • Teen)



The purpose of this lesson is to have youth:

- Understand some of the reasons why people choose to eat a vegetarian diet
- Explore the benefits and challenges of a vegetarian diet for young people
- Create an "Awareness Pamphlet" for teens that highlights the challenges and benefits of a vegetarian diet
- Prepare and sample a vegetarian recipe

### Instructor Essential Information

#### SET UP DETAILS

See Instructor Essential Information for School Age children. Youth will explore the benefits and challenges of a vegetarian diet for young people, by reading and discussing the article in the handout: *Losing Meat, but Keeping a Child's Diet Balanced*. The entire lesson plan, called "Where's The Beef?" can be found on the *New York Times Learning Network* website:

<http://www.nytimes.com/learning/teachers/lessons/20000725tuesday.html>. The parts of the lesson used in this chapter are included below. The full article and lesson plan can also be found in Appendix A.



### Discussion



(Middle School • Teen) 🕒 35-40 minutes

Give each student a copy of the handout *Losing Meat, but Keeping a Child's Diet Balanced*, or have them go to the *New York Times Learning Network* website and read it online:

<http://www.nytimes.com/learning/teachers/lessons/20000725tuesday.html>. After each youth has read the article, have a discussion using these questions from "Activities/Procedures" section (Question 2):

- Why are some kids rejecting meat in their diets?
- How do vegetarian kids sometimes force compromises in the family diet?
- What has led to more widespread acceptance of vegetarian diets for children?

## Lesson 5: Vegetarianism In A Nutshell

- For what reasons do people often choose a vegetarian diet?
- What are the different types of vegetarians?
- Why do some experts consider vegetarian diets to be generally healthier?
- What concerns do some experts have about vegetarian diets for young people?
- What types of concerns do parents have about their children eating vegetarian diets?
- What evidence from popular culture shows the growing interest in vegetarianism?

Next, have students create awareness pamphlets for teens that provide information and resources about the challenges and benefits of a vegetarian diet. Students may use information from the featured article and information from additional research (Internet recommended) to complete their pamphlet.

You may want to divide students into small groups for this project, assigning each a different vegetarian diet (lacto-vegetarian, ovo-vegetarian, pesco-vegetarian, pollo-vegetarian, vegan, etc.) to research. This activity comes from the New York Times Learning Network website referenced above under "4. Activities/Procedures," Wrap-Up/Homework.

### Technology Challenge

(Middle School • Teen)

Find a vegetarian website using a search engine such as Google <http://www.google.com> or Yahoo <http://www.yahoo.com>. Select a recipe that your family might enjoy. Print it out and try it at home.

**APPLY** (Middle School • Teen)

Take home the recipe you selected above and make it for your family to taste.



## Lesson 6: The Truth About Vitamins, Steroids, & Supplements

### PREPARATION

🕒 10 minutes

### SUPPLIES

- ❑ Poster paper
- ❑ Markers
- ❑ Jump ropes, balls, and hula-hoops
- ❑ CD Player
- ❑ A variety of upbeat and relaxing music

### Outcomes (School Age)



The purpose of this lesson is to have the children:

- Learn that muscles are best built by exercise and good nutrition
- Understand why vitamin-mineral pills can be helpful to a diet, but may not be necessary

### Instructor Essential Information

Many families automatically give their children a daily vitamin without thought as to whether or not it is needed. This lesson will help youth understand that sometimes vitamins may improve a diet, and at other times, they may be unnecessary.

Research findings on vitamin-mineral supplements are open to different interpretations. Some studies find that vitamins are acceptable supplements for nutrients found in food. Other studies indicate that the nutrients present in food are the preferred, superior form. It is possible to consume too much of certain vitamins.

If youth follow the MyPyramid recommendations, they will get all the vitamins and minerals they need without supplements.

### STEROIDS

This lesson includes a section about steroids. Although steroids are not a major health concern for elementary-aged children, these youth are sometimes aware of steroid abuse by professional athletes. For this reason, youth of all ages can benefit from a basic explanation of steroids, and why they are sometimes abused.

You may skip this section, if you feel that this topic is not appropriate for School Age youth. Another part of the lesson focuses on non-competitive fitness activities that build muscles.

Steroids are certainly an important topic for both middle school and high school youth. The two fastest growing groups of new users of steroids (other than professionals) are 8<sup>th</sup> and 12<sup>th</sup> grade boys. You may wish to refer back to Chapter 1, Lesson 6: Muscle Mania, for details about circuit training.



## Lesson 6: The Truth About Vitamins, Steroids, & Supplements

### Discussion

**DO** (School Age) ⌚ 15 minutes

Have youth sit in a half-circle around the instructor.

? Ask: Does anyone know what kinds of vitamins and minerals are typically found in a vitamin or mineral pill? Answer: Vitamins A, B, C, D, E and minerals such as calcium, zinc, potassium, iron, and iodine.

? Ask: What foods can you eat that will give you the same nutrients as those found in vitamin pills? Possible answers:

- Fruits and vegetables
- Dairy products that contain Vitamin D and A
- Fortified foods such as breads and cereals

? Ask: Does anyone know which vitamin our bodies make when our skin is exposed to the sun? Answer: vitamin D

? Ask: Why do some people take a “daily” vitamin? Examples: they don’t like fruits and vegetables, their parents “make” them, vitamins are fun, vitamins taste good, they might get sick a lot so it helps them to be healthier.

? Ask: What can people do to build muscle and improve their performance in physical activities? Possible answers: exercise and eat right. Mention that there is minimal research on youth lifting weights, but it is usually recommended that youth not lift weights until after puberty.

### Activity 1 – Free (Fun) For All

**DO** (School Age) ⌚ 30 minutes



Have kids brainstorm ways in which they can be physically active even if they are not part of organized sports or games. List all their suggestions on poster paper attached to the wall. Possible answers: jumping rope, free dance, tag, running in place, relay races, jumping in place, hopping on one foot, hula-hoop, push-ups. Have children vote for the top five activities that can be done here at the Center.

Divide youth into five groups. Select a leader for each group using a non-competitive selection process. For example, choose youth whose birthdays occur in this month, who have on blue socks,

## Lesson 6: The Truth About Vitamins, Steroids, & Supplements

whose mom or dad has a birthday closest to today, who has a cat, etc.

Let each group pick one of the five activities to work with, and have them figure out how it helps build muscles. After all the groups have finished, instruct them to demonstrate to the other groups how their activity helps to make them stronger.

### REFLECT (School Age)

? Ask: Which activity did you enjoy the most? Which one did you think was the best way to build muscles? Remind youth that every person is different and responds to exercise differently.

? Ask: What other activities could you do at home that would give you similar results? Examples: raking leaves, walking the dog (at a fast pace), sweeping, running around the edge of the yard.

? Ask: Why would someone actually “need” vitamin-mineral supplements? Possible answers: poor diet, illness, no access to fruits and vegetables.



### APPLY (School Age)

Ask youth to pick at least one at-home activity such as yard or house work and find a way to make it more energetic. Suggest that the youth play music while they do the activity, or give themselves a time limit to see if it makes the activity more fun, or inspires them to use more energy while completing the task. Ask youth to come to the next meeting prepared to report on their success in turning everyday activities into more active, fun exercises!

## Optional Discussion - Steroids

### DO (School Age) ⌚ 10 minutes

You may discuss steroids with the group if you feel it is appropriate. For a basic overview of steroids and their effects, see the Middle School Age Discussion.

Review the handouts listed in the Resources section to determine if your young audience needs to know any thing else about side effects at this time. There may be a child with special questions and/or interests that you should address.

## Lesson 6: The Truth About Vitamins, Steroids, & Supplements



### PREPARATION

⌚ 20 minutes  
depending on training  
stations selected

### SET UP

- ❑ Have 2 sheets of poster paper attached to walls
- ❑ 4 circuit training stations - see Set Up Details

### SUPPLIES

- ❑ Poster paper
- ❑ Markers
- ❑ Jump ropes, basketballs
- ❑ Timer or clock
- ❑ CD Player
- ❑ A variety of upbeat and relaxing music

### HANDOUTS & BOOKS

- ❑ *Mind Over Matter: The Brain's Response To Steroids* [RK](#)
- ❑ *Tips for Teens* [RK](#)

### Outcomes (Middle School)

The purpose of this lesson is to have youth:

- Understand the difference between anabolic-androgenic steroids and corticosteroids
- Identify the short term vs. permanent side effects and risks of steroid use on the body
- Understand that steroid use may be a major growth inhibitor with serious, permanent, long term effects
- Name some of the reasons why star athletes succumb to the temptation of using steroids
- Understand the competitive pressure of high school and club sports teams

### Instructor Essential Information

#### SET UP DETAILS

To set up four of the circuit training stations, refer back to the Set Up Details for Lesson 6: Muscle Mania - Move it or Lose It on page 46. Set up these stations: push-ups, wall sits, crunches and ball pass. Bring out the necessary equipment. Review Activity 1 - Circuit Training, in Lesson 6 for a description of how the station should be run.

#### STEROID USE

There are well-known short-term risks, permanent risks, and side effects of steroid use on the body based on the evidence of adults who use and abuse these drugs. Since it is illegal for youth and teens to use anabolic steroids and supplements, there is very little scientific research on the effect of these substances on youth and teen bodies. Middle school students may be exposed to, and influenced by, the popular media descriptions of athletic feats done under the influence of steroids.

Familiarize yourself with symptoms and possible side effects of steroid use. See handouts: *Mind Over Matter: The Brain's Response To Steroids*, and *Tips for Teens*. The Resources section also has further information.

### Discussion

[DO](#) (Middle School) ⌚ 10 minutes

? Ask: Who has heard of steroids? Some youth will have heard about steroids because of news coverage of abuse by baseball

## Lesson 6: The Truth About Vitamins, Steroids, & Supplements



players or other athletes. Others may know about steroids from first hand experience in taking them for asthma, poison ivy, or some other medical condition.

? Ask: Who knows what steroids do in the body? Answer: there are two types of steroids and they do different things:

- **Corticosteroids** are prescribed by a doctor and are used to reduce inflammation. They can be used both internally and externally. Internally, they can be used to reduce swelling in lungs caused by asthma. Externally, they can be used in creams that can reduce inflammation from rashes, etc. Corticosteroids do not build muscle, and are not typically abused.
- **Anabolic steroids** build muscle quickly, improve athletic performance, and may reduce body fat. Anabolic steroids have many negative side effects that can cause long-term health problems and shorten your life. Their use in sports is considered to be “cheating” since they artificially enhance performance.

? Ask: Do you know of anyone taking any other kind of powders or drinks to improve their athletic performance? Examples: supplements from a health food store, Creatine, drinks such as Red Bull, Vault, etc.

? Ask: Why do you think that young people take these supplements?

Divide youth into groups of three or four. Have each share among themselves what they know or have heard about the short term and long term positive and negative effects of using steroids. Have each small group select a reporter. After five minutes, have the groups report back to the total group.

Appoint two recorders for the entire group. On the first sheet of poster paper on the wall, have the recorder write down the benefits of steroids. On the second sheet, record the negative effects of steroids. Have youth determine which results are short term and which are long term by labeling them with either an “S” or an “L.”

At the conclusion of this exercise, instructor should fill in the gaps on steroid use, being sure that the teens are aware of some of the longer-term effects of steroids as outlined in the handout from the National Institute on Drug Abuse, *Mind Over Matter: The Brain's Response to Steroids*.



## Lesson 6: The Truth About Vitamins, Steroids, & Supplements

Divide youth into smaller groups again. Have them discuss some ways to develop muscles other than using steroids. Suggestions should include weight bearing exercise and other strengthening exercises. Refer back to Chapter 1, Lesson 6: Muscle Mania.

### Activity 1 – What’s A Kid To Do?

**DO** (Middle School) ⌚ 30 minutes

Present youth with several situations they might encounter in their lives where they will feel pressured to do things that they know are not good for them or someone else. This could be something they eat/take that is harmful, something they say that isn't true, cheating, foul play. Examples:

- Drinking a lot of caffeine the night before a test so that they could stay up most of the night to study
- Tripping a player making a fast break with the ball while the referee is on other side of the field and can't see
- Elbowing someone hard just as they get near the basket
- Saying something negative about a friend so that someone else will like you
- Eating a candy bar right before a game for an initial burst of energy, knowing it will make it harder to play later

Point out that the pressure to succeed by doing something harmful is greatly magnified for professionals whose careers, social lives, and sometimes even family lives, are dependent upon their ability to perform.

**? Ask:** Have you ever participated in an activity where you had to go through “try-outs?” This could have been a music group, a play, a team, or other school activity.

Have each group make up a situation in which they will be rated or “tested” by peers and will be tempted to use some artificial or unethical means to boost their standing or performance. Have the groups act out their situations for everyone. Ask each group what other action they could have taken that would have been a better choice.





## Lesson 6: The Truth About Vitamins, Steroids, & Supplements

### Activity 2 – Muscle Building Through Circuit Training

**DO** (Middle School) ⌚ 30 minutes

? Ask: Who can describe how we did circuit training in an earlier lesson? If they don't remember, review the exercise that goes with each of the four circuit training stations used in this activity: push ups, wall sits, crunches, and ball pass.

Follow the procedure for warm-up, aerobics, and cool-down.

- **Warm Up** - Start with music that is calm and somewhat low. Ask youth to warm up at their own pace using any of the warm up exercises they learned about in Chapter 1.
- **Circuit Training** - Change the music to something more upbeat. Have  $\frac{1}{4}$  of the group begin at each station. Review each exercise (see Chapter 1, Lesson 6). When the youth have done each station twice for 3-5 minutes, have them jump rope as long as possible without stopping.
- **Cool-Down** - At the end of the exercise period, ask the group to do some cool down exercises that they remember from the earlier lessons.

**REFLECT** (Middle School)

? Ask: How did it feel while you were acting out a situation in which you were tempted to do something unethical?

? Ask: What do you think is the main reason athletes abuse steroids? How do you think they feel after they are caught? How might their families and children feel?

**APPLY** (Middle School)

Have youth log onto the web site called Sara's Quest:

<http://www.sarasquest.org>. This is an interactive game site of the National Institute on Drug Abuse. Ask youth to review the section on steroids and any others that interest them.

## Lesson 6: The Truth About Vitamins, Steroids, & Supplements



### PREPARATION

⌚ 20 minutes  
depending on training  
stations selected

### SET UP

- ❑ Have 2 sheets of poster paper attached to walls
- ❑ 4 circuit training stations, see Set Up Details

### SUPPLIES

- ❑ Poster paper
- ❑ Markers
- ❑ Jump ropes, basketballs
- ❑ Timer or clock
- ❑ CD Player
- ❑ A variety of upbeat and relaxing music

### HANDOUTS & BOOKS

- ❑ *Mind Over Matter: The Brain's Response To Steroids* [RK](#)
- ❑ *Tips for Teens* [RK](#)



### Outcomes (Teen)

The purpose of this lesson is to have youth:

- Understand the difference between anabolic-androgenic steroids and corticosteroids
- Identify the short term and permanent risks and side-effects of steroid use on the body
- Learn about supplements commonly used by teens to enhance their body appearance and strength.
- Understand that different activities require different muscle performance (e.g., lifting weights uses different muscle groups than those used in distance running)
- Understand the competitive pressure of college and professional sports teams
- Learn the dangers inherent in using any substance prepared in a non-sterile, uncontrolled environment

### Discussion

**DO** (Teen) ⌚ 5-10 minutes

? Ask: What is your perception of steroid and supplement use by athletes? The discussion might include baseball player usage, track and field scandals, Olympic drug testing, etc. Encourage open discussion.

? Ask: Who knows what steroids do in the body? Answer: there are two types of steroids and they do different things:

- **Corticosteroids** are prescribed by a doctor and are used to reduce inflammation. They can be used both internally and externally. Internally, they can be used to reduce swelling in lungs caused by asthma. Externally, they can be used in creams that can reduce inflammation from rashes, etc. Corticosteroids do not build muscle, and are not typically abused.
- **Anabolic steroids** build muscle quickly, improve athletic performance, and may reduce body fat. Anabolic steroids have many negative side effects that can cause long term health problems and shorten your life. Their use is considered to be "cheating" in sports since they artificially enhance performance.

? Ask: Do you know of anyone taking any other kind of powders or drinks to improve their athletic performance? Examples:

## Lesson 6: The Truth About Vitamins, Steroids, & Supplements

supplements from health food store, Creatine, drinks such as Red Bull, Vault, etc.

? Ask: Why do you think that young people take these supplements?

Divide teens into groups of three or four. Have them share among themselves what they know or have heard about the short term and long term positive and negative effects of using steroids. Have each small group select a reporter. After five minutes, have the small groups report back to the whole group.

### Activity 1 – Steroid & Supplement Use

**DO** (Teen) ⌚ 15-20 minutes

Divide teens into groups of three or four persons. Appoint two recorders for the entire group. On the first sheet of poster paper on the wall, have the recorder write down the benefits of steroids. On the second sheet, record the negative effects of steroids. Have youth determine which results are short term and which are long term by labeling them with either an "S" or an "L."

At the conclusion of this exercise, instructor should fill in the gaps on steroid use, being sure that the teens are aware of some of the longer-term impacts of steroids. See the National Institute on Drug Abuse handout: *Mind Over Matter: The Brain's Response to Steroids*.

? Ask: How many of you have heard of Creatine or know of other legal or illegal supplements that athletes use for enhanced performance? Ask the small groups to think of reasons why these supplements are not wise for teens to use. Possible answers:

- Research has not been done specifically on teens to determine whether or not the substance is dangerous for youth
- There is little research or information on side effects of supplements
- There is no guarantee of sterility in the manufacturing of supplements
- There is no guarantee of contents matching the label since there is no regulation on manufacturing these substances

## Lesson 6: The Truth About Vitamins, Steroids, & Supplements

### Activity 2 – What’s A Kid To Do?

**DO** (Teen) ⌚ 30 minutes

See instructions for Activity 1 for Middle School youth, on page 120.

Have teens discuss some natural, healthy ways to develop muscles other than using steroids. Suggestions should include weight bearing exercise and other strengthening exercises. Refer back to Chapter 1, Lesson 6: Muscle Mania.



**REFLECT** (Teen)

? Ask: Ask youth to think about what they learned about steroids or supplements that they didn’t know before.

**APPLY** (Teen)

Ask each participant to select either a magazine or newspaper and review it to see how often steroids are mentioned. Is this more or less than they would have expected? What might be the reason for the increase/decrease in publicity about steroids?

### Activity 3 – Muscle Building Through Circuit Training

**DO** (Teen) ⌚ 30 minutes

See instructions for Muscle Building Through Circuit Training for Middle School youth, Activity 2 on page 121.

### Technology Challenge

(Teen)

Have teens visit the web site for National Institute on Drug Abuse: <http://www.nida.nih.gov>. There is a great deal of credible and worthwhile information there.

See also “NIDA for Teens.” This site educates youth aged 11 through 15, as well as their parents and teachers, on the science behind drug abuse. The site is <http://teens.drugabuse.gov>.

## Lesson 6: The Truth About Vitamins, Steroids, & Supplements

---


### Resources

- National Clearinghouse for Alcohol and Drug information  
1-800-729-6686
- Another web site of interest is the US Olympic Committee Team web site: Information on Sports Medicine and Dietary Supplementation for Athletes. <http://www.usoc.org>



## Lesson 7: Energy Drinks and Foods

### PREPARATION

 30 minutes

### SET UP

See Set Up Details.

### SUPPLIES

- ☐ One 2-cup measuring cup for each group
- ☐ Bottled water or tap water
- ☐ Drinking straws
- ☐ Paper cups or drinking glasses that will hold 12 ozs. of water
- ☐ A variety of sports energy bars, drinks and gels (save the grocery receipt for price comparison)
- ☐ 3 X 5 index cards
- ☐ Marker
- ☐ Peeled cucumber and oranges
- ☐ Sports pinnies or flags

### HANDOUTS & BOOKS

Picture or poster of the entire human body (can be a magazine picture)

### Outcomes (School Age)



The purpose of this lesson is to have the children:

- Learn that their bodies need water every day to be healthy
- Learn what 12 ounces of water looks like
- Understand that water is the best way to hydrate before, during, and after exercise
- Learn that many foods contain water
- Compare prices of sports drinks and sodas
- Sample several different energy drinks, food bars, and gels
- Participate in an aerobic activity

### Instructor Essential Information

#### SET UP DETAILS

The instructor should do the following before class begins:

- Set out several liquid measuring cups and bottled water.
- Have at least one drinking straw for each youth.
- Display several kinds of sports energy bars, drinks, and sports gels. Divide them into small amounts for sampling.
- On a 3 X 5 index card, use a marker and write the name and price of each energy bar, sports drink, or gel. Place the card price-side down so the amount is not visible.
- Peel cucumber and oranges. Cut them into slices and separate them so that there are one to two slices of each for everyone.
- Display picture or poster of human body where it is visible. You can use a magazine picture of a model or athlete if necessary.

### Discussion

**DO** (School Age)  15 minutes

? Ask: How much of your body is made of water? Answer: 60-70%. Use the magazine picture of the human body to illustrate what 60-70% looks like. You may wish to use a marker to color 70% of the body so that the youth understand just how much this figure represents.

? Ask: Can you name some of the functions that water has in the human body? Examples: helps with food digestion, helps blood transfer needed nutrients to muscles, helps keep blood moving

## Lesson 7: Energy Drinks and Foods



smoothly through veins, helps regulate heating and cooling systems in the human body.

Because we need water for critical body functions, it is important that we continuously replace the water we lose when we exercise, sweat and go to the bathroom.

? Ask: Can you name some foods that contain a large percentage of water? Examples: milk, juice, soda, smoothies, other beverages, fruits and vegetables.

Explain that all foods contain some water and many foods, especially fruits and vegetables, contain large amounts of water. Stress that if youth eat a variety of foods with plenty of fresh fruits and vegetables, they will get about 20% of the water their bodies need from their food. The rest must come from the beverages they drink. Use the picture of the body to show what 20% and 80% look like. Have youth guess the prices on the sports drinks and energy bars but don't share with them the actual cost yet.

? Ask: Why do you think that some of these items cost more than others?

? Ask: What other foods might provide some of the same nutrients as the sports drinks and bars? Examples: milk, whole-grain bread, nuts, fruits and vegetables, fruit juice.

### SET UP

See Set Up Details.

### SUPPLIES

- ❑ One 2-cup measuring cup for each group
- ❑ Bottled water or tap water
- ❑ Drinking straws
- ❑ Paper cups or drinking glasses that will hold 12 ozs. of water

## Activity 1 – How Much Water Is In A Soda Can?

**DO** (School Age) ⌚ 10 minutes

Divide the children into groups of three to four. Give each group some bottled water and a liquid measuring cup. Make sure each group also has a drinking glass and a straw for each person.

Have each child measure 12 ounces of water (1½ cups) into their glass. Explain that this is the size of a normal can of soda. Have them slowly sip it with a straw.

While they are drinking their water, review the functions of water in the human body. Have them discuss whether this amount is more or less water than they normally drink in one serving.



## Lesson 7: Energy Drinks and Foods

### SUPPLIES

Peeled cucumber and oranges

### Activity 2 – Tasting The Water In Food

**DO** (School Age) ⌚ 10 minutes

Give each child one to two slices of oranges and cucumbers. Have them taste each one separately.

? Ask: Can you taste the water in the food?

Earlier in the lesson, youth learned what 1½ cups of water looks like. Next, ask them to guess what percentage of a cucumber is water. What percentage of an orange is water? Answers: cucumber 96%, orange 88%. You can also provide samples of several other low- and high-water content foods for comparing texture, juiciness and tastes. Examples might include: crackers, bread, carrots, tomatoes, mangoes, lettuce, etc.

### SUPPLIES

Sports pinnies or flags

### Activity 3 – Tag Or Muscle “Rest” Game

**DO** (School Age) ⌚ 15 minutes

Tell youth that they will be playing a game of tag. Ask for two to three volunteers to be “it” at the beginning and give them flags or pinnies to wear. Confine the tag game to a specific area where there are no “safe” bases. The object of the game is for the youth wearing the pinnies to tag the other youth. After a youth has been tagged, he/she must take the pinnie and become “it.”



If a youth wants to rest, he or she may stop running but must complete a set of 10 activities such as sit-ups, push-ups, wall push-ups, step-ups, chin-ups, or other muscle-building activities that have been predetermined as “rest” activities. (A step-up requires youth to “step up” 10 times with each leg, using a sturdy step.) After the tag game has ended, ask the following questions.

? Ask: Did you notice that your body began to sweat during or after the game? Why do we sweat? Answer: it cools us off so we don’t overheat.



## Lesson 7: Energy Drinks and Foods

### SET UP

See Set Up Details.

### SUPPLIES

- ❑ Paper cups
- ❑ A variety of sports energy bars, drinks and gels (save the grocery receipt for price comparison)
- ❑ 3 X 5 index cards
- ❑ Marker



### Activity 4 – Tasting Food Bars & Energy Drinks

**DO** (School Age) ⌚ 10 minutes

Give each child a few samples of different sports bars, gels and energy drinks. Have them try each one separately and discuss the taste and texture. Do they like the taste? Why or why not? As a group, have children rate them on a scale of 1 to 5, where 1 is "Great" and 5 is "Terrible."

Next, turn over the 3 X 5 cards so that prices of the items are visible. Did the more expensive drinks and bars get a better rating? Discuss whether or not the sports bars, gels and energy drinks are a "good buy."

**REFLECT** (School Age)

? Ask: Why do you think two young people of the same age might need different amounts of water? Discuss how exercise affects how much water we need to drink.

? Ask: What are other things that affect how much water we drink everyday? Does weather make a difference? How?

**APPLY** (School Age)

Ask youth to keep a record for one week of how much liquid they drink. To keep track of their consumption, have children use measuring cups or drink from pre-measured beverage containers. Have them record the amount and type of beverage: water, milk, juice, or soda. What else did they drink (e.g., milkshakes, smoothies, ice tea)? Which beverage did they drink the most?

## Lesson 7: Energy Drinks and Foods

### PREPARATION

⌚ 45 minutes

### SET UP

See Set Up Details.

### SUPPLIES

- ☐ Marker or pen
- ☐ 3 X 5 index cards
- ☐ 2-4 tablespoons for measurement; 2-4 teaspoons
- ☐ Bottled water or tap water
- ☐ Paper cups
- ☐ A variety of sports drinks, bars, gels
- ☐ Oranges and cucumbers (1-2 slices per youth)
- ☐ Bottled lemon and lime juice
- ☐ One small can of orange juice concentrate
- ☐ Salt
- ☐ Empty gallon container or pitcher
- ☐ Sports pinnies or flags for every 25 youth
- ☐ Food pictures from magazines
- ☐ Index cards with percent of water in foods (see Set Up Details)
- ☐ 12-ounce container of water for display
- ☐ One 2-quart milk carton, filled with water

### Outcomes (Middle School • Teen)

The purpose of this lesson is to have youth:



- Understand that water is the best way to hydrate under most circumstances
- Identify the instances when a sports drink, gel or energy bar is an appropriate substitute for water or food
- Learn that many foods contain water
- Compare prices of sports drinks and sodas
- Make a homemade sports drink
- Understand that energy bars and gels do not build bigger muscles or provide “better” energy
- Sample several different energy drinks, bars and gels
- Participate in an aerobic activity
- Understand the physiological reasons for sweating

### Instructor Essential Information

#### SET UP DETAILS

Before lesson begins, the instructor should:

- Set out orange, lime, and lemon juices, salt, water, measuring spoons, mixing equipment and cups for making and sampling sports drinks.
- Display several kinds of sports drinks, energy bars, and gels and divide them into small amounts for sampling.
- On a 3 X 5 index card, write the price of each energy bar or sports drink; place card price-side down so the amount is not visible.
- Peel cucumber and oranges. Cut them into slices and separate so that there are one to two slices of each for everyone.
- The instructor or youth should cut out pictures from magazines of the following foods: chicken noodle soup, broccoli, milk, orange, oatmeal, grapes, rice, roasted chicken, roast beef, whole wheat bread, beef jerky, raisins, oatmeal cookie, saltine crackers, and rice cereal. On separate index cards, write the corresponding percentage of water these foods contain. See Activity 5 – Body of Water Relay instructions for percentage amounts.

## Lesson 7: Energy Drinks and Foods

### Discussion

**DO** (Middle School • Teen) ⌚ 25 minutes

? Ask: How much of your body is made of water?  
Answer: 60-70%.

? Ask: Why are beverages important? Explain that beverages contain mostly water. Because so much of your body is made of water, you need to drink a lot of it to remain healthy. Share with youth that more than 80% of blood is water; 70% of muscle is water; 25% of body fat is composed of water; and more than 20% of bone is water.



? Ask: Can you name some of the other important functions of water in the human body? Answers: water

- Helps with food digestion
- Makes it possible for blood to transport needed nutrients to muscles
- Helps blood move smoothly through veins
- Regulates the heat and cooling system in the human body
- Acts as a lubricant and protective cushion around tissues and sensitive organs like the eyes and brain

Because we need water for bodily functions, it is important to continuously replace the water we lose when we exercise, sweat, and use the bathroom.

Explain to youth that there is no absolute rule about how much water they should drink each day. Much depends on how active they are. Generally, you need about 6-8 or so cups of water per day; more, if you are an athlete. While exercising or playing sports, you should continuously replace fluids that are lost through sweating.

Sweating serves a very important function in the body. It helps to regulate body temperature. The American College of Sports Medicine recommends drinking water as follows:

- Two hours before exercise - drink 16 ozs. of water
- Twenty minutes before working out – drink an additional 8 ozs of water.
- During vigorous workouts - drink 4-8 ozs. of water every

## Lesson 7: Energy Drinks and Foods

20 minutes.

- After your workout – drink 18-24 ozs. of water within 30 minutes.

A quick way to tell if you are properly hydrated is to check the color of your urine. If your urine is clear to a very pale yellow, you are probably getting enough water. If your urine is dark and concentrated you need more water.



? Ask: Can you name some foods that provide water for our bodies? Examples: milk, other beverages, fruit and vegetables. Explain that all foods contain some water. Many foods, especially fruits and vegetables, contain a large amount of water.

? Ask: Can you guess the prices on the sports drinks and energy bars?

? Ask: Why do you think some drinks might be more expensive than others.

? Ask: What foods might provide some of the same nutrients as the sports drinks and bars? Examples: milk, whole-grain bread, nuts, fruit and vegetables, fruit juice. Stress that if youth eat a variety of foods with plenty of fresh fruits and vegetables, they will get about 20% of the water their bodies need from their food. The rest will come from the beverages they drink.

? Ask: Can you give an example of when you might need to drink a sports drink or eat an energy bar instead of other food? Stress that water and a healthy, varied, diet with plenty of fruits, vegetables, lean meat, low-fat dairy products and whole wheat grains is the best fuel for athletes and growing teens.



The only time young people should supplement their athletic regimens with sports drinks is when they are doing continuous and strenuous exercise for longer than 60 minutes, or when exercising in very hot weather. Sports drinks provide electrolytes (such as sodium and potassium) and carbohydrates that may be depleted during long, strenuous activities.

Energy bars and gels can provide a quick source of energy from carbohydrates or protein, depending on the brand. If a teen is engaged in sports or activities such as long-distance running or long hikes, such foods are convenient and lightweight. Otherwise, the best choice for athletic fuel is getting energy from a variety of healthy food sources.

## Lesson 7: Energy Drinks and Foods

### SUPPLIES

See recipe for ingredients and utensils list.

### HANDOUTS & BOOKS

Recipe: *Homemade Sports Drink* [A](#)  
p. 266

### SET UP

See Set Up Details.

### SUPPLIES

- ❑ Paper cups
- ❑ A variety of sports energy bars, drinks and gels (save the grocery receipt for price comparison)

Stress to youth that many energy bars promise bigger muscles and enhanced performance. However, the only real way to grow stronger and enhance performance is the old-fashioned way - hard work and an appropriate training regimen.

### Now We're Cookin' - Homemade Sports Drink

(Middle School • Teen) ⌚ 20 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Make the *Homemade Sports Drink* either as one large group or divide the youth into groups of three to four. If you have several groups, give each group one bottled water, and the ingredients for the *Homemade Sports Drink*. The recipe is in Appendix A. Refrigerate and use as a refreshment for youth in the coming week.



### Activity 1 – Comparing Sports Drinks

**DO** (Middle School • Teen) ⌚ 20 minutes

Each group will taste and compare their homemade sports drink with a store-bought sports drink, such as Gatorade. Give each group both drinks and sample cups. Pour out samples of the homemade sports drink. Ask youth to sample the homemade sports drink and describe the taste.

Next, ask the group to pour a small amount of the Gatorade into their empty cups and compare the taste of Gatorade to the homemade sports drink.

? Ask: Which one do you like better? Why?

? Ask: How are the ingredients of the two drinks similar? How do they differ?

**Optional:** For tasting and discussion purposes, ask one group to use less than one gallon of water and one group to use more than one gallon of water.

### Activity 2 – Tasting The Water In Food

**DO** (Middle School • Teen) ⌚ 10 minutes

See School Age instructions for Activity 2 - Tasting The Water In

## Lesson 7: Energy Drinks and Foods

Food on page 128.

### Activity 3 – Tag or Muscle “Rest” Game

**DO** (Middle School • Teen) ⌚ 15 minutes

See School Age instructions for Activity 3, Tag or Muscle “Rest” Game, on page 128.

After the tag game, ask the youth if they noticed their bodies begin to sweat during or after the game.

? Ask: Why do we sweat? Answer: it cools us so we don’t overheat.

### Activity 4 – Tasting Food Bars & Energy Drinks

**DO** (Middle School • Teen) ⌚ 10 minutes

See School Age instructions for Activity 4, Tasting Food Bars & Energy Drinks, on page 129.

#### SET UP

See Set Up Details.

#### SUPPLIES

- ❑ Marker or pen
- ❑ 3 X 5 index cards
- ❑ Bottled water or tap water
- ❑ Empty gallon container or pitcher
- ❑ Food pictures from magazines
- ❑ Water percentage cards for Body of Water Activity
- ❑ 12-ounce container of water for display
- ❑ One 2-quart milk carton, filled with water

### Activity 5 – Body of Water Relay

**DO** (Middle School • Teen) ⌚ 15 minutes

Remind youth that water is essential to the body. Take a quick water break. Explain the need to frequently replace water in our bodies through food and beverages. Share the following interesting water facts:

- An adult will lose up to 8 cups of water a day – which is the amount of liquid in a ½ gallon carton of milk. Show a ½ gallon (2-quart) container of water.
- The amount of water lost in one day just from breathing is 1½ cups of water. That is 12 ounces. Show youth a 12-ounce container of water.

Tell youth they will be running the Body of Water Relay.<sup>5</sup> Depending upon the size of the group, give each youth either a food picture from the list below, or, an index card with a water content percentage. The pictures can be cut from a magazine.

-----  
<sup>5</sup> The Body of Water Activity is adapted from: WIN Kids Fun Days, Wellness In The Rockies: <http://www.uwyo.edu/wintherockies>.



## Lesson 7: Energy Drinks and Foods

Each person should have one card. Set up a silent matching relay. Have participants silently match the food card with the water content for that food item. Below is the correct matching information.

### Food Item Water Content

- |                           |                          |
|---------------------------|--------------------------|
| - Chicken noodle soup 93% | - Roast beef 57%         |
| - Broccoli, raw 91%       | - Whole wheat bread 38%  |
| - Milk 89%                | - Beef jerky 23%         |
| - Orange, raw 87%         | - Raisins 15%            |
| - Cooked oatmeal 85%      | - Oatmeal cookie 6%      |
| - Grapes 81%              | - Saltine crackers 4%    |
| - Cooked rice 68%         | - Crispy rice cereal 2½% |
| - Roasted chicken 60%     |                          |

### REFLECT (Middle School • Teen)

? Ask: Why would two young people who are the same age need different amounts of water? Discuss how exercise and weather affects how much water we need.

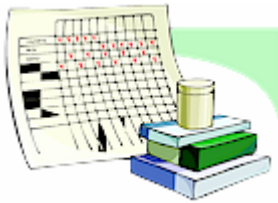
? Ask: What important mineral is in orange juice that makes it a good ingredient for a homemade sports drink? Answer: potassium.

? Ask: Why is it so important to drink plenty of fluids before you feel thirsty?

### APPLY (Middle School • Teen)

Ask youth to keep a record for one week of how much water they drink. Have them use measuring cups to keep track of their consumption.

Ask them also to keep a record of milk, juice and sodas that they drink. Which beverages do they drink the most?



## Chapter 4 Consumer Challenge

### Introduction

In Chapter 4, youth are introduced to the challenges of being a consumer. They learn how to interpret marketing claims. Youth learn that not all websites are credible and that they need to investigate the information provided on a website. They practice searching the Internet to find information about products.

This chapter teaches youth about the components of a shoe and what makes a shoe fit well. It also provides a role playing opportunity for each student to become a “buyer” of shoes, as well as a “seller.” Youth learn about how advertising tries to influence their buying decisions.

How to make healthy food choices by reading food labels is one of the more important skills youth learn in Label Lingo. This lesson includes an activity that helps youth understand the terminology on a food label and how the numbers relate to the USDA Dietary Guidelines. Stepping outside of their routine, youth are encouraged to try some new and different food choices. Since typical food portions in restaurants and grocery stores keep growing ever larger, youth learn what a healthy portion looks like and how to choose a healthy-sized meal when eating out. They also get tips on choosing healthy foods from the menu.

### Lesson Summary

- |  |           |
|--|-----------|
| 1. Selling Or Telling                            | Nutrition |
| 2. If The Shoe Fits                              | Fitness   |
| 3. Which Sport Which Shoe                        | Fitness   |
| 4. Label Lingo                                   | Nutrition |
| 5. Media Mania                                   | Nutrition |
| 6. Eating Out                                    | Nutrition |
| 7. New And Unusual Foods: Why Not Give It A Try? | Nutrition |
| 8. It's All About Size: Portion Distortion       | Nutrition |



## Lesson 1: Selling or Telling

### Getting Reliable Information from the Web


#### PREPARATION

🕒 15 minutes

#### SUPPLIES

- ❑ Marker
- ❑ Poster board or easel

#### HANDOUTS & BOOKS

*Assignment 24 From 45 Internet Projects For Food And Nutrition Classes* 

#### Outcomes (School Age)

The purpose of this lesson is to have the children:

- Learn safety rules for using the Internet
- Understand the basics of how the Internet, web browsers and search engines work
- Use a search engine
- Learn the difference between a website that is “selling” and one that is “telling”
- Identify a credible nutrition and/or fitness website
- Begin to develop research skills
- Find an “ethnic” recipe on a website to be prepared at a later date



#### Discussion

DO (School Age) 🕒 20 minutes

Tell youth that safety on the Internet is very important and that youth must follow these four rules. Write down or make a poster of the rules to hang in a visible spot in the computer lab.

Rules for using the Internet:

- **Rule 1** Youth must not give out any personal information such as address, photo, telephone number, school location, etc., without permission from their parents or other adult (such as a teacher).
- **Rule 2** Youth should never join a chat group on the Internet at school or in the computer lab without their parent's permission. Stress that if they do get permission to join a chat room they must never tell their password to anyone.
- **Rule 3** Youth must tell their parents or another adult right away if they come across any information that makes them feel uncomfortable.
- **Rule 4** Youth must NEVER agree to get together with someone they “meet” online without first checking with their parents.

? Ask: What exactly is the Internet? Invite youth to share their ideas. Explain that the Internet is a huge collection of computers around the world that are all linked together so that we can “talk”



## Lesson 1: Selling or Telling



to each other and share information.

? Ask: What is a web browser? Explain to the youth that a web browser is the software they are using to look at web pages. Anytime they look up something on the Internet they are using a web browser. There are lots of different web browsers, but the most popular ones are *Internet Explorer*, *Netscape*, and *Mozilla/Firefox*. Often kids simply use the basic browser that comes with their Internet service.

? Ask: Which web browser are you using at home, in school, or in the computer lab?

? Ask: What is an Internet search engine? Explain that to do research on their computers for a homework assignment, or to find a game or something else that interests them, youth must know how to use an Internet search engine. Internet search engines help you find web pages on a given subject. The search engine does this by collecting information on the contents of web sites. One of the more popular search engines is Google <http://www.google.com>. There are many others.

Explain to youth that the Internet can be a very useful tool for searching for information. While some websites provide good, credible information, others want users to buy a product and/or are pushing merchandise or ideas that aren't backed by scientific research. This is particularly true for nutrition and fitness websites.

Health information is one of the most researched topics on the web. Tell youth to be cautious about websites that make claims about food or fitness equipment that seem too good to be true. Stress that the best sources of information on food and fitness come from governmental agencies such as the United States Department of Agriculture, research universities, and professional organizations such as the American Dietetics Association.

### Activity 1 – Learning About Search Engines

**DO** (School Age) ⌚ 20 minutes

**Instructor Note:** If the children do not have basic computer knowledge, have them start with the first website under the Technology Challenge section. To complete this activity, you will need *Assignment 24 from 45 Internet Projects for Food and Nutrition Classes*.

Tell children that they will learn how search engines can help them find nutrition and food information on the web. Go to the Yahoo

## Lesson 1: Selling or Telling

search engine at <http://www.yahoo.com> and type in the key words "ethnic foods."

Find three different recipes from various parts of the world. Write down the names of the recipes, the country of origin, and the recipe ingredients. Pick one of the recipes to prepare during an upcoming lesson.

### Activity 2 – Find Reliable, Accurate, Websites

**DO** (School Age) ⌚ 60+ minutes

? Ask: How can you determine if a website is accurate and reliable? Brainstorm this question and use the easel or blackboard, to make two lists. Begin the first list with: "A Website is Probably Credible If..." Have youth describe why a website might be viewed as credible. Examples: the information on the website will be credible if it comes from professional organizations, governmental agencies, or research institutions or universities, such as:



- American Dietetic Association
- The American Medical Association
- The American Cancer Association
- The American Heart Association
- The National Institutes of Health
- The Centers for Disease Control
- The National Heart, Lung, & Blood Institute
- The University of Maryland
- Tufts University
- The Mayo Clinic

Begin the second list with: "You Should be Cautious of a Website If..." Have youth describe why a website might be viewed as less credible or reliable. Keep the lists in a visible place in the computer lab. Tell youth to be cautious if the website:

- Sells products or promises miracle cures
- Uses words or phrases like "too good to be true," "miraculous, instant results, etc."
- Recommends products and claims that they produce results that are not based on scientific evidence
- Lists foods that are "good" or "bad"
- Sells fitness equipment that claims it will make drastic changes in body appearance

After the two lists are complete, ask the youth to use a search engine such as Google: <http://www.google.com> or Yahoo

## Lesson 1: Selling or Telling

<http://www.yahoo.com> to search one of the following topics related to health and/or nutrition:

- Fitness
- Energy drinks
- Diets
- Weight loss

Tell youth to pick two websites for each one of these health topics. One website should seem credible, the other should be a website about which they feel cautious. Ask them to explain how they decided that a website may be misleading.

Finally, reinforce to the youth that the Internet is a wonderful and quick resource for them to learn about new things and to verify information they have heard from other sources. However, they should always evaluate a website's credibility based on the criteria they have established for "credible websites."

## Lesson 1: Selling or Telling


### PREPARATION

⌚ 15 minutes

### SUPPLIES

- ❑ Marker
- ❑ Poster board or easel

### HANDOUTS & BOOKS

*Assignment 24 From 45 Internet Projects For Food And Nutrition Classes* 



### Outcomes (Middle School • Teen)



The purpose of this lesson is to have youth:

- Learn safety rules for using the Internet
- Understand the basics of how the Internet, web browsers and search engines work
- Learn how to use a search engine
- Be able to identify a credible nutrition and/or fitness website
- Recognize the difference between a marketing website and a research-based website
- Use the web to search for information relating to nutrition and/or health
- Pick one or more recipes to prepare at a later date

### Discussion

 (Middle School • Teen) ⌚ 20 minutes

Use the School Age Discussion on Internet Safety, page 137.

### Activity 1 – Find Reliable, Accurate, Websites

 (Middle School • Teen) ⌚ 60+ minutes

Use the School Age, Activity 2 – Find Reliable, Accurate, Websites on page 139.

### Technology Challenge

(All Ages)

To learn about the Internet, guest books, web browsers, and more visit Mark Warner's Welcome To The Web website:

<http://www.teachingideas.co.uk/welcome/>. After you have completed the five sections under "Instructions," go straight to the "Welcome To The Web Challenge" and see if you can help solve the mystery!

Go to the U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, HealthFinder Kids website: <http://www.healthfinder.gov/kids>. There you will find all kinds of cool websites. Learn about ways to stay healthy and have fun too!

## Lesson 1: Selling or Telling

Visit the Centers for Disease Control and Prevention, Body and Mind and learn how to separate food fact from fiction:

<http://www.bam.gov>. Click on "Food and Nutrition."

Do you enjoy trying new kinds of foods? Visit <http://allrecipes.com> to find some exciting new recipes to try for your friends or family.



## Lesson 2: If The Shoe Fits

### PREPARATION

🕒 10 minutes




### SET UP

See Set Up Details.

### SUPPLIES

- ❑ Markers
- ❑ Flip chart paper

### HANDOUTS & BOOKS

- ❑ *Identifying The Parts Of A Shoe*  p. 267
- ❑ *Can You Label The Parts Of A Shoe?*  p. 268
- ❑ *Buying Shoes: Construction, Fit/Comfort, And Price*  p. 269

### Outcomes (School Age)



The purpose of this lesson is to have the children:

- Identify the parts of an athletic shoe
- Learn how to check the construction of a shoe
- Learn how to properly fit a shoe
- Compare shoe construction and cost to make an informed consumer choice

### Instructor Essential Information

#### SET UP DETAILS

Make a copy of these three handouts for each youth:

- *Identifying The Parts Of A Shoe*
- *Can You Label The Parts Of A Shoe?*
- *Buying Shoes: Construction, Fit/Comfort, And Price*

Become familiar with parts of the shoe. Divide a piece of poster paper in half. Mark one side: "Reasons You Like A Shoe," and the other side, "Reasons Your Foot Likes A Shoe."

### Discussion

 (School Age) 🕒 15 minutes

? Ask: Why did you purchase this particular style or color or brand of athletic shoe you currently own? List the answers on the chart. Examples: it's the cheapest, it was the only one that fit my foot, I liked the color, it looked good, it's the style my friends wear, I saw it advertised by a professional sports player.

? Ask: If your feet could talk, what might they tell you to consider when choosing a new pair of shoes? List answers on the chart. Examples: comfort, style, good for specific sports.

? Ask: Are you and your feet in agreement about what to get when you are looking for a pair of athletic shoes? Compare the answers to these questions.

Describe the most important qualities youth should look for in an athletic shoe: construction, fit/comfort, and price. Let's look at each one of these components more carefully using the *Buying Shoes: Construction, Fit/Comfort, And Price* handout.



## Lesson 2: If The Shoe Fits

### Activity 1 – Know Your Shoe

**DO** (School Age) ⌚ 15 minutes

1. Distribute Hand out *Identifying The Parts Of A Shoe* handout to each youth. Ask them to locate each of these parts on the shoes they are wearing. The children can do this individually or work in small groups.

? Ask: Look at your shoes and see if you can tell me if any of the parts shown on the handout are missing on your shoes. Which parts? Can you guess why that might be the case? what explanation do they have for it not being a part of the shoe.

After the children have had an opportunity to examine their own athletic shoes, show them a shoe, or use the *Can You Label The Parts Of A Shoe?* handout. Call out each of the parts of the shoe and ask a child to come forward and point to that part on their own shoe. As each child comes forward, have them move according to your direction (hop, skip, jump, twirl).

### Activity 2 – If The Shoe Fits

**DO** (School Age) ⌚ 20 minutes

Explain to the children that they are going to pretend to shop for shoes and will be trying on shoes for proper fit. Working in pairs, have one child be the shopper and the other the salesperson.



Have the children pretend to buy a pair of shoes. Go through each of the steps discussed earlier to evaluate construction, fit/comfort, and price. Have them pretend to put on the shoes and wiggle their toes. Have the salesperson check the fit of the shoe while the shopper is standing to see how far the toe is from the end of the shoe. Check the heel to make sure it is not slipping.

Finally, have them walk, jump, twist, turn and run a little in their "new" shoes. Then, have the children switch roles. The shoppers become the salespeople and the salespeople become shoppers. Have the shoppers evaluate the "new" shoes this time.

### Activity 3 – Which Shoe Would You Choose?

**DO** (School Age) ⌚ 15 minutes

Explain this scenario to the children: "You are looking for a new pair of shoes. You found two types of shoes that were a good fit for



## Lesson 2: If The Shoe Fits

your feet. Now you are looking at the construction and cost of these shoes."

- **Shoe A** is a brand of shoe that many of your friends are wearing. They cost \$70. This shoe has some irregular stitching that is a little loose in one spot near the toe.
- **Shoe B** is a brand name you do not recognize and costs \$40. Shoe B's construction seems OK.

? Ask: Which shoe would you choose? Have youth explain why they chose the shoe they selected.

### REFLECT (School Age)

Divide the children into groups and have them discuss what qualities they would look for in shoes the next time they shop for them. Have each group tell what is important to them.

### APPLY (School Age)

Go home and check out some of the shoes in your closet. Based on what you've learned about shoes, were they good choices?



## Lesson 2: If The Shoe Fits

### PREPARATION

🕒 10 minutes




### SET UP

See Set Up Details.

### SUPPLIES

- ❑ Pencils
- ❑ Plain sheets of paper big enough for foot tracing

### HANDOUTS & BOOKS

- ❑ *Shoe Part Definitions*  p. 271
- ❑ *Can You Label The Parts Of A Shoe?*  p. 268
- ❑ *Buying Shoes: Construction, Fit/Comfort, And Price*  p. 269



### Outcomes (Middle School • Teen)



The purpose of this lesson is to have youth:

- Identify the parts of an athletic shoe
- Learn how to check the construction of a shoe
- Learn how to properly fit a shoe
- Compare shoe construction and cost to make an informed consumer choice

### Instructor Essential Information

#### SET UP DETAILS

Make one copy for each youth of each of the three handouts shown below. Become familiar with parts of the shoe.

- *Identifying The Parts Of A Shoe*
- *Can You Label The Parts of A Shoe?*
- *Buying Shoes: Construction, Fit/Comfort, and Price*

### Discussion

 (Middle School • Teen) 🕒 15 minutes

? Ask: Why do you buy athletic shoes? Examples: they are comfortable to wear, I play sports, I like the way they feel or look, or my friends are wearing this type of shoe.

? Ask: What made you decide to buy your most recent pair of athletic shoes?

3.? Ask: Would you buy the same brand or style again? Why or why not?

Describe the most important qualities youth should look for in an athletic shoe: construction, fit/comfort, and price. Let's look at each one of these components more carefully using the *Buying Shoes: Construction, Fit/Comfort, And Price* handout.

Describe what a shoe "last" is and how it creates the shape of the shoe. A shoe last is a shaped piece of wood or metal on which the shoe is built. The shape of the last determines the shape of the shoe. Shoes are made in three basic shapes: straight, curved, or semi-curved.

## Lesson 2: If The Shoe Fits



### Activity 1 – Name That Part

**DO** (Middle School • Teen) ⌚ 30 minutes

Give each youth a pencil and these two handouts: *Can You Label The Parts Of A Shoe?*, and *Shoe Part Definitions*. Have them first look at *Shoe Part Definitions* and then fill in the labels on *Can You Label The Parts Of A Shoe?* When they have finished, go over the handouts as a group so that everyone will have the correct answers.

### Activity 2 – A Lasting Fit

**DO** (Middle School • Teen) ⌚ 20 minutes

Give each youth a piece of paper to trace the outline of their foot. The paper may be 8½ X 11 inch or larger if needed. Have each person stand barefoot on the paper and trace the outline of their foot.

Next, have youth draw a straight line from the middle of the back of the heel up the foot to the toes. If this line runs through the first two toes, you have a straight foot. The further away from the big toe that the line runs through, the more curved the foot is. This will help the youth to determine the type of shoe to look for to get a better fitting shoe.

### Activity 3 – Savvy Shoe Shoppers

**DO** (Middle School • Teen) ⌚ 30 minutes

3. Divide the youth into groups and give each group one of the situations below to discuss.

**Situation 1:** Ray has a foot with a high, rigid arch and he wants to find a pair of athletic shoes that will provide the best support. While shopping, he finds a pair that is the latest style at a reasonable price. When he looks at the inside shape of the shoe, he sees that it was built on a straight last. These shoes feel okay except that the cushioning seems too high on his foot.



These shoes look great and are the same shoes his best friend just bought. Are these the best athletic shoes for his feet? Why or why not? Answer: no, these shoes are

## Lesson 2: If The Shoe Fits



designed for someone with a low arch, not a high arch like his. Even though they are a popular style, they are not for every type of foot. Ray should look for a pair of shoes made from a curved last.

**Situation 2:** Trevor needs a pair of athletic shoes to wear to school. He has found three pairs that he likes. Trevor has a budget of \$50 for his shoes. When he tried them on, this is what he found:

- Shoe A: The shoe originally costs \$70. Since it is now on sale for \$35, Trevor believes that this a great shoe for a great price. This shoe fit snugly and his toes were rubbing on the side and top of the shoe.
- Shoe B: This shoe costs \$75. Trevor was able to wiggle his toes up, down and side to side a little and his heel fit snugly and did not slip. He did notice a small rough spot on the inside of the shoe, but it was not rubbing anywhere on his foot. This is the same shoe he had seen advertised by his favorite basketball player.
- Shoe C: This shoe costs \$40. When he tried it on, Trevor immediately noticed it felt comfortable. There was wiggle room for his toes and when laced up, his foot felt snug but not tight in the shoe. He did not notice any flaws in the construction features.

? Ask: Which shoe should Trevor purchase and why? What are the reasons for not selecting the other shoes? Answer: shoe C would be the best choice because it is within his budget and fits well. Shoe A is the right price but not the right fit.

Bargain prices are not necessarily the best buy. A shoe that does not fit is a poor value at any price. Shoe B is out of Trevor's price range. Although it seemed like a good fit in the store, the rough spot may rub later.

**Situation 3:** Amy desperately needed a new pair of athletic shoes. She did not have a lot of time to spend shopping, so she went into a shoe store and picked out a pair of shoes that were the same size as the ones she bought last time. These shoes are a different brand and different style from the ones she had before. What should Amy have done before purchasing a new pair of athletic shoes? Answer: Amy should have tried on the shoes before she bought them. This is especially true because they are a different brand and style than she has purchased before and may not be sized the same way. Additionally, Amy's foot may have grown since she last purchased shoes.



## Lesson 2: If The Shoe Fits

### REFLECT (Middle School • Teen)

After the youth have finished with the situations, have them return to the group and share the reasons for their choices.

### APPLY (Middle School • Teen)

Ask youth to share the proper fitting techniques with their families and ask them to report back after they purchase their next pair of shoes.

## Technology Challenge

(Middle School • Teen)

Visit several shoe manufacturers or other foot-related websites to learn more about how a shoe is constructed. Try <http://www.runnersworld.com> or <http://www.adidas.com> to see if any of the things you have learned about buying athletic shoes are included in these websites.

## Lesson 3: Which Sport, Which Shoe?

### PREPARATION

🕒 5 minutes

### SET UP

Copy the *Athletic Shoe Situations* handout for each youth.

### SUPPLIES

- ❑ Markers
- ❑ Poster board or easel

### HANDOUTS & BOOKS

*Athletic Shoe Situations*  p. 272

### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Explore differences in shoes designed for different sports
- Learn to weigh factors such as cost, quality, and need when purchasing athletic shoes
- Compare athletic shoes to make an informed buying decision

### Discussion

DO (All Ages) 🕒 15 minutes

This is a brainstorming lesson to get the youth to think about athletic shoes and how they are constructed and marketed. Ask the youth the following questions and record their answers on a poster or easel.

? Ask: How many different types (not name brands) of athletic shoes can you name? Examples: running, tennis, cross-training, basketball, soccer, etc.

? Ask: How do you determine what type of shoe is best for a particular sport or for all-around wear? Suppose you are looking for a shoe that was designed for a specific sport such as \_\_\_\_\_ (name a sport). What features would you look for in that shoe?

? Ask: Do you really need a sport-specific athletic shoe? Answer: yes, if you are playing a sport at least three times a week. If you play that often you should consider getting shoes that are designed specifically for that sport. Each sport puts stress on a different part of the foot and the shoe for that sport takes this into account in the design. Here are some examples of sport-specific athletic shoes:



- **Aerobic** – These shoes will be lightweight with extra shock absorbency in the sole beneath the ball of the foot where the most stress occurs.
- **Basketball** – These shoes need to handle the quick stops and starts along with twists and turns. The feet move in all directions so look for a shoe with a thick, stiff sole and a rigid heel counter. To better protect the ankle, wear high top shoes. The feet will get a workout with the jumping

## Lesson 3: Which Sport, Which Shoe?



typically done in this sport. Look for shoes that have adequate inner sole cushioning and a herringbone tread pattern on the outsole of the shoe.

- **Cross Trainers** – These shoes are designed for a variety of sports, combining several features found in sport specific shoes. These shoes will be more flexible than a basketball shoe and will have more side-to-side stability than a running shoe.
- **Running Shoe** – Feet are constantly pounded during a run. Look for a shoe that will provide good shock absorption for the foot. Wear shoes that provide flexibility in the toe area and overall cushioning. The sole has front end curves to protect the toes, elevated heels, padded insoles, and an arch support.
- **Tennis Shoe** – Those playing tennis need to move quickly side to side as well as forward and back. A padded toe box is important to consider along with padded ankle, innersole, and tongue.
- **Walking Shoe** – Since walking creates a rolling motion, walking shoes are more rigid in the front than running shoes. Look for shock absorption in the heel and under the ball of the foot. A slightly rounded sole helps shift weight from the heel to the toes.

### Technology Challenge

(All Ages)

Each youth should have a copy of the *Athletic Shoe Situations* handout. There are two shoe situations, one for School Age youth, and one for older youth. Each scenario will help youth evaluate athletic shoes and determine which would be best for each of these situations. Youth may work in a group or individually.

After they read the situation, have them go online to sites that sell shoes and find four different shoes to consider purchasing based on the information given. After they have found the shoe possibilities, have them select the one that would be best. Rank all of the possibilities in order of preference. Ask them to give reasons why they chose the ones they did.

#### REFLECT (All Ages)

When the youth are finished finding shoes for their situation, have them report to the group which shoes they considered and why they chose the ones they did.

### Lesson 3: Which Sport, Which Shoe?

**APPLY** (All Ages)


Have the youth look at the shoes they are currently wearing or ones they have at home and see if they can determine what type of athletic shoes they own. Are they using them for the purpose for which they were designed?





## Lesson 4: Label Lingo


### PREPARATION

 10 minutes




### SET UP

See Set Up Details.

### SUPPLIES

- ☐ Pencils
- ☐ Computer paper
- ☐ Magazine ads such as "Got Milk"
- ☐ MyPyramid poster 

### HANDOUTS & BOOKS

- ☐ *Working on the Macaroni and Cheese Label*  p. 273
- ☐ *Label Scavenger Quest*  p. 274
- ☐ *How to Understand and Use the Nutrition Facts Label*
- ☐ *What's On The Label?*
- ☐ *What's The Score?*
- ☐ *What's The Score? Answer Key*
- ☐ *Get Your Calcium-Rich Foods*
- ☐ *Trans Fat Worksheet*  p. 275

### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Learn the components of a food label
- Use the label as a tool to make healthful food choices
- Compare nutrition information on the label to make product choices

### Instructor Essential Information

The use of the nutrition label on food products aids in the selection of wholesome foods. Labels allow you to:

- Compare products more easily. There is uniformity of serving sizes among like products. Serving sizes are expressed in household measures.
- Under the title Nutrition Facts, nutrients are listed in a uniform way that relate to health concerns.
- Get a general idea of the food's nutrient contribution to the daily requirements, called the % Daily Value. This percentage is based on a 2,000 calorie a day diet.
- Compare nutrient content descriptive terms, which are carefully defined by law. Two examples are "low calorie" which mean 40 calories or less per serving, and "light" or "lite" which means 1/3 fewer calories, or no more than 1/2 the fat compared to the regular food.
- Review the ingredient list that appears on foods with two or more ingredients. By law, ingredients must be listed in descending order by quantity. This means that the first ingredient is the main ingredient.

### SET UP DETAILS

(School Age)

Make one copy of each of these three handouts for each child. These handouts can be downloaded at the web sites shown (pages 1-2 contains the macaroni and cheese label) or the ones in Appendix A can be copied.

<http://www.cfsan.fda.gov/~dms/foodlab.html#twoparts>

- *How to Understand and Use the Nutrition Facts Label*,
- *Working On The Macaroni and Cheese Label*
- *Label Scavenger Quest*

## Lesson 4: Label Lingo

### (Middle School)

Go to the website shown below and select MyPyramid for Kids, Level 3 Lessons. Download *Lesson 3: Get Your Calcium-Rich Foods*. <http://teamnutrition.usda.gov/Resources/mypyramidclassroom.html> Keep this copy for your review.

At the end of Lesson 3, there are three handouts. Make enough copies of these handouts so that each youth has a set. Do not pass out the Answer Key until youth have completed the activity.

- *What's On The Label?*
- *What's The Score?*
- *What's The Score? Answer Key*

### (Teen)

Make one copy of the *Trans Fat Worksheet* handout for each youth.

## Discussion

**DO** (School Age) ⌚ 10 minutes

There are three major areas on food labels. They are:



- **Nutrition Facts:** This panel contains dietary components that appear in a standardize format.
  - Calories
  - Total Fat
  - Cholesterol
  - Sodium
  - Total Carbohydrate / Dietary Fiber & Sugars
  - Protein
- **Ingredient List:** By law, ingredients are listed in descending order. The first ingredient is the main ingredient.
- **Descriptive Words:** While these are optional, they must be accurate. Descriptive words such as "low-calorie" and "light" have been defined by law.

## Activity 1 – The Macaroni and Cheese Label

**DO** (School Age) ⌚ 45 minutes

Go to the U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition website. Scroll down to "Nutrition Facts Label – An Overview."

## Lesson 4: Label Lingo

<http://www.cfsan.fda.gov/~dms/foodlab.html#twoparts>

Look at the sample label for macaroni and cheese on the website. Go through the steps in the *Working On The Macaroni and Cheese Label* handout to learn about the label. After completing the worksheet have the children scroll down to the bottom of the web page and take the online quiz.

### REFLECT (School Age)

Have the children report back to the group.

? Ask: What are the important parts of the label?

? Ask: What does the label tell you?

? Ask: How does the label help you make food choices?

### APPLY (School Age)

Pass out the *Label Scavenger Quest* handout and have the children search their homes for food labels.

## Activity 2 – What’s On the Label?

### DO (Middle School) ⌚ 20 minutes

This lesson focuses on calcium-rich foods and uses the information given on a nutrition label. Use the *Get Your Calcium-Rich Foods* lesson that you downloaded before class on the MyPyramid site <http://www.mypyramid.gov> (see Set Up Details). There are also handouts, scorecards, sample labels and taste testing activities on this website. Go to <http://www.mypyramid.gov> and select “For Kids.” Scroll down to “Classroom Materials” and click on “Level 3, Lesson 3.”

### REFLECT (Middle School)

Review the *What’s the Score? Answer Key* with students.

### APPLY (Middle School)

Pass out the *Label Scavenger Quest* handout and have youth search their homes for food labels.

## Lesson 4: Label Lingo

### Activity 3 – This Fat, That Fat, Trans Fat

**DO** (Teen) ⌚ 35-45 minutes

Go online to the U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition page titled: "Trans Fat Now Listed with Saturated Fat and Cholesterol on the Nutrition Facts Label" at: <http://www.cfsan.fda.gov/~dms/transfat.html#same>.

Find the section titled: "How Can I Use the Label to Make Heart-Healthy Food Choices?" and take the nutrition "Pop Quiz" at the bottom of the page.

Next, use the information on this USDA website to complete the first part of the *Trans Fat Worksheet* handout, called "Defining Trans Fat." Read the "Practical Tips for Consumers" section and write down some tips on trans fat that you can take home and use for reference.

**REFLECT** (Teen)

? Ask: From what you have learned about trans fat, can you identify any types of foods you eat frequently that have a lot of trans fat? What can you do to reduce your consumption of trans fat?



**APPLY** (Teen)

Take the *Trans Fat Worksheet* handout home and complete the second part, "The Hunt for Trans Fat." Check your kitchen. Make a list of any products you can find that have trans fat. Look at your margarine labels. Do they list trans fat?

### Technology Challenge

(All Ages)

Have each youth bring one of their favorite snack foods labels to the computer lab. Have them find out how healthy their snack is according to California Nutrition Standards using the Nutritional Calculator at <http://www.californiaprojectlean.org/calculator/>. Follow the instructions on this page and fill in the information from the snack package label.

## Lesson 4: Label Lingo

Test your "Food Label Knowledge" at:

<http://www.cfsan.fda.gov/~dms/flquiz1.html>

- (School Age) Click on Question 2
- (Middle School) Click on Questions 1, 3 & 4
- (Teen) Click on Questions 1 - 5

Find out more about the nutritional standards established by California's legislation, by clicking on the underlined words "nutrition standards" in the first paragraph.

(Teen)

To learn more about trans fat, go to this U.S. Food and Drug Administration site and find out about the U.S. government initiatives: <http://www.fda.gov/oc/initiatives/transfat/>

### Resources

- *Nutrition Facts Label – An Overview:*  
<http://www.cfsan.fda.gov/~dms/foodlab.html#twoparts>
- *How to Understand and Use the Nutrition Facts Label:*  
<http://www.cfsan.fda.gov/~dms/foodlab.html#twoparts>

## Lesson 5: Media Mania

### PREPARATION

🕒 10 minutes

### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Discover the impact of the media on food choices
- Identify techniques used in advertisements to encourage consumers to choose their products
- Learn to evaluate ads for credible nutrition information
- Use advertising techniques to develop a tool to market healthy food choices
- Evaluate products based on factual information versus advertising claims

### Discussion

**DO** (All Ages) 🕒 15 minutes

Ads can exert a powerful influence on our spending and eating habits. A report of the American Psychological Association's Task Force On Advertising And Children<sup>6</sup> provides these estimates:

- The average child sees more than 40,000 television commercials a year.
- Advertisers spend more than \$12 billion per year to target the youth market because of its strong contribution to the consumer economy.
- Children age 14 years old and under make \$24 billion in direct purchases and influence \$190 billion in family purchases, underscoring the high stakes involved.

? Ask: What is a jingle? Answer: a jingle is a slogan or piece of music in advertising that helps you remember the product or service.

? Ask: What is your favorite food ad? Did a jingle or company character help you remember the product or cause you to buy it? Examples: Cheerios, the Jolly Green Giant, Captain Crunch. Describe the connections and choices we make because of the power of ads.



-----  
<sup>6</sup> Report Of The American Psychological Association's Task Force On Advertising And Children: *Psychological Issues in the Increasing Commercialization of Childhood*, February 20, 2004, the American Psychological Association. See <http://www.apa.org/monitor/jun04/protecting.html>.

## Lesson 5: Media Mania

### SUPPLIES

Assortment of magazines with food ads.



Show youth some examples of popular advertising campaigns in magazines such as “Got Milk?”

? Ask: What is advertising? Why do you think companies advertise their products? Think of how many different kinds of ads bombard you daily from TV, billboards, magazines, radio, etc.

Make no mistake - advertising is Big Business! The cost of a “Premium” ad in the Washington Post is nearly \$200 a column-inch.

? Ask: Who can guess how much it cost per second to advertise during the Super Bowl? Answer: in the 2006 Super Bowl, a 30-second ad cost \$2.6 million.

### Activity 1 – Take A Look At Food Ads

**DO** (School Age) ⌚ 15 minutes

Divide the children into small groups. Provide them with an assortment of magazines and have each group cut out a food ad, or the instructor can pre-select a number of food ads and let the group pick one out. Discuss the following questions with the entire group.

? Ask: What is the name and type of product in your ad?

? Ask: Why did you select this ad?

? Ask: What makes this ad appeal to you?

? Ask: Does the ad describe anything about nutrition or good health?

**REFLECT** (School Age)

Help the children come to the conclusion that ads sell products. It is the responsibility of each consumer to make wise food choices. Refer back to lesson 4, Label Lingo to review how to make wise food choices by reading food labels.

**APPLY** (School Age)

Ask the children to challenge their families by discussing what food ads they like the best and why. Do these ads affect their families’ food choices? Why or why not?

## Lesson 5: Media Mania

### PREPARATION

🕒 10 minutes

### SET UP

Make copies of the *Advertising Sells!* handout.

### SUPPLIES

- ☐ Flipchart or blackboard
- ☐ Markers or chalk
- ☐ Pencils

### HANDOUTS & BOOKS

*Advertising Sells!*   
p. 276

## Technology Challenge

(School Age)

Have the children go to the PBSKids website:

<http://pbskids.org/dontbuyit/advertisingtricks/foodadtricks.html>

and select "Advertising Tricks" at the top of the page then choose between "Design a Cereal Box" or "Create Your Own Ad."

### Activity 2 – Advertising Sells!

**DO** (Middle School) 🕒 20 minutes



Divide youth into small groups and have them think about their favorite food advertisements. These can be ads from TV, radio, magazine, the Internet, etc. Give each youth a copy of the *Advertising Sells!* handout to complete. Use a flipchart or the blackboard to list the student's favorite food ads. Make a note of the selling techniques involved and which ads were for healthful foods.

? Ask: What is a jingle? Answer: A slogan or piece of music used in advertising that is very memorable. Jingles are used to help you remember the product or service.

? Ask: Can you give me an example of a jingle? Did any of the ads selected use jingles?

**REFLECT** (Middle School)

Thinking about the ads you discussed in this lesson, describe how advertising affects your food choices.

**APPLY** (Middle School)

Over the dinner table tonight, share some of the jingles discussed today and see which ones your families recognize.

## Technology Challenge

(Middle School)

Go to this PBSKids website and see if you can spot a great idea:

<http://pbskids.org/dontbuyit/advertisingtricks/foodadtricks.html>

Click on "Buying Smart," then select "Hot or Snot" and do the activity. Starting from the home page, analyze an ad by selecting "Advertising Tricks" and then "What's in an Ad?" Follow the directions on the page and click on "Pepsi."



## Lesson 5: Media Mania

### PREPARATION

🕒 10 minutes

### SUPPLIES

- ❑ Flipchart or blackboard
- ❑ Markers or chalk
- ❑ Pencils
- ❑ Paper

### HANDOUTS & BOOKS

*Advertising Sells*   
p. 276

### Activity 3 – Create An AD

**DO** (Teen) 🕒 30 minutes

Divide youth into small groups and have each group develop a food ad that promotes a healthy food. Encourage youth to be as creative as possible. Have each group present their ad to the group. Here are some key components to consider:

- Decide which type of media you will use: television, radio, newspaper, or magazine.
- Describe your audience.
- What will you use to appeal to your audience?
- How will you convey that this is a healthy food choice?



**REFLECT** (Teen)

? Ask: Do you think that creating your own food ad might make you think twice before responding to an ad in the future?

**APPLY** (Teen)

Post your ads around the Center or in other buildings around the installation, if possible.

### Technology Challenge

(Teen)

This PBSKids website tells you what to ask yourself when you see an advertisement. Select “Buying Smart” and “Question the Commercial.”

<http://pbskids.org/dontbuyit/advertisingtricks/foodadtricks.html>

On the website above, analyze an ad by selecting “Advertising Tricks” and then “What’s in an Ad?” Follow the directions on the page and click on “Pepsi.”

## Lesson 6: Eating Out

### PREPARATION

🕒 45 minutes

### SET UP

See Set Up Details.

### SUPPLIES

- ❑ Easel
- ❑ Paper
- ❑ Markers
- ❑ Empty cartons from fast food meals

### HANDOUTS & BOOKS

- ❑ *Tips For Choosing Healthy Food When Eating Out* [A](#)  
p. 277
- ❑ *Portion Distortion* [RK](#)



### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Understand that it is healthier to eat less fast food
- Calculate how much fat and calories are in a fast food meal
- Understand how to make more healthful food choices at fast food and other restaurants
- Learn at least three ways to reduce fat in fast food meals
- Prepare and sample a quick, convenient and healthy recipe to use at home in place of fast foods

### Instructor Essential Information

Americans eat almost half of their meals away from home. Something that was once a special treat, an occasional indulgence, is becoming a way of life in our busy society. The challenge is to keep calories under control when eating out. Americans consume approximately three hamburgers and four orders of French fries every week. Busy and cash-strapped families increasingly rely on take-out food for family dinners.

As people eat out more frequently in fast food restaurants or all-you-can-eat buffets, they become accustomed to super-sized portions and think that such portions are normal. The high caloric content of these large servings leads to weight gain for regular fast food customers. The resulting obesity can lead to many dangerous health problems.

### SET UP DETAILS

Before the lesson begins:

- Arrange room with seats in a semi-circle.
- Write the data from the Burger King food items table on page 163 in the lesson below on the board or a flip chart or poster. You can use any fast food restaurant data for this lesson if you can obtain the calorie and fat information. This type of information is usually found in a nutrition analysis chart at the restaurant.
- Make 2 copies of the *Fast Food - Line 'Em Up* handout. Use one as an answer key. The other one should be cut apart, line-by-line, discarding the calorie column.
- Make copies of the *Toaster Oven Pizza* and *Ten Tips For Choosing Healthy Food When Eating Out* handouts.

## Lesson 6: Eating Out

### Discussion

**DO** (All Ages) ⌚ 30 minutes

? Ask: Did anyone eat at a fast-food restaurant this past week? Raise your hand if you ate out once this past week. Raise both hands if you ate out twice this past week. Stand up if you ate out three or more times this past week. Have youth look around to see how many people have their hands raised or are standing up.

? Ask: How many of you like to eat at Burger King? What is your favorite meal at Burger King? After the youth share their favorite foods from Burger King, ask the group if they have ever wondered about the calories or fat in fast food.

? Ask: Has anyone here ever eaten a Whopper with cheese, large fries, and a milkshake? To make a statement about the amount of fat and calories being consumed, show them a bag of these items from Burger King (use empty containers). Using the flip chart or the blackboard, show the amount of fat and calories that this large portion fast food meal has.



Burger King Food Item	Fat Grams	# of Calories
<b>Large Meal</b>		
Whopper	40	660
King Fries	30	600
Vanilla Shake	30	590
<b>Total</b>	<b>100</b>	<b>1850</b>
<b>Smaller Meal</b>		
Hamburger	15	320
Small Fries	13	250
Low-fat milk	2.5	100
<b>Total</b>	<b>30.5</b>	<b>670</b>

Remind youth that the recommended total calories intake per day for most individuals is between 1600 and 2200. Explain that 65 grams of fat is the total Daily Value for fat using a 2000 calorie a day diet, as shown on food labels. Thus, 65 grams of fat is 100% of the total daily requirement.

## Lesson 6: Eating Out



Explain that youth will be learning how to consume fewer calories at fast food restaurants by making better choices.

Have them review the *Portion Distortion* handout and point out that the larger the food item, the more calories it has. To reduce their caloric intake, youth need to choose smaller sized portions from fast food restaurants. Show them another bag of smaller-sized items from Burger King, such as a regular hamburger, small fries, and a container of low-fat milk. Write on the flip chart or board, the facts in the table below with the calories for that smaller-sized fast food meal from Burger King.

? Ask: How does the total amount of fat and calories for the smaller meal compare to the larger fast-food meal?

? Ask: How does the total fat compare to the recommended amount of less than 65 grams per day?

? Ask: How do the total calories of the large meal compare to 1600-2200 total calories recommended per day? How about the smaller-sized meal?

### PREPARATION

⌚ 15 minutes

### SET UP

Cut the *Fast Food – Line ‘Em Up* handout into strips minus the calorie counts (see Set Up Details).

### SUPPLIES

- ☐ Index cards
- ☐ Scissors

### HANDOUTS & BOOKS

*Fast Food – Line ‘Em Up* p. 278

## Activity 1 – Fast Food - Line ‘Em Up

DO (All Ages) ⌚ 20 minutes

Using the cut up strips from the *Fast Food – Line ‘Em Up* handout, give each child the name of a fast food item. Have all youth line up from one side of the room to the other, arranging themselves from the highest calorie food at one end of the line to the lowest calorie food at the other. Have them discuss with one another where they should be in the line based on their food item.

Next, reveal the actual calorie count for each food and have youth rearrange the line according to the real calorie counts.

? Ask: Were you surprised about any of the calorie counts for the fast food items? Which ones? Did you think they were higher or lower?

## Lesson 6: Eating Out


### SET UP

See Set Up Details.

### SUPPLIES

See recipe for ingredients and utensils list.

### HANDOUTS & BOOKS

Recipe: *Toaster Oven Pizzas*  p. 279

### PREPARATION


#### SET UP

Obtain copies of menus from local restaurants.

#### SUPPLIES

- ☐ Copies of menus from local restaurants
- ☐ Red and green highlighters

### HANDOUTS & BOOKS

*Clarifying Menu Muddle*  p. 280

### HANDOUTS & BOOKS

- ☐ *Eating Out And Eating In – Go Lean With Protein*
- ☐ *Where's The Fat?*

## Now We're Cookin' – Toaster Oven Pizza

(All Ages) ⌚ 45 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Give each child a copy of the *Toaster Oven Pizza* recipe and follow the directions to make a personal pan pizza.



## Activity 2 – Clarifying Menu Muddle

 (All Ages) ⌚ 20 minutes

Give youth the handout *Clarifying Menu Muddle* and discuss the terms to look for on the menu, and the terms to use when ordering food to help reduce the fat and calories in restaurant choices.

Distribute menus from local restaurants. Have youth highlight the terms to watch out for in red and the items that are good choices in green.



## Technology Challenge

(School Age)

Go to <http://www.mypyramid.gov> click on "For Kids" and go to "Classroom Materials." Scroll down to Level 3 Lesson 2, *Eating Out And Eating In – Go Lean With Protein*. Complete the *Where's The Fat?* worksheet on page 3. **Instructor Note:** You will find the answers to the *Where's The Fat?* worksheet below.

How many grams of total fat are in a quarter-pound hamburger?  
grams 18

How many grams of total fat are in a regular hamburger? 9 grams

## Lesson 6: Eating Out



Circle the food with less fat. (The correct answer is underlined.)

- Taco salad OR beef soft taco
- Bean burrito with no cheese OR fried fish filet sandwich
- Crispy fried chicken OR hamburger

List three ways you can make low fat choices when you are eating out.

- Choose grilled, not fried food.
- Choose the smaller-sized portion such as a hamburger versus the quarter-pound hamburger.
- Look at nutrition information provided by the restaurant before making your selection.

### APPLY (Middle School)

Use information from the American Heart Association website to make healthier choices of where and what to eat. See the Technology Challenge below.

## Technology Challenge

(Middle School • Teen)

Go to the American Heart Association website:

<http://www.americanheart.org>. From the "Healthy Lifestyle" menu item on the left, select "Diet and Nutrition." Under "Related Items," click on "Tips for Eating Out." On the left of this web page is a list of types of cuisines (Cajun, Chinese, French, etc.). Click on your favorite type of cuisine and review the healthier choices within that cuisine. At the bottom of the restaurant list is a "Checklist for Eating Out." Check it out!

Look again at the menus from local restaurants in Activity 2. According to the American Heart Association website, which restaurants offer healthy choices?

## Discussion

DO (Teen) ⌚ 20 minutes

Introduce teens to the statistics regarding eating out, particularly at fast food restaurants. (See Instructor Essential Information.) Discuss how advertisements encourage you to make food choices.

## Lesson 6: Eating Out

? Ask: Which ads grab your attention? Why? Discuss what might work in getting a healthy message across to teens.

? Ask: What motivates you to select fast food?

? Ask: What health concerns do you have at your age that advertisers try to appeal to?

? Ask: What are acceptable alternatives to high fat and high calorie fast foods that you like?

### PREPARATION

⌚ 5 minutes

### SUPPLIES

- ❑ Flip chart
- ❑ Paper
- ❑ Pencils
- ❑ Props for staging youth commercials

### Activity 1 – Lights, Camera, Action!

**DO** (Teen) ⌚ 60 minutes

Divide youth into working groups of 3-5 teens. Have teens develop a television commercial promoting a healthy fast food restaurant. The restaurant may be entirely made up or may be an existing restaurant or chain. Challenge each group to be creative, informative, and explicit in the types of foods they would offer at this establishment. Have each group present their commercial. You might offer TV Cleo Awards!



**APPLY** (Teen)

Collect fast food Nutritive Value Charts when you visit a fast food restaurant and bring them to the Center for discussion.

### Technology Challenge

(Teen)

Here are several sites teens can use to select and evaluate fast food meals: <http://fatcalorie.com> and <http://healthchecksyste.ms.com/ffood.htm>.

## Lesson 7: New And Unusual Foods

### Why Not Give It a Try?

#### PREPARATION

⌚ 20 minutes

#### SET UP

- ❑ Check out the website listed in Set Up Details
- ❑ Contact the grocery store manager and arrange for a grocery store tour

#### Outcomes (All Ages)

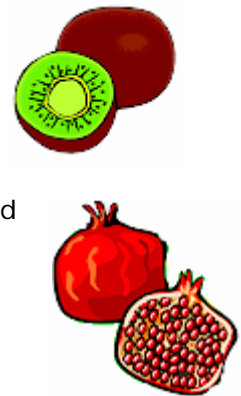
The purpose of this lesson is to have youth:

- Discover new and unusual foods via a grocery store tour
- Encourage youth to taste some unfamiliar fruits, vegetables and grains



#### Instructor Essential Information

Research shows that only a very limited number of youth are eating the recommended amounts of fruits, vegetables and whole grains each day. In today's grocery store, there are new and unusual varieties found on the shelves. Encourage youth to explore the variety of foods available. Many grocery stores offer tours that include learning about, and sampling, a variety of foods. Contact your local supermarket manager to schedule a tour for your Center. Ideally, the grocery store tour should be done in advance of the activities and discussion in this lesson.



#### SET UP DETAILS

For the New Foods Taste Test activity, gather a variety of fruits that the youth may not be familiar with such as: mango, yellow, orange or red peppers, kiwi, pineapple, star fruit (carambola), snap peas, pomegranate, fresh fennel, asparagus, sweet potatoes, whole grain granola, whole grain cereals, white whole wheat bread, whole wheat pitas, whole wheat tortillas, and whole wheat English muffins. Soy products are another category of foods that may be introduced to any age. Teens, in particular, may enjoy the flavors of various soy products. Set up tasting stations. Have the fruits, vegetables and whole grains cut into tasting portions.

In advance of the class, visit the <http://www.kidnetic.com> website and verify that the recipes shown below are still on the website. The specific instructions for finding the recipes are in the Now We're Cookin' activity. Print a copy of the recipes so you can gather all the ingredients and supplies in advance.

- **School Age** - *Insect Infested Log*
- **Middle School** - *Savory School Paste*
- **Teen** - *Garbage Pasta Salad OR Crazy Mix Veggie Burgers*



## Lesson 7: New And Unusual Foods

### Discussion

**DO** (All Ages) ⌚ 15 minutes

The best way to give your body the balanced nutrition it needs is by eating a variety of nutrient-packed foods every day. We all have our favorite fruits, vegetables, and grains, and we may avoid those we don't like as much. There are new and unusual varieties filling the grocery store shelves, and we don't have to limit ourselves to routine choices.

? Ask: Who likes to try new foods? What was the last new food you tried? Did you like it or not? What was the best new food you ever tried? What was the worst?

### Activity 1 – New Foods Taste Test

**DO** (All Ages) ⌚ 30 minutes

Conduct a taste testing session using the new and unusual foods that you bought at the supermarket. Divide the youth into groups and have them circulate through the food tasting stations. Have the youth complete the *New Foods Taste Test* handout as they circulate through the food stations.

#### PREPARATION

⌚ 2 hours to gather a variety of different foods.

#### SET UP


See Set Up Details.

#### SUPPLIES

- ☐ Cutting boards
- ☐ Knives
- ☐ Colanders
- ☐ Bowls
- ☐ Plates
- ☐ Forks
- ☐ Napkins
- ☐ Pencils
- ☐ Food for the taste tests (See Set Up Details.)

#### HANDOUTS & BOOKS

*New Foods Taste Test*

 p. 281



## Lesson 7: New And Unusual Foods

### SUPPLIES

See recipes for ingredients and utensils list.

### HANDOUTS & BOOKS

- ❑ Recipe: *Insect Infested Logs*
- ❑ Recipe: *Savory School Paste*
- ❑ Recipe: *Garbage Pasta Salad*
- ❑ Recipe: *Crazy Mix Veggie Burgers*



### Now We're Cookin' – Recipe Round Up

(All Ages) ⌚ 45 minutes

Have youth wash their hands using the *Proper Handwashing* steps on page 29. Have youth go to <http://www.kidnetic.com> and print out the recipe for their age group.



- (School Age) Click on the "Go" button under "Recipe Round-Up." Select "Gross out Delights," then "*Insect Infested Logs*." The recipe, supplies and equipment needs are listed on the web site.
- (Middle School) Click on the "Go" button under "Recipe Round-Up." Select "Gross out Delights," then "*Savory School Paste*." Make sure you include some unusual vegetables. The recipes, supplies and equipment needs are listed on the web site.
- (Teen) Click on the "Go" button under "Recipe Round-Up." Select "Family Friendly," then "*Garbage Pasta Salad*." The recipes, supplies and equipment needs are listed on the web site. Or, under "Dinner Winners" you might pick "*Crazy Mix Veggie Burgers*" (may also be used as a vegetarian recipe.)

### REFLECT (All Ages)

Review the scores the youth gave to the unusual fruits, vegetables and grains on the taste test. Have youth decide which new foods they might incorporate in their diets.

### APPLY (All Ages)

? Ask: How could you include some of these "new" foods into family meals? Are there any foods that you regularly eat that others may consider "new" or "unusual?"

### Technology Challenge

(All Ages)

Go to <http://www.kidnetic.com>. Select "Bright Papers," then "Totally Weird Ways to (Fruit and) Vegetable Out." Have students select one of the activities, download it, and try it at home.

## Lesson 8: It's All About Size

### Portion Distortion




#### PREPARATION

🕒 60 minutes

#### SET UP

Set up the two measuring stations.

#### SUPPLIES

- ☐ Bread
- ☐ Ice cream
- ☐ Potato chips
- ☐ Mega muffin
- ☐ Monster cookie
- ☐ Large bagel
- ☐ 20-oz. soda bottle
- ☐ Microwave popcorn
- ☐ Sets of measuring cups
- ☐ Paper plates
- ☐ *MyPyramid* poster  (reverse side has serving information)
- ☐ *Handy Portions* poster 
- ☐ Portion Distortion handout 

#### Station 1

- ☐ Small bowl
- ☐ Large plate
- ☐ 6-ounce glass
- ☐ Cold cereal
- ☐ Cooked pasta
- ☐ Juice

#### Station 2

- ☐ Large bowl
- ☐ Small plate
- ☐ 12-oz. or larger

#### Outcomes (All Ages)

The purpose of this lesson is to have youth:

- Define “normal” versus “distorted” portion sizes
- Recognize how super-sized portions can contribute to overeating and weight management issues
- Recognize and choose foods of appropriate portion sizes



#### Instructor Essential Information

The rising incidence of obesity is well documented in the United States today. We know that over consumption of food and lack of physical activity are major contributing factors. Some common examples of where increased portions lead to excess calorie intake are illustrated in:

- The larger portion sizes now available in vending machines
- Fast food super-sized portions, all-you-can-eat buffets
- Popcorn at movie theaters

Outrageously big portion sizes can be found everywhere, and the most commonly “super-sized” foods are those high calorie foods that provide little nutritive value.

This lesson will focus on the difference between a portion and a serving. Think of a portion as the amount of a specific food you choose to eat at a meal or for a snack, whereas a serving is the unit of measure used to describe the amount of food

recommended from each food group. Refer to the resources for this lesson to see the recommended servings for each food group.



#### Discussion

 (School Age) 🕒 20 minutes


? Ask: What is the difference between a portion and a serving?

Answer: A “portion” is the amount of a specific food you choose to eat at a meal or for a snack. A “serving” is the unit of measure used to describe the amount of food recommended from each food group. Refer to the resources for this lesson to see the

## Lesson 8: It's All About Size

- glass
- ☐ Cold cereal
- ☐ Cooked pasta
- ☐ Juice

### HANDOUTS & BOOKS

- ☐ *Portion Control: Sizing It Up!*  p. 282

recommended servings for each food group. Use the *Portion Distortion* handout to illustrate recommended serving sizes.

Discuss with children the *Handy Portions* poster and the *Portion Control: Sizing It Up* handout.

? Ask: Do you see a difference between the recommended serving sizes and what you eat at home or when dining out? Are the recommendations larger or smaller than our normal portions?

### Activity 1 – You Do The Measuring

 (All Ages) ⌚ 30 minutes

Divide youth into two groups. Have Group 1 begin at Station 1, and Group 2 at Station 2. Have them fill the containers and measure the amounts they used for a portion of each of the three foods (cold cereal, pasta and juice). Discuss what constitutes a serving of cereal, pasta and juice according to the MyPyramid recommendations.

### PREPARATION

⌚ 20 minutes


### SET UP

Set up the food measuring stations with foods youth like such as ice cream, popcorn, chips, and cereal. Choose foods with serving size indicated on the label.

### SUPPLIES

Select youth's favorite foods.

### HANDOUTS & BOOKS

- A Measured Serving*  p. 283

### Activity 2 – Looks Like A Serving To Me!

 (Middle School • Teen) ⌚ 20 minutes

Provide numerous food items for the youth to measure. Give each youth a copy of the *A Measured Serving* handout. Tell them to move from station to station and take an amount that represents their “normal” portion of that food. Have them measure the amount they took. Then, have youth read the label on the food container and write down the amount in one serving according to the label. Answer the questions on the handout.



## Lesson 8: It's All About Size

### HANDOUTS & BOOKS

*A Serving Size Card*

### PREPARATION

⌚ 30 minutes

### SET UP

Have food items ready for students when they come to the lab.

### SUPPLIES

- ❑ Computer paper
- ❑ Pencils

### HANDOUTS & BOOKS

*Task Sheets for the Portion Scavenger Hunt (online)*

## Technology Challenge

(All Ages)

Go to the National Heart, Lung, and Blood Institute (NHLBI) website at: [http://hin.nhlbi.nih.gov/oei\\_ss/menu.htm#sl2](http://hin.nhlbi.nih.gov/oei_ss/menu.htm#sl2) and click on "Portion Distortion II" Slide Show," then "View Online." Begin the slide show and take the "Portion Distortion II Interactive Quiz."

Go to this Department of Health and Human Services, National Institutes of Health, website <http://hin.nhlbi.nih.gov/portion/keep.htm>. Click on "Download a Serving Size Card." Print this card, review it, and keep it handy!

## Activity 3 – Portion Scavenger Hunt

DO (Teen) ⌚ 60 minutes

Youth will undertake a Portion Scavenger Hunt. This takes place in several locations and will require a field trip to the computer lab, a fast food restaurant, a convenience store or the commissary.

Go to the Wellness In The Rockies web site: <http://uwadmnweb.uwyo.edu/WinTheRockies/default.html> Click on "Educational Materials," then scroll down and click on the "WIN Kids Fun Days" graphic. Scroll down to the "Portion Scavenger Hunt Folder." Have youth select partners and each team can select and download a different "Task Sheet" as appropriate. The sheets are in PDF format. The choices are:

- *Task Sheet for Candy Bar*
- *Task Sheet for Chips*
- *Task Sheet for Cookie*
- *Task Sheet for Fries*
- *Task Sheet for Muffin*
- *Task Sheet for Pop (Soda)*
- *Task Sheet for Popcorn*
- *Take Home Slip*



Youth will be directed to go to a fast food restaurant and a convenience store with a task sheet for candy bar, chips, cookie, fries, muffin, pop, or popcorn.

## Lesson 8: It's All About Size

### REFLECT (Teen)

Bring the group together to report on what they discovered about their food product.

### APPLY (Teen)

Ask teens to report one finding to a friend or family member.

### Resources

- Available as a handout (in bulk in tablet form, or as poster): *Handy Portions*, Learning Zone Xpress 1-888-455-7003 can be found at <http://www.learningzonexpress.com> ISBN 1-57175-131-9.
- Reproduce the slides from one of the two Portion Distortion Slide Show [http://hin.nhlbi.nih.gov/oei\\_ss/menu.htm#sl2](http://hin.nhlbi.nih.gov/oei_ss/menu.htm#sl2) that show the MyPyramid food group slides with portion recommendations for each food group. Author: Alice Henneman.





# Chapter 5 Activity for Life

## Introduction

Chapter 5 teaches youth how to develop the support of friends, family, and community for creating a healthier life. Youth will learn how to create a walking club, a wellness event, and participate in games that challenge them to be physically active. This chapter illustrates how easy it is to stay physically active using simple equipment such as jump ropes, Frisbees, or no equipment at all. Youth also practice team building and cooperation skills.

Youth are introduced to Native American dances along with more traditional multicultural dances enjoyed by their parents and grandparents. They learn that dancing can be a fun part of staying fit as well as allow the expression of emotions, and strengthen friendships. Chapter 5 is also a review of some basic nutrition and fitness concepts from earlier chapters. This culminates in having youth plan and carry out an actual wellness event for their community, Center, or base.

## Lesson Summary

- |  |         |
|--|---------|
| 1. Walk Your Way to Fitness                    | Fitness |
| 2. Let's Play Outside: Everyday Fun Activities | Fitness |
| 3. Jump Into Fitness                           | Fitness |
| 4. Dancing for All Seasons                     | Fitness |
| 5. Cooperative Play                            | Fitness |
| 6. Planning a Wellness Event                   | Fitness |



## Lesson 1: Walk Your Way To Fitness

### PREPARATION

🕒 5 minutes

### SET UP

Set up easel or use walls to hang self-stick paper.

### SUPPLIES

- ❑ 5 pedometers included in [RK](#)
- ❑ Easel and markers
- ❑ Pencils
- ❑ Pens

### HANDOUTS & BOOKS

- ❑ *Goal Setting Worksheet – School Age Youth* [A](#) p. 284
- ❑ *Goal Setting Worksheet – Middle School And Teen* [A](#) p. 285
- ❑ *Progressive Walking Marathon Log Sheet* [A](#) p. 286



### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Learn about the importance of social support for making healthy lifestyle changes
- Understand the health benefits of walking
- Learn how to develop a walking club
- Practice using a pedometer
- Participate in a walking activity

### Discussion

**DO** (All Ages) 🕒 10 minutes

? Ask: Has anyone ever had to learn a new and difficult skill such as riding a bike, solving a math problem, learning a sport, or learning how to cook?

? Ask: Has anyone ever tried to stop a behavior such as biting your nails, eating too many sweets, or leaving your clothes on the floor?

? Ask: Did you have help or were you able to change your behavior on your own?

Explain to the youth that people learn things in different ways. Some individuals learn more easily by themselves while others learn better if they have a buddy or someone to support them while they are practicing and learning the new skill. Friends or family can offer support when a task seems difficult. This is particularly true when you are trying to start a healthy habit, like starting a walking program or eating less junk food. A friend who also wants to make a positive change in their life can offer moral support when your own commitment might be faltering. A friend can encourage you to get out and play when you might be feeling a little lazy.

? Ask: Why is walking a good way to get exercise? Answers: it's easy, you can walk almost anywhere, it doesn't take any special equipment except a good pair of sneakers, you can do two things at once such as walk and shop, walk and visit with your friends, walk the dog.

Emphasize that walking helps people manage their weight and makes them feel and look better. Exercise in general, including walking, has been linked to reduced risk for heart disease, high blood pressure, diabetes, osteoporosis, and some forms of cancer.

## Lesson 1: Walk Your Way To Fitness

? Ask: If you were successful at learning the new skill or behavior why do you think that was so? Allow time for youth to discuss what other suggestions they have about how to be successful at making healthy lifestyle changes.

Explain that the best way for a behavior to become a daily habit is by setting small measurable goals. Sometimes when people want to add a new healthier behavior in their lives, such as daily activity, they make big, unrealistic goals, which can cause them to feel frustrated when they can't meet the goals. Tell youth that it is much easier to set a series of smaller goals, which can be easily met before moving on to tougher ones.

For example, sometimes people who want to lose weight give up their favorite foods altogether instead of eating smaller portions of these foods less frequently. They usually aren't able to stick to such a strict diet because they miss the foods they liked so much. They end up not feeling good about themselves and go back to eating as they were before. A better choice might be to eat more healthfully by increasing fruit and vegetable consumption, limiting soda, and taking smaller portions of sugary and fatty foods.

? Ask: Can you think of ways to increase how much you walk? Tell youth that there are many ways to increase daily steps. Have them use their imaginations to come up with their own list. Write their ideas on an easel. Examples: take a walk with your friend, walk the dog, use the stairs instead of the elevator, walk to school or the store, start a walking club, walk over to visit a friend or relative walk around the garden.

### Activity 1 – Walking With A Pedometer

**DO** (All Ages) ⌚ 20-45 minutes

Ask youth to form groups of two to four. Give each youth a pedometer. Tell them to push the "reset" button. Tell everyone that before beginning, their pedometer should read "0."

Show youth the correct technique to attach the pedometer to their waistband or belt close to the hip.



Tell the youth that they are going to walk with their pedometers for 15 minutes without stopping to see how many steps they take during that time. Have them walk around the room, outside, up and down the halls, wherever they can walk continuously for a 15-minute period. Emphasize that sometimes when you are very busy with school and other activities, you might only have time for a quick 10-15 walk, but that is fine. Combining several smaller walks

## Lesson 1: Walk Your Way To Fitness

with some other activities can add up to the recommended 60 minutes of daily moderate activity (or 10,000 steps) that all young people should have.

Reassemble the group after 15 minutes and have everyone remove their pedometers. Discuss how many steps their pedometers registered during the 15-minute period.

Tell the youth that depending upon their age and height, approximately 2,000 = 1 mile. If time permits, ask everyone to “zero” out their pedometers and walk around the area until their pedometers register 2,000 steps.

(Teen)

Explain to the youth that research shows that people who walk 10,000 steps per day can achieve the positive health benefits outlined earlier. Most Americans, including teenagers, do not walk 10,000 steps a day. In fact, they only walk about 2,000 steps. One way to track your steps is to use a pedometer to see how far you are walking.

**Instructor Note:** If pedometers are not available, approximate the distance by using the formula: 15 minutes of walking = 1 mile.

### Activity 2 – Goal Setting

**DO** (School Age) ⌚ 20-30 minutes

To illustrate the difference between setting realistic and unrealistic goals read the following story to the children:



**Scenario:**

Natasha Jones is 10 years old. Her mother and father think she is spending too much time watching television and not enough time actively playing. Her parents have decided that her daily screen time will be limited to one hour and that she must make an effort to get outside and “play” more. Natasha decided that she would like to play on a recreational soccer team that practices in her neighborhood. After watching the team practice, Natasha believes that she might be too “out of shape” to play the game. Natasha wants to be able to run as far and as long as the other children on the team. She has decided she is going to get in better shape by running two miles every day after school.

## Lesson 1: Walk Your Way To Fitness

? Ask: Do you think Natasha has set a realistic goal for increasing her activity level? Why or why not?

? Ask: What goal would you suggest for Natasha?

? Ask: What other recreational activities would you suggest for Natasha if she decides not to join the soccer team?

? Ask: Would Natasha be more likely to enjoy her new activities if her best friend joins her?

Pass out pencils and the *Goals Setting Worksheet – School Age Youth* handout. Ask for volunteers to share their answers. Discuss whether the goals are realistic. Why or why not?

### Activity 3 – Goal Setting

**DO** (Middle School • Teen) ⌚ 20-30 minutes

To illustrate the difference between setting realistic and unrealistic goals, read the following story to youth.



#### **Scenario:**

James Duncan is a 14-year-old high school freshman. He has tried out for the wrestling team but needs to lose 10 pounds to “make his weight.” The coach has suggested that he skip breakfast and lunch for a few days, and just eat a protein bar and salad for dinner. The coach has also recommended that James limit his fluid intake for the next several days. James has four days to lose the weight.

? Ask: Do you think James’ goal of losing 10 pounds in four days is realistic? Why or why not?

? Ask: Do you think James will make his weight? Why or why not?

? Ask: What are some factors that might affect James’ performance if he does wrestle for the high school wrestling team after several days of this diet?

? Ask: What would you recommend as an alternative strategy for James to make his weight? Possible answers: increase exercise, fruits, vegetables, and whole grains; eliminate sauces, choose

## Lesson 1: Walk Your Way To Fitness



grilled meats.

Pass out pencils and the handout: *Goals Setting Worksheet – Middle School and Teen*. Have youth to take a few minutes to answer the questions. Ask for volunteers to share their answers. Discuss whether the goals are realistic goals. Why or why not?

### Activity 4 – Walking Club

**DO** (All Ages) ⌚ 30 minutes

Discuss with youth the idea of setting up a 14-week walking club at the Center or in their neighborhood. If youth are interested, have them work as a group to develop two to three goals for the walking club. Write their goals on a large piece of paper and post them in a place where the youth will see them on a daily basis.

Here are some sample goals for the "Space Walkers" walking club:

- Space Walkers will meet at least twice a week for the first four weeks.
- Space Walkers will get sponsors for each mile walked to support a local charity.
- Space Walkers will sponsor a walk-a-thon to raise money for a celebration.

? Ask: Are the Space Walkers' goals realistic? Why or why not?

? Ask: Do the Space Walkers have goals in which everyone could experience success?

? Ask: Can you think of any obstacles the Space Walkers might need to overcome for the group to be a success?

**Instructor's Note:** One possible activity for the walking club might be to try and complete a walking marathon, which is 26.2 miles. The total miles can be completed over a 14-week period. For very young children, consider a parent-sponsored 5-mile walk-a-thon. Refer to the *Progressive Walking Marathon Log* handout for suggested weekly mileage amounts. Discuss how many times per week the youth will walk and if they might combine walking with other activities.

## Lesson 1: Walk Your Way To Fitness

### REFLECT (All Ages)

? Ask: Without telling us the name of the person, or where they live, do you know anyone who has ever successfully stopped a difficult behavior such as smoking or overeating? Were they successful on the first try? How did this person's family and/or friends help them or make it more difficult for them?



### APPLY (All Ages)

Ask youth to track their daily steps on a pedometer if they have one. If they don't have a pedometer, have them estimate their daily mileage based on the formula that one city block is approximately equal to 1/10 of a mile (10 blocks = 1 mile). Or use the formula: 15 minutes = 1 mile. Have youth think about a realistic goal for increasing their steps or mileage. Have youth list three to five routine tasks in which they could increase their steps by making small changes.

## Technology Challenge

(All Ages)

You don't have to walk to increase your steps! Visit <http://www.kidnetic.org> and click on "Move Mixer" and then again on "Move Mixer." The Move Mixer Dance Creation Tool lets you design your own dance with music and then dance along. Have fun combining several dance steps and impress your friends with your new dance "moves."

## Lesson 2: Let's Play Outside

### Everyday Fun Activities

#### PREPARATION

🕒 5 minutes

#### SET UP

- ❑ Set out an assortment of play equipment that might be available at home such as balls, jump ropes and hula-hoops
- ❑ Identify and label 10 Frisbee "golf holes"

#### SUPPLIES

- ❑ Play equipment (see Set Up)
- ❑ Two large hula-hoops
- ❑ 4-5 Frisbees
- ❑ Marker and paper to label Frisbee golf holes
- ❑ Paper
- ❑ Pencils

#### Outcomes (All Ages)

The purpose of this lesson is to have youth:

- Learn that playing actively is an important part of staying healthy
- Recognize that screen time should be limited to less than two hours each day
- Design a group play activity where all members of the group have active roles
- Participate in active, easy, games



#### Discussion

**DO** (All Ages) 🕒 10 minutes

? Ask: Does anyone have any good memories to share of a time when they were playing outside with friends and/or family? What makes it such a good memory? What activities were you doing? Examples: a family picnic in the park, a neighborhood game of kickball or softball, playing football or soccer with your family members, riding bikes through the neighborhood.

Actively playing with friends and family, such as a neighborhood game of basketball or riding bikes, can help to keep you healthy and strong. Many youth spend too much time indoors playing video games or watching television and don't get the recommended one hour of moderate physical activity every day.

? Ask: How do you spend your free time after-school and on the weekends? Do you play video or computer games? Is your free time spent with friends? Do you watch much television? Do you play outside?

More than two hours per day of screen time for children and teens can be associated with poor health. Remind youth that growing bodies of all ages need at least 60 minutes of moderate physical activity each day to remain healthy. One of the best ways to achieve this goal is to limit time spent in front of computers, video games, and television and go outside and play!





## Lesson 2: Let's Play Outside

### Activity 1 – The Use-Your-Imagination Game

**DO** (All Ages) ⌚ 30 minutes

Divide the youth into groups of four to six. Tell them that they are going to invent a game. Have each group pick at least three pieces of play equipment from the choices available. Instruct each group to spend five to seven minutes designing a game. Give the game a fun name. There are three rules:

- The games should last at least 10 minutes.
- The game should allow each member of the group to be an active participant.
- The three pieces of equipment must be incorporated into the game.

Allow each group a few minutes to practice their activity. After a few minutes of practice, have each group tell the name of their game and provide a demonstration.

#### SET UP

The best place for this activity is in a gymnasium or outside.



### Activity 2 – Frisbee Golf

**DO** (All Ages) ⌚ 30 minutes

Identify 10 "holes" that will make up your Frisbee golf course. A "hole" can be a piece of paper with a number on it, a chair, a tree, a spot on the wall. Label each hole 1-10. Decide the par (points given) for each hole. To simplify the game, you may wish all holes to be a standard 3 par. Or the par may change depending upon the difficulty of the throws.

Divide youth evenly into teams. Designate a scorekeeper on each team and give him/her a paper and pencil to keep score for each member of their team. The object of the game is to hit the holes with the Frisbee. The throw for the first hole is taken from a designated starting spot. Subsequent throws are taken from the previous hole. For example, a youth would stand at hole two to throw to hole three. The winner is the individual or team with the lowest score, which translates to the fewest overall throws used to hit their targets.

This game can be played as a competition between teams or between the youth on each team. If you have a large group, start half of the teams at hole 1 and the other half at hole 10 so that youth are not waiting too long for their turns.

Stress to the youth that the form they use to throw the Frisbee is not as important as hitting the target. Whatever method of throwing that will get the Frisbee to the target is acceptable. This



## Lesson 2: Let's Play Outside



way, those youth who are not skilled at Frisbee throwing will feel less intimidated. It also adds a silly factor to the game because some unskilled youth will be successful using unusual throwing methods to hit the holes.

### Activity 3 – Pass the Hula-Hoop

**DO** (All Ages) ⌚ 15 minutes

Have youth line up holding hands with the person next to them. This can be done (and is more fun) with two lines of youth lined up and facing each other. Start at one end and put the hula-hoop over the head of the first youth. Have that youth wiggle the hula-hoop any way possible to the next person, and so on down the line. The hula-hoop can be passed over their heads, under their legs, and across linked arms, but youth must keep their arms linked. Once the hula-hoop gets to the end, have them pass it back to the beginning.

**REFLECT** (All Ages)

? Ask: Would you say that your generation is generally healthier or healthier than your parents' generation? Why?

**APPLY** (All Ages)

Ask youth to keep a log of their screen time for one week (TV, computer, video games). Ask them to try and replace some of the time they spend doing screen activities with active play and/or sports. Have them report back on their successes.

### Technology Challenge

(All Ages)

Have youth create a list of all the fun activities, games, sports, and events that they can do at the Center - both inside and outside. They may use a search engine such as Google

<http://www.google.com> to find this type of activity. Make sure they include the instructions for the activity in their document. The "inside" list should include active games or activities that can be done inside the Center. The "outside" games should involve lots of movement across a large space and require minimal equipment.

**Hint:** Physical education sites include many fun activities for groups and individuals.

## Lesson 3: Jump Into Fitness

### PREPARATION

🕒 5 minutes



### SET UP

See Set Up Details.

### SUPPLIES

- ❑ Copy paper
- ❑ One jump rope for each child
- ❑ Longer jump ropes – 1 for every 3 youth
- ❑ Pencils
- ❑ CD player
- ❑ A variety of upbeat and relaxing music

### HANDOUTS & BOOKS

- ❑ *Heart Rate Log*  p. 216
- ❑ *Heart Rate Chart* 

### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Learn games while developing basic jump roping skills
- Understand the cardiovascular and muscle-building benefits of jumping rope and how it can fit into a total fitness plan
- Learn the basics of single jump roping and double jump roping
- Learn about jump roping team activities offered through competitive Double Dutch programs for youth
- Understand how jumping rope can contribute to improved balance and greater strength

### Instructor Essential Information

The duration and intensity of the exercises in this lesson may need to be adjusted to accommodate different fitness levels of the youth. The instructor should always provide water breaks during these activities. The breaks should be more frequent in warm weather.

Jumping rope is a fun, inexpensive way to improve cardiovascular health and build muscle. Youth and adults of all ages can benefit, whether they do basic two-foot jumping, rope skipping, or any of the many intricate variations that have been developed for single and double rope jumping.

More information about Jumping Rope can be found in: *Jump Rope: A Basic Instruction Guide* published by the United States Amateur Jump Rope Federation. Their website is: <http://www.usajrf.org>.

This lesson builds on the introduction to Jumping Rope found in the Chapter 1, Lesson 4: In Beat - The Heartbeat. Refer back to that lesson to help youth calculate their heart rates. If there are youth who are very proficient rope jumpers, look up more advanced steps and activities in the reference materials for them to follow.

### SET UP DETAILS

The best place for the jump rope activity is in a large room with a dry smooth floor made of wood, tile, or matted material. A smooth outdoor surface can be used. Each youth will need a jump rope for some of the activities.



## Lesson 3: Jump Into Fitness

The proper rope length for each youth can be found by having them stand on the rope and see if it reaches to their armpits.

### Discussion

**DO** (All Ages) ⌚ 45 minutes

Remind youth of the warm up exercises and jump rope skills they learned in the lessons in Chapter 1, Lesson 4: In Beat - The Heartbeat. Go over the method for taking a heart rate on page 33.

Select a leader and begin to play slow relaxing music. Ask youth to follow the leader in warm up exercises including stretches of arms, legs, shoulders and neck. Change the music to a more upbeat tempo. Divide youth into groups of 6-8 members. Give each team a long rope. Youth will take turns being the rope holders.

### Activity 1 – Learning The Ropes

**DO** (All Ages) ⌚ 30 minutes

Have youth lay their rope flat on the floor and then line up along side it. Have them jump with feet together back and forth across the rope at least five times.

Next, have two youth become rope holders as they hold the ends of rope and move it “like a snake.” The other youth jump across the rope one by one without touching it. They continue jumping over it, making a large circle as they jog around for their next turn. Repeat until each youth jumps “the snake” at least five times.

The rope holders raise rope about 6 inches above floor and youth jump back and forth across rope at least five times. Next, rope holders wiggle the rope “like a snake” up and down and back and forth, while youth jump across it without touching it in the same pattern as they followed in the previous step.

The rope holders lay two ropes on floor parallel to each other about six inches apart. Each youth jumps across the “river.” The rope holders increase the distance between the ropes by three inches on each subsequent jump until no one can jump the river.

Using one of the longer ropes, have the jumpers form one line perpendicular to the rope. The rope turners begin to turn the rope - first one time toward the line of jumpers, then one time away from the jumpers. The jumpers do not jump the rope; they just run under it. As the rope is reversed, they come back under it while



## Lesson 3: Jump Into Fitness

never letting the rope touch them. This is to be done in groups. For example, while one jumper is going under and back again, another jumper jumps in and they go under and back again together. Continue adding another jumper with each pass. The game ends when a miss, or a touch of the rope, occurs. Then, the entire group goes to the end of the line, and the one at the front of the line begins the game again.

### Activity 2 – Team Jumping

**DO** (All Ages) ⌚ 20-30 minutes

Divide group into teams of three and give each team a long rope. Members of the team practice turning the rope at different speeds, touching the floor each time and creating the full arc with the rope. All three members should participate in this.



After they can all turn the rope smoothly, the third youth stands next to the rope and the turners begin to turn. Turners say “Jump!” when the rope nears the floor. Each jumper continues until he or she can jump at least three consecutive jumps. Then, they jump out. Team members switch positions until all youth have reached the goal. If teams finish early, they can continue to jump, setting their own targets, until all youth in the class have reached the goal.

Next, distribute the short ropes to each youth for individual jumping. Have them jump for one minute then rest.

Have youth calculate their heart rates and record them on the *Heart Rate Log*, as they learned to do in Chapter 1, Lesson 4: In Beat – The Heartbeat. For those who can, set a goal of two minutes without stopping. Have youth jump for five sets of either:

- One minute of jumping, one minute rest
- Two minutes of jumping, two minutes rest

Youth should check their heart rate after each set.

### Activity 3 - Follow Me Game

**DO** (Middle School • Teen) ⌚ 20 minutes

Bring small groups back together into one group. Youth will take turns being the rope holders. Using one long rope, have the jumpers form one line perpendicular to the rope. Have each youth take a turn jumping into the turning rope, jumping several times, then jumping out. When everyone has had a turn, teach youth the

## Lesson 3: Jump Into Fitness

game below.

Jumpers form one line to enter the rope near one of the turners. The first jumper enters the rope, jumps once, and exits on the diagonal going around the turner to form a new line.

As the first jumper is exiting the rope, the next jumper in line must enter and jump the rope once in a "follow the leader" fashion, taking his/her place behind the leader. This continues until all the jumpers are in the new line. As the last jumper exits the rope, the first jumper enters the rope and repeats the process, making a figure "8."

As youth become skilled in this exercise, the leader should begin to add motions during their jump. This might be a clap of the hands, jumping on one foot (holding the other foot up at the ankle), crossing arms over chest, or whatever else they would like to try. Check to be sure that the moves the leaders are making are not too difficult for the participants.

This game can be played competitively as an elimination game, or non-competitively, depending on the skill level and interests of the youth. If you do choose to eliminate youth for missing their turn or not following the leader, be sure that you have single ropes available for those youth to practice jumping while the "Follow Me" game continues. You also could go onto the "Double Dutch" activity and let those who are out of "Follow Me" begin learning how to jump with two ropes.

If you want the game to be competitive, set a goal to see who can last the longest while following the leader. They have to get in and out each time when it's their turn. As the line gets shorter from eliminations, rope turners may turn faster and faster. If the leader is eliminated, the next person in line takes over as the new leader. The last three youth still jumping are the winners. Remember, each turn of the rope must have a jumper jumping in, jumping one time, and exiting while the next jumper jumps. This is a great game for older School Age children and Middle School youth.



### Activity 4 – Double Dutch

**DO** (Middle School • Teen) ⌚ 15-20 minutes

After youth have finished the game, divide them into groups of three. Give each group two long ropes. Ask them to practice turning the ropes in towards the other. This type of rope turning is called Double Dutch. Be sure that all three youth master this skill.

## Lesson 3: Jump Into Fitness

? Ask: What is different when you are jumping with two ropes compared to one rope? Possible answers: some side-to-side motion, tempo increases.

In teams of three, have one youth stand in between the two ropes. Turners begin to turn the ropes, saying "Jump." After each youth has successfully jumped at least four jumps with two ropes, let the youth choose whether they wish to continue with two ropes or go back to one. The jumper can also jump into moving ropes rather than standing between the ropes to at the start.

### Activity 5 - Jump Into Fitness

**DO** (Teen) ⌚ 20-25 minutes

Each team will create a fitness routine for a selected audience using the jump ropes. Youth will:

- **Select a target audience** such as athlete (gymnast, wrestler, baseball player, soccer player), those who are inactive, or whomever else they choose.
- **Develop a jump rope plan** that would be beneficial to that audience. Ask youth to consider what they have learned in previous lessons, and what they know about jumping and its benefits. Consider a program that improves endurance, strength, and balance for the audience selected.



There are no right or wrong answers, but common sense should prevail. For example, a gymnast might have a program that includes jumping on one foot or doing deep knee bends while jumping or turning around while in the rope. A soccer player might work up to 10-15 minutes of straight jumping over a course of several weeks. A beginner might start with simple jumping for 30 seconds, then 30 seconds rest, increasing their time over the course of several sessions

Each group will report back on their fitness plan and demonstrate their program. Each member of the team should participate.

### Activity 6 – Cool Down

**DO** (All Ages) ⌚ 5-10 minutes

Put on relaxing music. Have youth do the following cool down exercises. Remind the youth that they need to cool down their

## Lesson 3: Jump Into Fitness



muscles after strenuous activities to help their bodies return to a resting condition.

Have youth first stretch one arm to the ceiling, pushing their arm higher and higher. Have them raise their other arm to the ceiling stretching upward. Have them stretch both arms, lifting them higher and higher and holding the stretch for at least 15 seconds.

Tell youth to sit on the floor with their legs stretched forward and their backs straight. Have them reach toward their feet, keeping their backs straight and their heads in line with their spine. Hold this stretch for at least 15 seconds.

Next have youth lie on their backs and stretch their arms overhead. Have them hold this stretch for at least 15 seconds.

### REFLECT (All Ages)

? Ask: What do you think makes rope jumping a “heart healthy” exercise? What makes it a muscle-building exercise? Examples:

- Jump rope requires you to breath more deeply as you get tired, thus the heart works harder
- As you get out of breath, the body uses more oxygen
- Each time you hit the ground, you are putting your body weight on muscles
- Each time you jump back up you are using muscles to lift up your weight
- The heart is a muscle
- Over time, bones are made stronger when legs make impact with the ground

? Ask: Do you think “Double Dutch” jumping is more or less strenuous than single jump roping? Why or why not?

### APPLY (All Ages)

Youth should jump rope at least four days per week until the next lesson. For each rope jumping set, they should record their resting heartbeat and then calculate their heart rate after jumping. Remind them to do their warm up and cool down exercises. Ask youth to bring their *Heart Rate Logs* to the next class.

## Lesson 3: Jump Into Fitness

### REFLECT (Teen)

? Ask: Can you think of some benefits of jumping rope that might not be obvious? Examples:

- Increases your ability to concentrate
- Develops a sense of rhythm and timing
- Helps with balance and coordination
- Doesn't cost much money
- Can be done anywhere and you can carry your rope with you
- Can be done alone or with others

### APPLY (Teen)

Each teen should plan a jump rope fitness plan for themselves before the next session based on their own needs and level of fitness. The plan should include jumping at least four days per week. Ask youth to bring their heart rate logs to the next session.

## Technology Challenge

(Teen)

Have youth visit this website to try some jump rope games.

<http://www.jumpingforjoy.org/games.html>

## Resources

- *Jump Rope: A Basic Instruction Guide* published by the United States Amateur Jump Rope Federation.  
(<http://www.usajrf.org>)
- Web site of the American Double Dutch league:  
<http://www.usaddl.org/>
- *So, You Want to Learn How to Double Dutch, How to Jump, Judge and Make Adjustments*, Roberson-Williams, Judy, Dorrance Publishing Co., Inc., Pittsburgh, 1994.
- *Jump 2b Fit*, a 45-minute video with demonstrations and instructional clips about the skills and activities of jumping rope, 2002, Atec Marketing Limited, Ontario, Canada.  
<http://www.jumprope.com>



## Lesson 4: Dancing For All Seasons

### PREPARATION

🕒 5 minutes

### SET UP

- ❑ See Set Up Details
- ❑ Set up CD player

### SUPPLIES

- ❑ Musical instruments (see Set Up Details)
- ❑ CD player
- ❑ A variety of upbeat and relaxing music
- ❑ Tapes or CDs of Native American Music (see set Up Details) [RK](#)
- ❑ Two 5-8 foot poles for Tinikling

### Outcomes (School Age)



The purpose of this lesson is to have the children:

- Learn about the importance of dance to many societies throughout the world
- Understand that dance is an activity that can be enjoyed throughout their life span
- Experience basic dance steps that can be done alone or with others
- Experience the joy of synchronized movement with music

### Instructor Essential Information

Moving the body rhythmically to music or other sounds has been a part of cultures around the world as far back as history has been recorded. The sounds that accompany dance can be from instruments or from the dancers in the form of singing, clapping, stomping etc.



Dance has been a vehicle used to express joy, sorrow, success, and failure. Today, many dances that were once only practiced within specific cultures have become more widely known and popular. This has occurred as more ethnic groups have become a part of the American mainstream. Examples of popularized ethnic dance include the Hora (Jewish), the “Cha-Cha” (from the Cuban Mambo) the Tango (Spain), the Mexican Hat Dance, the Irish Jig, and Tinikling (Republic of the Philippines).

There are also many uniquely American dances ranging in style from the Bunny Hop to the Electric Slide that have been shared among many cultures. Dance can unite people with different politics, religions, and ethnic backgrounds. Some dances arise out of particular songs such as the Twist and the Mashed Potato. Others arise from several songs or produce a musical genre or style such as rock 'n roll or hip-hop. In this lesson, stress the commonalities of the emotions expressed by dance and the opportunities it presents for nonverbal communication. There are several web sites listed below with step-by-step instructions if you wish to teach specific dances to the children.

### SET UP DETAILS

The best place for this lesson is a large open space. For this lesson, you will need a variety of music with strong beats. This should include music with a 2-3 beat (cha-cha), a 3-3 beat (waltz), and marches. Choose a variety of familiar music, including popular

## Lesson 4: Dancing For All Seasons



music and classical music. See if you can find some classical music used in popular movie scores that the children may have seen. Have enough percussion instruments for each child. Instruments can be toy drums, sticks, triangles, castanets or any other rhythm instruments. Review the web sites listed in the lesson and decide whether you will teach a specific dance to the children.

### Discussion

**DO** (School Age) ⌚ 10 minutes

Have the children sit on the floor in a semi circle. Explain that dance lessons might be given at a dance studio, local community or recreation center, or even in school. They might have learned to dance from friends or siblings.

? Ask: How many of you have ever taken dance lessons? If so, what kind of dances did you learn?

? Ask: What is your favorite type of dance? Why?

? Ask: How do you feel when you dance?

? Ask: Have you ever danced with your parents or friends for fun?

Share with the children the importance of dance to most cultures as explained in the Instructor Essential Information.

### Activity 1 – Rhythm In Me

**DO** (School Age) ⌚ 15 minutes

Have children sit in a circle with their eyes closed while listening to the music. As the music plays, have them do all of the following for three minutes each:

- Keep time with their hands, either by clapping or tapping on the floor. Play several different speeds of music and have the children adapt to the changes.
- Select a rhythm instrument of their choice and sit with their eyes closed while keeping time to the music.
- Stand up and close their eyes. Have them move to the music, but keep their feet in the same place. They can either use an instrument or their hands or feet to keep time.
- Spread out so that they can spin around with their arms

## Lesson 4: Dancing For All Seasons

outstretched without touching another person. Play music with a marching beat and tell them to keep time however they like. They should feel free to move about the room, leaving an arm's distance between themselves and other youth.

### Activity 2 – Tinikling, The National Dance Of The Philippines

**DO** (School Age) ⌚ 30 minutes

Introduce youth to Tinikling, a dance done in the Philippines. This is a good follow-up to the rhythm activities and a spin-off of jumping rope. Have two youth sit cross-legged on the floor and hold the ends of two long bamboo poles. Youth tap the poles on the floor for two counts, then tap the poles together for one count.

When the first two youth have mastered the beat, have the rest of the group take turns “jumping” the poles. To do this, youth first straddle the poles. They then jump inside the poles and then outside of them. Let all youth have a chance to jump as well as to tap the rhythm with the poles. Refer to the website in the Resources section for more information, music, and videos on Tinikling.

### Activity 3 – Partner Fun

**DO** (School Age) ⌚ 15 minutes

Assign each child a partner and be sure that all are participating. One way to do this is to divide the group into 2 lines and have them count off 1,2,3, etc., until everyone in both lines has a number. Then, tell the number 1's that they will be partners, the number 2's, and so on. If the group has an odd number of children, have one pair become a trio.



Ask each pair to develop a simple rhythm dance or routine. The children can decide whether to do their dance to music or other rhythmic sounds such as clapping. They can use dance steps they already know or concentrate on free movement. Play music and have them practice their dance to see if it fits the music.

After about 10 minutes, give the children the opportunity to demonstrate their routine to the group. Do not require that each group perform. The goal of this exercise is for the children to enjoy movement to music and rhythm without any self-consciousness created by an audience. Do require that they participate during the development phase.

## Lesson 4: Dancing For All Seasons

### REFLECT (School Age)

? Ask: What did you feel while you were moving with your eyes closed? Did you prefer moving alone or with a partner?

### APPLY (School Age)

Encourage the children to ask their parents, grandparents or others to teach them some simple steps of a dance they remember from their childhood, especially one that reflects their cultural background. If the family has no tradition of dances of this type, they can ask their parents to teach them any kind of dance, ranging from the fox trot to the "bump." Plan a follow up lesson so the children can demonstrate what they have learned.

## Lesson 4: Dancing For All Seasons

### PREPARATION

🕒 30 minutes

### SET UP

Review web sites listed in Set Up Details.

### SUPPLIES

- ❑ Toy drums
- ❑ CD player
- ❑ Tapes or CDs of Native American Music (see set Up Details) [RK](#)
- ❑ Two 5-8 foot poles for Tinikling



### Outcomes (Middle School)



The purpose of this lesson is to have youth:

- Explore some of the dances of Native Americans
- Feel the connections between beat and movement
- Experience the joy of synchronized movement with music

### Instructor Essential Information

Some of the earliest recorded dances are those of Native American tribes. Their dances are similar to many European and African cultural dances in that they convey the idea that everyone is of equal status. This idea is illustrated by dancing around in a circle, with no soloist. This seems to fit in especially well in cultures with a belief in equality of all people. There are many variations of the basic steps of American Indian dancing. The goal of this lesson is to introduce Native American dancing and music, emphasizing its personal nature.

### SET UP DETAILS

For this lesson, you will need tapes or CDs of Native American music. There are several sources for music of this kind, such as music stores, bookstores, online bookstores (Amazon.com, Half.com, Alibris.com, etc.) and other major distributors of music on the web. Web sites for music and information about Native American dance are shown in the Resources section.

### Discussion

**DO** (Middle School) 🕒 10 minutes

Have youth sit on the floor in a semicircle. Ask what they know about Native American or American Indian music and dance. Answers may include:

- Dances are usually circular
- Men and women dance separately
- Every tribe has different dances but there are some commonalities
- There are ghost dances of the Great Plains
- Dances are usually connected to nature, animals and harvests
- Drums are most common instrument, but flutes are also prominent

## Lesson 4: Dancing For All Seasons

### Activity 1 – Native American Dancing

**DO** (Middle School) ⌚ 35-40 minutes

Our country's earliest dancers were Native Americans. Ask youth to get into a sitting position and close their eyes. Play an American Indian song for about five minutes and instruct youth to simply move to the music in any way they like. Be sure to tell them the title of the song.

? Ask: How did you feel when the music was playing? Did it make you think of anything in particular?



Put on a different song, name the title, and ask youth to keep time to the music by tapping or hitting the floor, as though it were a drum. Ask youth to stand up and close their eyes. Play another Native American song and be sure to tell youth the title. Instruct youth to move their bodies to the music while staying in place. After five minutes, ask again how they felt while moving, and what they were thinking about.

Invite youth to decide whether they want to be a musician or a dancer for the next activity. Once they've chosen, divide them into two groups with musicians and dancers represented in both groups. Give drums or other percussion instruments to the musicians.

Ask each group to vote on the song they liked best of the three that you've played. Play the favorite song of the dancers and have the musician drum while the dancers dance. Have the dancers develop a simple routine to go with their favorite music.

If time allows, have musician and dancers switch roles. This time, play the favorite song of the group who were musicians in the previous step, and have the "new" dancers develop a simple routine to go with their music.

**REFLECT** (Middle School)

? Ask: How do you think that Native American dances developed? Do you know what animals, crops, and events were recognized and/or honored by dances? Why?

**APPLY** (Middle School)

Ask youth to explore Native American (American Indian) dances on the Internet.

## Lesson 4: Dancing For All Seasons

### Activity 2 – Tinikling, The National Dance Of The Philippines

DO (Middle School) ⌚ 30 minutes

See School Age, Activity 2 – Tinikling, The National Dance Of The Philippines on page 195.

## Lesson 4: Dancing For All Seasons


### PREPARATION

⌚ 30 minutes

### SET UP

- ❑ Find an open space for dancing
- ❑ Set up CD player

### SUPPLIES

- ❑ CD player
- ❑ A variety of upbeat music
- ❑ A variety of upbeat and relaxing music (see Set Up Details)
- ❑ Tapes or CDs of Native American Music (see set Up Details) 
- ❑ Two 5-8 foot poles for Tinikling



### Outcomes (Teen)

The purpose of this lesson is to have youth:

- Learn some “old fashioned” dances
- Understand that basic dance steps are used by many age groups, and many cultures
- Practice popular group dances such as the Electric Slide or Boot Scoot Boogie



### Instructor Essential Information

#### SET UP DETAILS

For this lesson, you will need a variety of music with different beats. Obtain songs that can be used for ballroom dances such as the waltz (3 beat) and cha-cha (2-3 beat). Also have a variety of popular music such as hip-hop, rock, rap, and country. Include some classical music as well.

### Discussion

DO (Teen) ⌚ 20-25 minutes

Divide youth into small groups. Give each group one or two of the following questions to discuss.

? Ask: Why do people dance?

? Ask: Where do dance steps come from?

? Ask: How does dance reflect culture?

? Ask: What are the current popular dances?

? Ask: How do you feel when you are at a dance and songs are played that you don't like? (e.g., they like hip-hop over rock, or don't like slow songs).

Have teens share their group observations with the larger group. Point out the similarities and differences among them.

? Ask: How many of you have ever danced at a wedding or some other event where they were doing some of the “old” dances such as the Cha-Cha, Waltz and Foxtrot?



## Lesson 4: Dancing For All Seasons

Play some samples of this type of music. Ask if any of the youth know how to do this kind of dancing. Have them demonstrate the dance to the group.

### Activity 1 – Dancing Just For Me

**DO** (Teen) ⌚ 20 minutes

Have youth select some music that they would like to dance to and find a space for dancing. Put the first type of music on and ask youth to close their eyes and move in place to the music.

Choose another selection and tell youth to open their eyes and move in their space to the new music. Continue to change music until all types selected have been played. Ask youth to at least try to move to the different beats.

At the end of the music time, ask youth to share how they felt when they were dancing to music they didn't especially like or understand.



### Activity 2 – Native American Dancing

**DO** (Teen) ⌚ 20 minutes

Teens may also be interested in the Native American dancing. See Middle School, Activity 1, on page 198.

### Activity 3 – Tinikling, The National Dance Of The Philippines

**DO** (Teen) ⌚ 30 minutes

See School Age, Activity 2 – Tinikling, The National Dance Of The Philippines on page 195.

**REFLECT** (Teen)

? Ask: Do you think that there can be spiritual aspects to some kinds of dance? (However youth define spiritual is fine.)

? Ask: Can you think of any religious or patriotic songs that you remember from childhood? Do these invoke different feelings than the popular songs of today?

## Lesson 4: Dancing For All Seasons

### APPLY (Teen)

Encourage youth to ask their parents, grandparents or others to teach them some simple steps of a dance they remember from their childhood - especially one that reflects their cultural background. If the family has no tradition of dances of this type, they can ask their parents to teach them any kind of dance, ranging from the Foxtrot to the "Bump." Plan a follow up lesson so youth can demonstrate what they have learned.



### Technology Challenge

(Teen)

Ask youth to select one kind of dance and research it on the web. It should be an unfamiliar dance. They can use the web sites listed in Resources to get started. Have them come back and share with the group what they learned.

### Resources

- Native American dance websites:
  - This site contains a downloadable guide to Native American dance steps.  
[http://www.inquiry.net/outdoor/native/dance/fundamental\\_steps.htm](http://www.inquiry.net/outdoor/native/dance/fundamental_steps.htm)
  - [http://www.earthcirclesminnesota.com/Native\\_American\\_Music\\_Directory.htm](http://www.earthcirclesminnesota.com/Native_American_Music_Directory.htm)
  - <http://www.indianhouse.com/music/frames.html>
  - <http://marilee.us/nativeamericans.html#SongsDancesGames>
- Mexican Hat Dance:  
<http://www.janbrett.com/piggybacks/hatdance.htm>
- Macarena, Electric Slide, Chicken Dance:  
<http://www.casperband.com/dnceless.htm>
- Irish and Scottish Dance:  
[http://www.nonvi.com/sm/dance\\_list.html](http://www.nonvi.com/sm/dance_list.html)
- Philippines, Tinikling:
  - <http://www.likha.org/galleries/tinikling.asp>
  - <http://www.ecsrd.ab.ca/st.marguerite/tinikling/default.htm>

## Lesson 5: Cooperative Play

### PREPARATION

🕒 5 minutes

### SET UP

- ❑ Set out tape or chalk
- ❑ Blindfolds

### SUPPLIES

- ❑ 30-50 "mines"
- ❑ Tape or chalk
- ❑ Blindfolds



### Outcomes (School Age)

The purpose of this lesson is to have the children:

- Develop listening and language skills
- Participate in a cooperative activity
- Develop team building skills



### Discussion

**DO** (School Age) 🕒 15-20 minutes

? Ask: Do you know what team building means? Do you know how to develop this skill? Possible answers: through games, physical activities, group activities, communicating.

You will encounter many different kinds of people throughout your life. It is important that you learn to work cooperatively with others. Part of working cooperatively is having good listening skills.

Have the children stand in a circle. Whisper a simple message into the ear of one child. Have that child then whisper the message to the next child in the circle. That child then whispers the message to the next child in the circle, and so on. Have the last child reveal the message. Discuss what happened if the original message was the not same as the message the last person received.

? Ask: How might a mistake in the "messages" affect teamwork?

### Activity 1 – Mine Field

**DO** (School Age) 🕒 20-25 minutes

The object of the Mine Field<sup>7</sup> game is to have blindfolded children make their way through a "minefield" with only verbal directions from their partner.

Draw or have the children draw a large (20' X 40') outline of a rectangle with tape or chalk. This rectangle becomes the "minefield." Ask the children to set up "mines" inside the minefield. The mines are 30-50 small soft objects such as beanbags, plastic food models, rolled up socks, etc.

-----  
<sup>7</sup> Memory Ball Toss and Mine Field activities were adapted from Rohnke, K. and Butler, S. (1995). *Quicksilver*. Dubuque, IA: Kendall Hunt.

## Lesson 5: Cooperative Play



Make sure that “mines” are soft enough so there are no injuries. You may assign each child to bring two soft items to the program or class.

Have the children divide into pairs and stand at opposite ends of the rectangle. For each pair, one partner is blindfolded, while the other gives directions.

The child giving directions calls out simple verbal instructions to blindfolded partner guiding him or her through the minefield. If the blindfolded partner touches a mine, he or she is out of the game.

Repeat this activity allowing the other partner to be blindfolded and guided through the minefield.

### REFLECT (School Age)

? Ask: How well did your partner follow directions? How well did your partner give directions?

? Ask: Did you feel more frustrated as the blindfolded partner or the partner giving directions?

### APPLY (School Age)

Have the children brainstorm or generate a list of things they could do to become better listeners, communicators, and team players.

Allow the children to repeat the minefield activity with a new partner, and apply some of these new ideas.



## Lesson 5: Cooperative Play

### PREPARATION

🕒 5 minutes

### SUPPLIES

- ❑ Stopwatch
- ❑ One soft item such as a Koosh ball, a small stuffed animal, or other soft item



### Outcomes (Middle School • Teen)

The purpose of this lesson is to have youth:

- Participate in a cooperative activity
- Develop problem-solving skills



### Discussion

**DO** (Middle School • Teen) 🕒 15-20 minutes

? Ask: Can you name some ways to build physical skills? Some examples might include running, playing basketball, swimming, and dance, etc.

? Ask: Which of these activities depend on cooperation and which don't? What is the difference between a cooperative and non-cooperative activity?

? Ask: Can you name sports or other activities in which cooperation is necessary for the success of the team? Examples: basketball, soccer, football or a group homework assignment.

? Ask: In which sports or activities is cooperation less important? Examples: swimming, singles tennis, running, etc.

Explain to youth that some people prefer to be part of a team where everyone's efforts are equally important. Others prefer to participate in activities where they are dependent only upon their own skills. Stress that youth should consider the type of person they are when choosing activities. Keep in mind that cooperation and teamwork are necessary skills for sports, school, work, and most all facets of life.

### Activity 1 – Memory Ball Toss

**DO** (Middle School • Teen) 🕒 20-25 minutes

Ask youth to form a circle. Give one person the ball and identify them as the starting person. Explain that each person is going to catch the ball and then toss it to someone else who hasn't previously caught the ball.

Explain that the last person to catch the ball must return it to the starting person. Each person must remember who tossed the ball

## Lesson 5: Cooperative Play

to them and the next person to whom they toss the ball.

The ball toss is then repeated remembering the pattern and sequence of tosses (i.e., each person must receive and toss the ball to the same person as before). Practice the toss a few times so students can establish the pattern. The challenge is to see how fast the group can move the ball through the pattern from start to finish. The group should work as a team to help each other remember where the ball goes next. Time the group's efforts to track improvement.

### Activity 2 – Mine Field

**DO** (Middle School • Teen) ⌚ 20-25 minutes

See Activity 1 for School Age youth – Mine Field on page 203.

**REFLECT** (Middle School • Teen)

? Ask: Why do you believe your group did or did not make improvements with the ball toss game?

? Ask: What did your group do differently as time progressed?

Answer: better decision making as a group/team vs. individually.

**APPLY** (Middle School • Teen)

Ask youth to identify a situation at home or school where teamwork is necessary for completion of a task. Have them report back if they noticed that they are more aware of the listening and cooperation skills necessary for people to work well together.

## Lesson 6: Planning A Wellness Event

### PREPARATION

🕒 5 minutes

### SET UP

Set up flip chart.

### SUPPLIES

- ❑ Supplies
- ❑ Flip chart and paper
- ❑ Markers

### Outcomes (All Ages)



The purpose of this lesson is to have youth:

- Review important nutrition and physical activity concepts
- Develop a wellness activity for their Center or community

### Instructor Essential Information

This lesson should be completed after the majority of activities in *Up for the Challenge: Lifetime Fitness, Healthy Decisions* have been completed. It is an overall review of key concepts. The concepts are applied to the development a wellness program or event. The event is designed by the youth for the Center or the community.

### Discussion

DO (All Ages) 🕒 20 minutes

Have youth sit in a large circle to facilitate discussion. Tell youth that it is time to review some of the information they learned in the *Up for the Challenge: Lifetime Fitness, Healthy Decisions* curriculum. Ask them to name at least five important health concepts that are important to their lives. Examples:

- Eat plenty of fruits and vegetables
- Be physically active
- Consume few high calorie foods
- Watch less television
- Eat whole grains

? Ask: Have you or anyone in your family made any healthy lifestyle changes or developed new habits as a result of what they have learned in *Up for the Challenge*? Examples: more family bike rides/walks, packing healthy school lunches, participation in physical activities in school or in the community, healthy family meals together, etc.

Designate a recorder to write down ideas on flip chart paper.

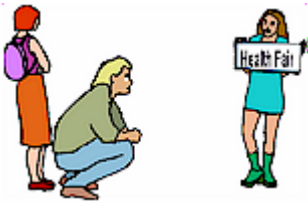
? Ask: What kinds of community activities encourage families to be active and healthy? Examples:

- Community fun runs or walks that benefit charities like the March of Dimes, cancer research, etc.
- Nutrition fairs

## Lesson 6: Planning A Wellness Event

- Multicultural festivals where unfamiliar foods and dances are presented
- Intramural or recreational sport activities
- Access to parks and recreational facilities for activities like neighborhood pick-up games, softball, Frisbee, etc.

Post the ideas around the room to be used in the next activity.



### Activity 1 – Planning A Wellness Activity

**DO** (All Ages) ⌚ 60-90 minutes

Divide youth into groups. Using the ideas generated from the discussion, have each group come up with a plan of action for a wellness event that they could actually implement at the Center, at the installation, or in the larger community.

When each group is finished, have youth share their ideas. Take a vote to choose which event youth would like to plan and develop. Examples: a family field day, a walk to raise money for a cause, donating healthy food goods to a food bank, a jump-a-thon, a health fair, writing a healthy foods cook book, or a cultural festival.

Once the wellness event has been chosen, lead the group through the planning discussion and make sure to cover the following items:

- **Timeline** - Youth will need to set a date for the event as well as deadlines for all things that need to happen prior to the event
- **Leader** - Vote on a youth chairperson who will be responsible for making sure everything gets accomplished
- **Roles** - Make sure everyone is assigned a job and understands their responsibilities
- **Location** – Research available locations for your event
- **Resources** – What resources/supplies do you need to make your event successful such as T-shirts, prizes, food, etc.? Who can help provide them?
- **Partnerships** - Are there community partners who might help you with your event?
- **Marketing** – How will you handle the publicity for the event?
- **Community Participation** – Youth are encouraged to involve the larger installation community. How will you get the community to participate?





## Lesson 6: Planning A Wellness Event

- **Rain Date** – Select a rain date if the event will be held outside
- **Others?**

### Technology Challenge

(All Ages)

Spread the news about your up-coming wellness event. Write a news story that focuses on good health or one that publicizes your wellness event. Learn more about how to write a story by visiting <http://www.timeforkids.com> and clicking on "Homework Helper." Click on "Rapid Research," then "Language Arts." Click on "Journalism and News," then scroll down to "Your Own Newsroom." Use these tips for writing stories and developing a newspaper.

## **Appendix A Handouts**

## Using MyPyramid In Your Life – Children And Youth



# Using MyPyramid in Your Life - Children and Youth

**MyPyramid will help you build an eating plan that works for you.**

You will find the right amount of foods to eat to meet your calorie needs for growth and a healthy weight. Your eating plan will also give you the nutrients you need for energy, muscle growth, and strong bones!

### Step 1: Estimate Your Daily Calorie Needs

Use the **Estimated Daily Calorie Needs** chart to find a calorie level that's right for you. First, find your gender and age. Then select a calorie level that fits your lifestyle (from sedentary up to active) - see definitions below. Your calorie level may be between the two levels in the chart, depending on how active you are.

The calorie levels are right for young people of average height and at a healthy weight. If you are a large person, your calorie needs may be higher. If your weight is causing health problems, you can move toward a healthier weight by following the calorie level in the chart for your gender and age group. Be sure you don't lose weight quickly, since that can cause health problems. You should **not** feel hungry a lot, and you need to eat enough food to get all of the nutrients you need! Check with your doctor for more information about a healthy body weight for you.






University of Florida, IFAS Extension, Department of Family, Youth and Community Sciences, 2005,  
<http://fyvcs.ifas.ufl.edu/pyramid/index.htm>. For more information, visit <http://MyPyramid.gov>.

## Using MyPyramid In Your Life – Children And Youth

ESTIMATED DAILY CALORIE NEEDS			
This chart gives an <b>estimate</b> of calorie needs for specific age and gender groups. Calorie ranges are based on physical activity level, from sedentary to active.			
ACTIVITY LEVEL:		Sedentary	Active
		CALORIES	CALORIES
<b>Females</b>			
4-8 years		1,200	1,800
9-13 years		1,600	2,200
14-18 years		1,800	2,400
<b>Males</b>			
4-8 years		1,400	2,000
9-13 years		1,800	2,600
14-18 years		2,200	3,200

**Sedentary** - less than 30 minutes a day of moderate physical activity in addition to daily activities

**Active** - 60 or more minutes a day of moderate physical activity in addition to daily activities.



My Estimated Daily Calorie Needs are \_\_\_\_\_ calories. This calorie level is about right for a person my age and gender of average height, who is at a healthy weight.

Remember, calorie needs vary from day to day, depending on how active you are. Also, when you go through a "growth spurt" you will need more calories than usual. Use the chart on the next page to build your eating plan!

## Using MyPyramid In Your Life – Children And Youth

## Step 2: Build Your Eating Plan



Find your calorie level at the top of the My Eating Plan chart.


Follow the column below your calorie level to see how much food to eat from each of the food groups.

There are tips for each food group on the next page. Eat healthy foods that you enjoy and that fit your lifestyle! Think about how you will get all the fruits and veggies that you need! You can use a menu planner to plan your day! See the worksheet at: <http://fycs.ifas.ufl.edu/pyramid/adobe/worksheet.pdf>


NOTE: oz-eq means ounce-equivalent; see the Grains Group and Meat and Beans Group below to understand how these work.

Calorie Level	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	3,200
Grains_	4 oz-eq	5 oz-eq	5 oz-eq	6 oz-eq	6 oz-eq	7 oz-eq	8 oz-eq	9 oz-eq	10 oz-eq
Vegetables_	1½ cups	1½ cups	2 cups	2½ cups	2½ cups	3 cups	3 cups	3½ cups	4 cups
Fruits	1 cup	1½ cups	1½ cups	1½ cups	2 cups	2 cups	2 cups	2 cups	2½ cups
Milk_	2 cups	2 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups
Meat and Beans_	3 oz-eq	4 oz-eq	5 oz-eq	5 oz-eq	5.5 oz-eq	6 oz-eq	6.5 oz-eq	6.5 oz-eq	7 oz-eq
Oils_	4 tsp	4 tsp	5 tsp	5 tsp	6 tsp	6 tsp	7 tsp	8 tsp	11 tsp


## Using MyPyramid In Your Life – Children And Youth




**Fruit Group** includes all fresh, frozen, canned, and dried fruits and fruit juices. In general, 1 cup of fruit or 100% fruit juice, or  $\frac{1}{2}$  cup of dried fruit is considered 1 cup from this group.




**Vegetable Group** includes all fresh, frozen, canned, and dried vegetables and vegetable juices. In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the vegetable group.



**Grains Group** includes all foods made from wheat, rice, oats, cornmeal, or barley, such as bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or  $\frac{1}{2}$  cup of cooked rice, pasta, or cooked cereal can be considered as 1 ounce equivalent from this group. At least half of all grains eaten should be whole grains.



**Milk Group** includes all fluid milk products and foods made from milk that retain their calcium content, such as yogurt and cheese. Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not part of the group. Make most milk group choices fat-free or low-fat. In general, 1 cup of milk or yogurt,  $1\frac{1}{2}$  ounces of natural cheese, or 2 ounces of processed cheese is considered as 1 cup from this group.



**Meat & Beans Group:** In general, 1 ounce of lean meat, poultry, or fish, 1 egg, 1 tablespoon peanut butter,  $\frac{1}{4}$  cup cooked dry beans, or  $\frac{1}{2}$  ounce of nuts or seeds can be considered as 1 ounce equivalent from the meat and beans group.

**Oils** include fats from many different plants and from fish that are liquid at room temperature, such as canola, corn, olive, soybean, and sunflower oil. Some foods are naturally high in oils, like nuts, olives, some fish, and avocados. Foods that are mainly oil include mayonnaise, certain salad dressings, and soft margarine.

4

## Handout for Chapter 1, Lesson 2: MyPyramid: The Beginning Challenge

*Recipe***Pyramid Kabobs****UTENSILS**

Cutting board

Knife

Large serving platter

**INGREDIENTS**

Cubed ham

Cubed cheese

Cubed pineapple

Cherry tomatoes

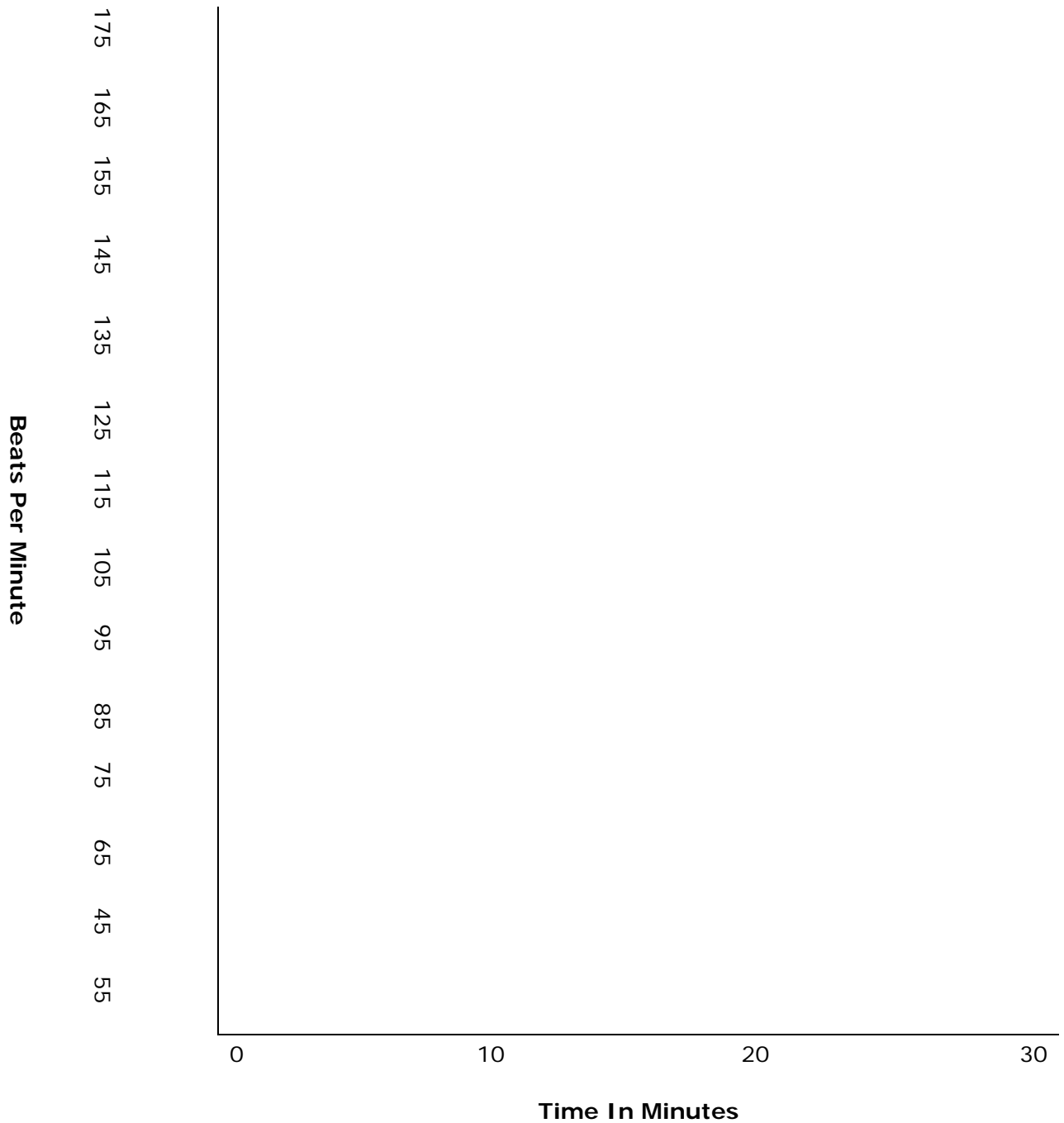
Other fruit, vegetables or meats, cubed

**DIRECTIONS**

To make a "Pyramid Kabob," take a pretzel stick and place different kinds of food on it as if it were a skewer. Food examples: cubes of ham (protein), cheese (dairy), pineapple (fruits), and cherry tomatoes (vegetables). You may need to pre-cut holes in the food cubes with wood or metal skewers. Or, simply use the wooden skewers instead of pretzel sticks, then serve with whole grain crackers.

Handout for Chapter 1, Lesson 4: In Beat – The Heartbeat

## Heart Rate Log





Handout for Chapter 1, Lesson 5: Think Your Drink

## Can You Guess How Much Fat Is In Each Cup Of Milk?

We often think that drinking low-fat or fat-free milk will not taste as good as whole milk. Try out these samples labeled A-D. Can you guess how much fat is in each cup of milk, even the one that you like? Mark down whole, 2%, 1%, or fat-free.

Which milk product did you like the best? Put a check mark by the one that you liked the best.

Product A: \_\_\_\_\_

Product B: \_\_\_\_\_

Product C: \_\_\_\_\_

Product D: \_\_\_\_\_

There are even low-fat or fat-free flavored varieties of milk that taste almost similar to regular fat flavored milk. Now, try out the samples labeled E-F. Can you guess how much fat is in each cup of flavored milk, even the one that you like? Mark down whole, 2%, 1%, or fat free.

Which flavored milk product did you like the best? Put a check mark by the one that you liked best.

Product E: \_\_\_\_\_

Product F: \_\_\_\_\_

Handout for Chapter 1, Lesson 5: Think Your Drink

## Three Fruit Drinks: Fruit Juice Spritzer, Juice Float, Power Me Up Smoothie

### *Recipes*

RECIPE	INGREDIENTS	DIRECTIONS
<b>Fruit Juice Spritzer</b>	2½ cups orange juice 1 cup pineapple juice 1 liter club soda or seltzer water	Mix juices in a pitcher and add soda. Stir and serve over ice.
<b>Juice Float</b>	100% fruit juice Frozen-fruit yogurt	Offer a selection of three or more 100% fruit juices and low-fat frozen yogurt. Provide 12 ounce cups and an ice cream scoop for the youth. Have each youth concoct their own juice float as a snack. Put a scoop or large spoonful of frozen-fruit yogurt in your cup; pour one or more types of fruit juices on top; mix with spoon.
<b>Power Me Up Smoothie</b>	½ cup fresh or frozen fruit 8 ounces low-fat or fat-free plain yogurt 8 ice cubes	Place all ingredients in a blender. Blend thoroughly. Makes two 8 oz servings or 10 small servings.

## Handout for Chapter 1, Lesson 5: Think Your Drink

*Recipe***Make Your Own Yogurt****UTENSILS**

Candy thermometer  
Saucepan  
Wooden spoon  
Liquid measuring cup  
2 or 3 wide-mouthed glass jars with screw on lids  
Thick towel

**INGREDIENTS**

Starter yogurt culture (buy a container of prepared plain yogurt with active cultures)  
2½ cups milk (whole, 2%, or skim).

**DIRECTIONS**

Warm the milk in a saucepan on low heat until it reaches 180° F. Use a candy thermometer to check the temperature. When 180° is reached, take pan off the stove. There will be small bubbles around the edge of the pot and a "skin" will develop on top of the milk. Heating the milk kills bacteria that might spoil the milk before the yogurt is finished.

Take the "skin" off the milk with a wooden spoon. Wait until the milk cools to 110° F. This might take ½ hour or so. You do this so that the "good" bacteria in the starter culture aren't killed by high heat when you add the starter to the milk. Add one tablespoon of the yogurt to the cooled milk. Mix completely with a wooden spoon.

Pour into the clean glass jars. Cover and wrap the towel around it to keep it warm. Bacteria grow faster in a warm environment.

Let the yogurt culture stand at room temperature away from drafts and movement for 8-12 hours. Don't peek or stir it. The yogurt is ready when it moves away (pulls) in one piece from the sides of the jar as you tilt it. If it's not ready, leave it for two more hours and check again. Don't let it stand for more than 12 hours or the yogurt will be too tart.

Refrigerating your yogurt stops the growth of bacteria. Chill before you eat it. Don't forget to save some for your next batch of yogurt.

Handout for Chapter 1, Lesson 5: Think Your Drink


## Ice Cream Personality Test

### Ice Cream Personality Test


A national manufacturer of ice cream, Edy's Grand Ice Cream, commissioned an ice cream flavorology study to determine how ice cream preferences relate to personality. The study, conducted by Dr. Alan R. Hirsch (M.D.), Neurological Director of the Smell & Taste Treatment and Research Foundation in Chicago, revealed that distinct personalities correspond with ice cream flavors.

**Pick your favorite flavor and see what it says about your personality.**


Vanilla




Chocolate




Butter Pecan




Banana



Strawberry



Chocolate Chip



<b>VANILLA</b>	You are colorful, impulsive, a risk taker who sets high goals and has high expectations of yourself. You also enjoy close family relationships.
<b>CHOCOLATE</b>	You are lively, creative, dramatic, charming, enthusiastic, and the life of the party. Chocolate fans enjoy being at the center of attention and can become bored with the usual routine.
<b>BUTTER PECAN</b>	You are orderly, perfectionist, careful, detail-oriented, conscientious, ethical, and fiscally conservative. You are also competitive, aggressive in sports and have a take-charge type of personality.
<b>BANANA</b>	You are easy-going, well-adjusted, generous, honest, and empathetic.
<b>STRAWBERRY</b>	You are shy, yet emotionally robust, skeptical, detail-oriented, opinionated, introverted, and self-critical.
<b>CHOCOLATE CHIP</b>	You are generous, competitive, and accomplished. You are charming in social situations, ambitious, and competent.

## Handout for Chapter 1, Lesson 2: MyPyramid - The Beginning Challenge

## How Much Meat And Beans?



# How Much Meat and Beans?

This chart shows how much to eat from the Meat and Beans Group. This amount is right for persons who get less than 30 minutes of moderate physical activity each day. Young people who are more active may need to eat more food to meet their calorie (energy) needs. Individual needs vary, so use this as a general guide to food intake.

Group	Age	Daily Recommendation
Children	4-8 years old	3-4 ounce equivalents
Girls	9-18 years old	5 ounce equivalents
Boys	9-13 years old	5 ounce equivalents
	14-18 years old	6 ounce equivalents

## What Counts as an Ounce?

In general, 1 ounce of meat, poultry or fish,  $\frac{1}{4}$  cup cooked dry beans, 1 egg, 1 tablespoon of peanut butter, or  $\frac{1}{2}$  ounce of nuts or seeds each counts as 1-ounce from the meat and beans group.

Here are a few more examples:

$\frac{1}{4}$  cup tofu

$\frac{1}{4}$  cup cooked black beans or chickpeas

$\frac{1}{4}$  cup hummus



1 sandwich slice lean turkey meat

24 pistachios

$\frac{1}{2}$  cup split pea soup



University of Florida, IFAS Extension, Department of Family, Youth and Community Sciences, 2005, <http://fyfcs.ifas.ufl.edu/pyramid/index.htm>. For more information, visit <http://MyPyramid.gov>.



## Handout for Chapter 1, Lesson 7: Picking Protein

*Recipe***Let's Try Lentils****UTENSILS**

Cutting board  
Cutting knife  
Mixing bowl and spoon  
Measuring spoons  
Large saucepan and lid  
Skillet

**INGREDIENTS**

½ pound lentils  
2 tablespoons olive oil  
2 medium onions, finely chopped  
2 cloves garlic, chopped  
2 large tomatoes, peeled, seeded, chopped  
Salt  
Freshly ground pepper  
Pinch of sugar  
1 teaspoon chopped fresh cilantro

**DIRECTIONS**

Put the lentils in a large saucepan with water to cover by about 1-inch and cook until they are almost tender, about 1 hour. The quick-cooking variety (noted on package) will be done in about 25 minutes. Drain and set aside. In a skillet heat the oil and sauté the onions and garlic until the onions are softened. Add the tomatoes, salt, pepper, sugar and coriander and simmer gently until the mixture is thick, about 10 minutes. Stir the sauce into the lentils and cook over very low heat for 10 minutes longer to blend the flavors. Serve instead of potatoes or rice. Makes 6 servings.

## Handout for Chapter 1, Lesson 7: Picking Protein

*Recipe***Fresh Spinach And Cilantro Salad****UTENSILS**

Cutting board  
Cutting knife  
Mixing bowl and spoon  
Measuring cups and spoons  
Salad bowl  
Baking sheet

**INGREDIENTS**

1 – 16 ounce prewashed bag of spinach or 1 bunch of spinach, washed  
1 – 15 ounce can black beans, rinsed  
4 medium tomatoes, chopped  
1 medium onion, thinly sliced and quartered  
2 cups cilantro, chopped  
1 tablespoon olive or vegetable oil  
1 fresh lemon  
1 fresh lime  
2 cups cottage cheese, crumbled or low-fat jack cheese, grated  
1 cup baked tortilla chips, lightly crushed

**DIRECTIONS**

Place all vegetables in a large salad bowl. Squeeze the juice of the lemon and lime into the bowl and drizzle with oil. Toss salad until all vegetables are well coated. Sprinkle cheese and tortilla chips on top and serve.

Serves: 8 as a side dish or 4 as an entrée

## Handout for Chapter 1, Lesson 7: Picking Protein

*Recipe***Kidney Bean And Tuna Salad****UTENSILS**

Cutting board  
Cutting knife  
Mixing bowl and spoon  
Measuring cups and spoons

**INGREDIENTS**

15 ½ ounce can kidney beans, drained  
6 ½ ounce can, water-packed tuna, drained  
2 Tbsp. reduced calorie mayonnaise  
2 Tbsp. plain low-fat-yogurt  
½ cup chopped celery  
½ green pepper, chopped  
3 Tbsp. pickle relish or 1 Tbsp. minced onion  
¼ tsp. dill  
1/8 tsp. black pepper

**DIRECTIONS**

Mix together and serve. Nutrition information: 150 calories per serving, 4 g. fiber, 3 g. fat per ¾ cup serving.



## Handout for Chapter 1, Lesson 7: Picking Protein

*Recipe***Good For You And Good Too Bean Tacos****UTENSILS**

Cutting board  
Cutting knife  
Mixing bowl and spoon  
Measuring cups and spoons  
Large saucepan and lid  
Skillet

**INGREDIENTS**

2 cans of cooked beans  
1 tablespoon of olive oil  
½ onion, finely chopped  
1 clove garlic, chopped or minced  
6 corn tortillas  
6 tablespoons of low-fat sour cream or low-fat plain yogurt  
½ cup of low-fat shredded mozzarella cheese

**DIRECTIONS**

In a skillet, heat the olive oil, chopped garlic, and chopped onion. Sauté these ingredients for a few minutes, until the garlic is slightly golden. Drain and rinse the can of beans. Add the can of beans to the pan. Mash the beans into the oil, garlic, and onion. Mix the ingredients in the skillet.

Warm-up the corn tortillas. Spoon the beans onto the warm corn tortillas, add some shredded mozzarella cheese, and add one teaspoon of low-fat sour cream.

Makes 6 servings.

Handout for Chapter 1, Lesson 9: Eating Rainbows

## Veggie Plant Parts<sup>8</sup>

Name \_\_\_\_\_

Did you know that vegetables come from all parts of the plant? Vegetables can be roots, stems, leaves, seeds, flowers or even fruit. Yes, vegetables can actually be the “fruit” part of the plant. A botanist (a scientist who studies plants) classifies the fruit of the plant as the part that surrounds the seeds. Examples of vegetables that are the fruit part of the plant include zucchini, cucumbers, peppers, tomatoes and eggplant.

**WORD LIST GAME** Directions: Unscramble the part of the plant on the left column. Next, draw a line from the plant part to the correct vegetable. Answers can be found below.

O R O T \_ \_ \_ \_

Broccoli

T I U F R \_ \_ \_ \_ \_

Corn

A L F E \_ \_ \_ \_

Carrot

E D S E \_ \_ \_ \_

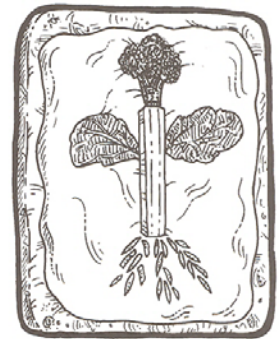
Celery

T E S M \_ \_ \_ \_

Romaine Lettuce

E O L W F R \_ \_ \_ \_ \_

Tomato



### Plant Part Art *A Science Project You Can Eat!*

#### INGREDIENTS

Large flat cracker	1 celery stick
Peanut butter or low-fat cream cheese	1 lettuce leaf, torn into small pieces
2-3 broccoli florets	1 tablespoon grated carrots

#### DIRECTIONS

Lightly spread cracker with either peanut butter or cream cheese. Next, create a plant or garden design on the cracker by arranging shredded carrots for roots, celery stick for the stem, lettuce for leaves and broccoli for flowers. **EAT & ENJOY!** *Serves 1.*

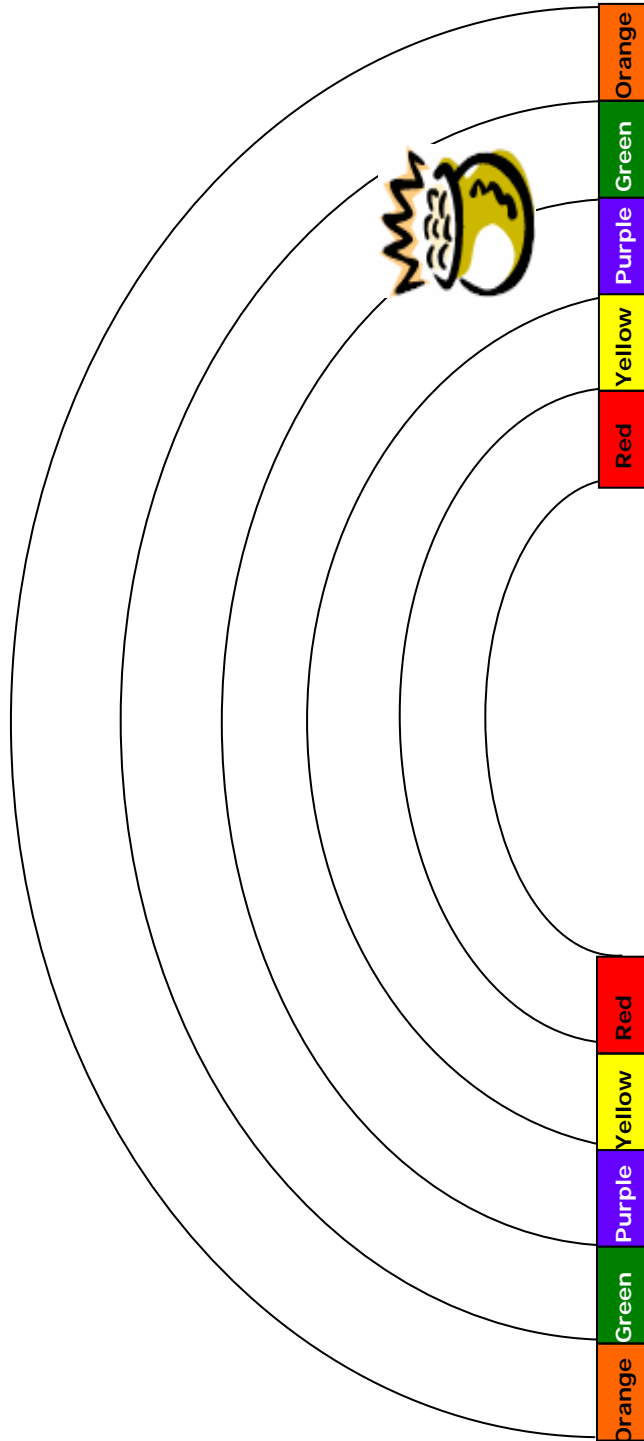
**Answers to Word List Game:** flower = broccoli, fruit = tomato, leaf = lettuce, root = carrot, seed = corn, stem = celery

<sup>8</sup> Adapted from Connie Liakos Evers, MS, RD, How to Teach Nutrition to Kids, Leader/Activity Guide, 1998, 24 Carrot Press.

## Handout for Chapter 1, Lesson 9: Eating Rainbows

## You Can Eat A Rainbow

## You Can Eat A Rainbow



We should try to eat **7** servings of fruits and vegetables each day (**4** servings of vegetables and **3** servings of fruit). Fruits and vegetables come in all colors of the rainbow. From deep red and green to bright orange and yellow, these colors are associated with natural ingredients found inside the fruits and vegetables. They give them their color and they give them their healthy properties.

The pot at the end of the rainbow is **legumes** (dry beans, dry peas, lentils). We should try and eat 5 servings (2½ cups) of legumes a week.

**Try to see how many colored fruits and vegetables you can eat this week. Draw or write them in the rainbow.**

**How many times did you eat legumes during the week?** \_\_\_\_\_

## Handout for Chapter 1, Lesson 9: Eating Rainbows

*Recipe***Rainbow Fruit Kabobs<sup>9</sup>**

(Makes 12 Kabobs)

**UTENSILS**

Cutting board

Sharp knife

Can opener

12 wooden skewers (10 to 12 inches long)

Large serving platter

**INGREDIENTS**

1 pint strawberries, washed and stems removed

12 ounce container fresh cut cantaloupe

20 ounce can pineapple chunks in juice, drain and reserve juice

12 ounce container fresh cut honeydew melon

1 pound purple grapes, washed

2 large bananas, peeled

**DIRECTIONS**

Cut each banana into six chunks. Dip chunks in reserved pineapple juice. Thread a strawberry, a cantaloupe chunk, a grape, a pineapple chunk, a honeydew melon chunk and a banana chunk on each skewer. Add more fruit until each skewer is full. Set on a plate and start threading the next skewer. Repeat until all skewers are filled with a rainbow of colorful fruit.

Lay skewers on platter. Pour reserved pineapple juice over the top to keep fruit from browning. Chill until ready to serve.

-----  
<sup>9</sup> The Rainbow Fruit Kabobs recipe is adapted from the Fun with Fruits and Vegetables Kids Cookbook, 2003, Dole Food Company, Inc., <http://www.dole5aday.com>

## Handout for Chapter 1, Lesson 9: Eating Rainbows

*Recipe***Crunchy Vegetable Burrito Banditos**<sup>10</sup>**UTENSILS**

Cutting board  
Grater  
Knife  
Mixing bowl and spoon  
Measuring cups and spoons

**INGREDIENTS**

½ cup shredded carrots  
½ cup chopped broccoli  
½ cup chopped cauliflower  
2 green onions, thinly sliced  
1 cup (4 ounces) shredded low-fat Cheddar cheese  
¼ cup nonfat Ranch salad dressing  
½ teaspoon chili powder  
4 (7-inch) flour tortillas  
1 cup torn iceberg lettuce, bite size pieces

**DIRECTIONS**

With help or supervision from an adult, grate the carrots and cut the broccoli, cauliflower and green onions.

In a mixing bowl, combine carrots, broccoli, cauliflower and onions with cheese, dressing and chili powder.

Lay tortilla flat on the counter and spoon about ½ cup vegetable mixture and ¼ cup lettuce down the center. Wrap each tortilla around the vegetable mixture.  
(Makes 4 servings)

-----  
<sup>10</sup> The Crunchy Vegetable Burrito Banditos recipe is adapted from the 5 A Day Kids Cookbook, 2004, Dole Food Company, Inc., <http://www.dole5aday.com>

Handout for Chapter 2, Lesson 1: Body Image

## Helping Terry

### *Scenario*

Terry is a 14-year-old girl who lives with her mother and younger brother in an apartment in the city. She helps her family by taking care of her younger brother after school and helping to get dinner ready when her mom gets home from work. Lately, she has been spending a lot of time in front of the television and on her computer "instant messaging" with her friends.

Terry feels as if she isn't getting enough exercise. She also knows that her family has been eating a lot of food that is not very good for them. She wants to make some healthy changes, but changing is so difficult and she's not sure where to start! We are going to help Terry find a way to start on a path to a healthier life.

## Handout for Chapter 2, Lesson 2: Calories In – Calories Out

**Calories Burned During One Hour Of Exercise**

Table 1 = 75 lbs

Table 2 = 100 lbs

Table 3 = 130 – 190 lbs

The number of calories burned during exercise is affected by body weight, intensity of workout, conditioning level and metabolism. Calories burned per hour are listed below for the example body weights of 130, 155 and 190 pounds. Source: <http://www.shapefit.com>.

**TABLE 1 - 75 LBS**

<b>Gym and Home Activities</b>			
Aerobics: low impact	198	Aerobics: high impact	252
Aerobics, Step: low impact	252	Aerobics, Step: high impact	360
Aerobics: water	144	Bicycling, Stationary: moderate	252
Bicycling, Stationary: vigorous	378	Circuit Training: general	288
Rowing, Stationary: moderate	252	Rowing, Stationary: vigorous	306
Ski Machine: general	342	Stair Step Machine: general	216
Weight Lifting: general	108	Weight Lifting: vigorous	216
<b>Training Activities</b>			
Basketball: playing a game	288	Basketball: wheelchair	234
Bicycling: BMX or mountain	306	Bicycling: 12-13.9 mph	288
Bicycling: 14-15.9 mph	360	Boxing: sparring	324
Football: competitive	324	Football: touch, flag, general	288
Frisbee	108	Golf: carrying clubs	198
Golf: using cart	126	Gymnastics: general	144
Handball: general	432	Hiking: cross-country	216
Horseback Riding: general	144	Ice Skating: general	252
Martial Arts: general	360	Racquetball: competitive	360
Racquetball: casual, general	252	Rock Climbing: ascending	396
Rock Climbing: repelling	288	Rollerblade Skating	252
Rope Jumping	360	Running: 5 mph (12 min/mile)	288
Running: 5.2 mph (11.5 min/mile)	324	Running: 6 mph (10 min/mile)	360
Running: 6.7 mph (9 min/mile)	396	Running: 7.5 mph (8 min/mile)	450
Running: 8.6 mph (7 min/mile)	522	Running: 10 mph (6 min/mile)	594
Running: pushing wheelchair, marathon wheeling	288	Running: cross-country	324
Skiing: cross-country	288	Skiing: downhill	216
Snow Shoeing	288	Softball: general play	180
Swimming: general	216	Tennis: general	252
Volleyball: non-competitive,		Volleyball: competitive,	

**TABLE 1 - 75 LBS**

general play	108	gymnasium play	144
Volleyball: beach	288	Walk: 3.5 mph (17 min/mi)	144
Walk: 4 mph (15 min/mi)	162	Walk: 4.5 mph (13 min/mi)	180
Walk/Jog: jog <10 min.	216	Water Skiing	216
Water Polo	360	Whitewater: rafting, kayaking	180
<b>Daily Life Activities</b>			
Gardening: general	162	Housecleaning: general	126
Mowing Lawn: push, hand	198	Mowing Lawn: push, power	162
Children's Games: 4-square, etc.	180	Raking Lawn	144
Shoveling Snow: by hand	216	Operate Snow Blower: walking	162

**TABLE 2 – 100 LBS****Gym and Home Activities**

Aerobics: low impact	264	Aerobics: high impact	336
Aerobics, Step: low impact	336	Aerobics, Step: high impact	480
Aerobics: water	192	Bicycling, Stationary: moderate	336
Bicycling, Stationary: vigorous	504	Circuit Training: general	384
Rowing, Stationary: moderate	336	Rowing, Stationary: vigorous	408
Ski Machine: general	456	Stair Step Machine: general	288
Weight Lifting: general	144	Weight Lifting: vigorous	288

**Training Activities**

Basketball: playing a game	384	Basketball: wheelchair	312
Bicycling: BMX or mountain	408	Bicycling: 12-13.9 mph	384
Bicycling: 14-15.9 mph	480	Boxing: sparring	432
Football: competitive	432	Football: touch, flag, general	384
Frisbee	144	Golf: carrying clubs	264
Golf: using cart	168	Gymnastics: general	192
Handball: general	576	Hiking: cross-country	288
Horseback Riding: general	192	Ice Skating: general	336
Martial Arts: general	480	Racquetball: competitive	480
Racquetball: casual, general	336	Rock Climbing: ascending	528
Rock Climbing: repelling	384	Rollerblade Skating	336
Rope Jumping	480	Running: 5 mph (12 min/mile)	384
Running: 5.2 mph (11.5 min/mile)	432	Running: 6 mph (10 min/mile)	480
Running: 6.7 mph (9 min/mile)	528	Running: 7.5 mph (8 min/mile)	600
Running: 8.6 mph (7 min/mile)	696	Running: 10 mph (6 min/mile)	792
Running: pushing wheelchair, marathon wheeling	384	Running: cross-country	432



<b>TABLE 2 – 100 LBS</b>			
Skiing: cross-country	384	Skiing: downhill	288
Snow Shoeing	384	Softball: general play	240
Swimming: general	288	Tennis: general	336
Volleyball: non-competitive, general play	144	Volleyball: competitive, gymnasium play	192
Volleyball: beach	384	Walk: 3.5 mph (17 min/mi)	192
Walk: 4 mph (15 min/mi)	216	Walk: 4.5 mph (13 min/mi)	240
Walk/Jog: jog <10 min.	288	Water Skiing	288
Water Polo	480	Whitewater: rafting, kayaking	240
<b>Daily Life Activities</b>			
Gardening: general	216	Housecleaning: general	168
Mowing Lawn: push, hand	264	Mowing Lawn: push, power	216
Children's Games: 4-square, etc.	240	Raking Lawn	192
Shoveling Snow: by hand	288	Operate Snow Blower: walking	216

<b>TABLE 3 - 130 – 190 LBS</b>	<b>130 lbs</b>	<b>155 lbs</b>	<b>190 lbs</b>
<b>Gym &amp; Home Activities</b>			
Aerobics, general	354	422	518
Aerobics, high impact	413	493	604
Aerobics, low impact	295	352	431
Archery (non-hunting)	207	246	302
Automobile repair	177	211	259
Backpacking, general	413	493	604
Badminton, competitive	413	493	604
Badminton, social, general	266	317	388
Basketball, game	472	563	690
Basketball, non-game, general	354	422	518
Basketball, officiating	413	493	604
Basketball, shooting baskets	266	317	388
Basketball, wheelchair	384	457	561
Bicycling, <10mph, leisure	236	281	345
Bicycling, >20mph, racing	944	1126	1380
Bicycling, 10-11.9mph, light	354	422	518
Bicycling, 12-13.9mph, moderate	472	563	690
Bicycling, 14-15.9mph, vigorous	590	704	863
Bicycling, 16-19mph, very fast, racing	708	844	1035
Bicycling, BMX or mountain	502	598	733
Bicycling, stationary, general	295	352	431
Bicycling, stationary, light	325	387	474
Bicycling, stationary, moderate	413	493	604

**TABLE 3 - 130 – 190 LBS**

	<b>130 lbs</b>	<b>155 lbs</b>	<b>190 lbs</b>
Bicycling, stationary, very light	177	211	259
Bicycling, stationary, very vigorous	738	880	1078
Bicycling, stationary, vigorous	620	739	906
Billiards	148	176	216
Bowling	177	211	259
Boxing, in ring, general	708	844	1035
Boxing, punching bag	354	422	518
Boxing, sparring	531	633	776
Broomball	413	493	604
Calisthenics, home, vigorous	472	563	690
Calisthenics, home, light/moderate	266	317	388
Canoeing, on camping trip	236	281	345
Canoeing, rowing, >6 mph, vigorous	708	844	1035
Canoeing, rowing, crewing, competition	708	844	1035
Canoeing, rowing, light	177	211	259
Canoeing, rowing, moderate	413	493	604
Carpentry, general	207	246	302
Carrying heavy loads, such as bricks	472	563	690
Child care: sitting/kneeling-dressing	177	211	259
Child care: standing-dressing, feeding	207	246	302
Circuit training, general	472	563	690
Cleaning, heavy, vigorous	266	317	388
Cleaning, house, general	207	246	302
Cleaning, light, moderate	148	176	216
Coaching: football, soccer, basketball	236	281	345
Construction, outside, remodeling	325	387	474
Cooking or food preparation	148	176	216
Cricket (batting, bowling)	295	352	431
Croquet	148	176	216
Curling	236	281	345
Dancing, aerobic, ballet or modern	354	422	518
Dancing, ballroom, fast	325	387	474
Dancing, ballroom, slow	177	211	259
Dancing, general	266	317	388
Darts, wall or lawn	148	176	216
Diving, springboard or platform	177	211	259
Electrical work, plumbing	207	246	302
Farming, baling hay, cleaning barn	472	563	690
Farming, milking by hand	177	211	259
Farming, shoveling grain	325	387	474
Fencing	354	422	518

**TABLE 3 - 130 – 190 LBS**

	<b>130 lbs</b>	<b>155 lbs</b>	<b>190 lbs</b>
Fishing from boat, sitting	148	176	216
Fishing from river bank, standing	207	246	302
Fishing in stream, in waders	354	422	518
Fishing, general	236	281	345
Fishing, ice, sitting	118	141	173
Football or baseball, playing catch	148	176	216
Football, competitive	531	633	776
Football, touch, flag, general	472	563	690
Frisbee playing, general	177	211	259
Frisbee, ultimate	207	246	302
Gardening, general	295	352	431
Golf, carrying clubs	325	387	474
Golf, general	236	281	345
Golf, miniature or driving range	177	211	259
Golf, pulling clubs	295	352	431
Golf, using power cart	207	246	302
Gymnastics, general	236	281	345
Hackey sack	236	281	345
Handball, general	708	844	1035
Handball, team	472	563	690
Health club exercise, general	325	387	474
Hiking, cross country	354	422	518
Hockey, field	472	563	690
Hockey, ice	472	563	690
Horse grooming	354	422	518
Horse racing, galloping	472	563	690
Horseback riding, general	236	281	345
Horseback riding, trotting	384	457	561
Horseback riding, walking	148	176	216
Hunting, general	295	352	431
Jai alai	708	844	1035
Jogging, general	413	493	604
Judo, karate, kick boxing, tae kwan do	590	704	863
Kayaking	295	352	431
Kickball	413	493	604
Lacrosse	472	563	690
Marching band, playing instrument	236	281	345
Marching, rapidly, military	384	457	561
Moto-cross	236	281	345
Moving furniture, household	354	422	518
Moving household items-upstairs	531	633	776

**TABLE 3 - 130 – 190 LBS**

	<b>130 lbs</b>	<b>155 lbs</b>	<b>190 lbs</b>
Moving household items-carrying	413	493	604
Mowing lawn, general	325	387	474
Mowing lawn, riding mower	148	176	216
Music playing, cello, flute, horn	118	141	173
Music playing, drums	236	281	345
Music playing, guitar, classical (sitting)	118	141	173
Music playing, guitar, rock/roll (stand)	177	211	259
Music playing, piano, organ, violin	148	176	216
Paddleboat	236	281	345
Painting, papering, plastering, scraping	266	317	388
Polo	472	563	690
Pushing or pulling stroller with child	148	176	216
Race walking	384	457	561
Racquetball, casual, general	413	493	604
Racquetball, competitive	590	704	863
Raking lawn	236	281	345
Rock climbing, ascending rock	649	774	949
Rock climbing, rappelling	472	563	690
Rope jumping, fast	708	844	1035
Rope jumping, moderate, general	590	704	863
Rope jumping, slow	472	563	690
Rowing, stationary, light	561	669	819
Rowing, stationary, moderate	413	493	604
Rowing, stationary, very vigorous	708	844	1035
Rowing, stationary, vigorous	502	598	733
Rugby	590	704	863
Running, 10 mph (6 min mile)	944	1126	1380
Running, 10.9 mph (5.5 min mile)	1062	1267	1553
Running, 5 mph (12 min mile)	472	563	690
Running, 5.2 mph (11.5 min mile)	531	633	776
Running, 6 mph (10 min mile)	590	704	863
Running, 6.7 mph (9 min mile)	649	774	949
Running, 7 mph (8.5 min mile)	679	809	992
Running, 7.5mph (8 min mile)	738	880	1078
Running, 8 mph (7.5 min mile)	797	950	1165
Running, 8.6 mph (7 min mile)	826	985	1208
Running, 9 mph (6.5 min mile)	885	1056	1294
Running, cross country	531	633	776
Running, general	472	563	690
Running, in place	472	563	690
Running, on a track, team practice	590	704	863

**TABLE 3 - 130 – 190 LBS**

	<b>130 lbs</b>	<b>155 lbs</b>	<b>190 lbs</b>
Running, stairs, up	885	1056	1294
Running, training, pushing wheelchair	472	563	690
Running, wheeling, general	177	211	259
Sailing, windsurfing, general	177	211	259
Sailing, in competition	295	352	431
Scrubbing floors, on hands and knees	325	387	474
Shoveling snow, by hand	354	422	518
Shuffleboard, lawn bowling	177	211	259
Sitting-playing with child(ren)-light	148	176	216
Skateboarding	295	352	431
Skating, ice, 9 mph or less	325	387	474
Skating, ice, general	413	493	604
Skating, ice, rapidly, > 9 mph	531	633	776
Skating, ice, speed, competitive	885	1056	1294
Skating, roller	413	493	604
Ski jumping (climb up carrying skis)	413	493	604
Ski machine, general	561	669	819
Skiing, cross-country, racing	826	985	1208
Skiing, cross-country, moderate	472	563	690
Skiing, cross-country, slow or light	413	493	604
Skiing, cross-country, uphill, max	974	1161	1423
Skiing, cross-country, vigorous	531	633	776
Skiing, downhill, light	295	352	431
Skiing, downhill, moderate	354	422	518
Skiing, downhill, vigorous , racing	472	563	690
Skiing, snow, general	413	493	604
Skiing, water	354	422	518
Ski-mobiling, water	413	493	604
Skin diving, scuba diving, general	413	493	604
Sledding, bobsledding, luge	413	493	604
Snorkeling	295	352	431
Snow shoeing	472	563	690
Snowmobiling	207	246	302
Soccer, casual, general	413	493	604
Soccer, competitive	590	704	863
Softball or baseball, fast or slow pitch	295	352	431
Softball, officiating	354	422	518
Squash	708	844	1035
Stair-treadmill ergometer, general	354	422	518
Standing-packing/unpacking boxes	207	246	302
Stretching, hatha yoga	236	281	345

**TABLE 3 - 130 – 190 LBS**

	<b>130 lbs</b>	<b>155 lbs</b>	<b>190 lbs</b>
Surfing, body or board	177	211	259
Sweeping garage, sidewalk	236	281	345
Swimming laps- fast-vigorous	590	704	863
Swimming laps, freestyle-light	472	563	690
Swimming, backstroke, general	472	563	690
Swimming, breaststroke, general	590	704	863
Swimming, butterfly, general	649	774	949
Swimming, leisurely, general	354	422	518
Swimming, sidestroke, general	472	563	690
Swimming, synchronized	472	563	690
Swimming, treading water, vigorous	590	704	863
Swimming, treading water, moderate	236	281	345
Table tennis, ping pong	236	281	345
Tai chi	236	281	345
Teaching aerobics class	354	422	518
Tennis, doubles	354	422	518
Tennis, general	413	493	604
Tennis, singles	472	563	690
Unicycling	295	352	431
Volleyball, beach	472	563	690
Volleyball, competitive, in gymnasium	236	281	345
Volleyball, noncompetitive	177	211	259
Walk/run-playing with child-moderate	236	281	345
Walk/run-playing with child-vigorous	295	352	431
Walking, 2.0 mph, slow pace	148	176	216
Walking, 3.0 mph, mod. pace	207	246	302
Walking, 3.5 mph, uphill	354	422	518
Walking, 4.0 mph, very brisk pace	236	281	345
Walking, carrying infant or 15-lb load	207	246	302
Walking, grass track	295	352	431
Walking, upstairs	472	563	690
Walking, using crutches	236	281	345
Wallyball, general	413	493	604
Water aerobics, water calisthenics	236	281	345
Water polo	590	704	863
Water volleyball	177	211	259
Weight lifting/body building, vigorous	354	422	518
Weight lifting, light or moderate	177	211	259
Whitewater rafting/kayaking/canoeing	295	352	431

Handout for Chapter 2, Lesson 3: Do You See What I See?

## Famous Person Body Chart – Youth Perceptions

List TV, movie, and sports personalities you see on TV. Put a check in the column that indicates your opinion of their body type. At the end of the week, count up how many famous people have “Just Right” bodies, how many you think are Too Fat (Needs to lose weight), or Too Thin (Needs to gain weight).

Name Of Famous Person	Just Right	Too Fat (Needs to lose weight)	Too Thin (Needs to gain weight)

Handout for Chapter 2, Lesson 3: Do You See What I See?

## Eating Disorders Fact Sheet

### Behaviors

Here is a list of general behaviors that suggest the presence of an eating disorder.

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Use of diuretics, laxatives, diet pills</li> <li><input type="checkbox"/> Obsessed with calories, fat, exercise</li> <li><input type="checkbox"/> Induced vomiting with ipecac or self induced</li> <li><input type="checkbox"/> Very low fluid intake</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Depressed, low self esteem, withdrawn, lack of interest in social events</li> <li><input type="checkbox"/> No admission of any problem but talks about food frequently</li> <li><input type="checkbox"/> Avoids mealtimes and eating or eats alone</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Refuses certain foods</li> <li><input type="checkbox"/> Frequently weighs self</li> <li><input type="checkbox"/> Denies being hungry</li> <li><input type="checkbox"/> Hides food or has unusual rituals</li> <li><input type="checkbox"/> Often cold, fatigued</li> </ul> |
|---|---|--|

### Anorexia

#### Definition

Self-imposed starvation to lose weight to be very thin. Person becomes fearful and obsessed about being fat, focuses on food, weight, and dieting to the extent that many other things are ignored. Anorexia is diagnosed by the presence of other medical complications caused by lack of nutrients.

#### Physical Results of Anorexia

- ☐ Loss of muscle
- ☐ Loss of endurance, poor coordination
- ☐ Decreased speed and strength
- ☐ Increased heart function
- ☐ Loss of bone mass and thinning hair
- ☐ Amenorrhea
- ☐ Irritability
- ☐ Constipation or incontinence
- ☐ Bruises easily
- ☐ Headaches, sore joints

#### Diagnosing Anorexia

- ☐ Body weight maintained at 15% below expected weight
- ☐ Intense fear of becoming obese although already underweight
- ☐ Self image distorted--believes self to be fat, even though underweight
- ☐ For females, lack of at least 3 menstrual cycles in a row



Handout for Chapter 2, Lesson 3: Do You See What I See?

### Eating Disorders Fact Sheet (continued)

#### Bulimia

##### Definition

Binge eating followed by purging. Most common purge is self-induced vomiting, but may also include use of laxatives and excessive exercise. May be the result of emotional stress or a desire to lose weight quickly. When hunger occurs, the person will binge, but then guilt triggers the purging. Depression and low self esteem result.

##### Physical Results of Bulimia

- ❑ Bad breath
- ❑ Dental problems- tooth enamel destroyed
- ❑ Electrolyte imbalance
- ❑ Irregular heartbeat
- ❑ Permanent damage to throat, mouth and esophagus from acid in vomit

##### Diagnosing Bulimia

- ❑ Recurring episodes of binge eating (eating large amounts of food in less than 2 hours)
- ❑ Fearful of not being able to stop while bingeing
- ❑ Self induced vomiting, use of laxatives, or rigorous dieting, fasting, or exercise
- ❑ At least 2 binges per week for at least 3 months
- ❑ Over emphasis on body image

#### Compulsive Overeating (Binge Eating)

##### Definition

Compulsive overeating, also called binge eating, is characterized by recurrent overeating to the point of discomfort or actual illness. An inability to control the amount of food intake results in being overweight. This is unhealthy and creates guilt and shame.

##### Physical Results of Compulsive Overeating

- ❑ Continuing weight gain leading to obesity
- ❑ Frequent changes in weight
- ❑ Excessive sweating and shortness of breath
- ❑ Mood swings
- ❑ Secretive eating habits, including hiding food
- ❑ Often tired but has trouble sleeping

##### Diagnosing Compulsive Overeating

- ❑ Frequent weight gain and loss—chronic dieting
- ❑ Secretive food patterns- hides food, eats at unusual times
- ❑ Frequent loss of breath after light activity
- ❑ Knows eating is out of control, makes disparaging comments about self after eating
- ❑ Eats to the point of discomfort regularly
- ❑ Eats very quickly

Handout for Chapter 2 Lesson 3: Do You See What I See?

### Measure Your Frame Size Ruler

Use this 8" ruler to measure wrist for frame size.

✂ Cut out this ruler.

	Inches
1	
2	
3	
4	
5	
6	
7	
8	

Handout for Chapter 3, Lesson 1: Nutrient Knowledge

**Sample Label for Macaroni and Cheese**

Sample label for  
Macaroni & Cheese

<b>Nutrition Facts</b>	
Serving Size 1 cup (228g) Servings Per Container 2	
<b>Amount Per Serving</b>	
<b>Calories</b> 250	Calories from Fat 110
	<b>% Daily Value*</b>
<b>Total Fat</b> 12g	<b>18%</b>
Saturated Fat 3g	15%
Trans Fat 3g	
<b>Cholesterol</b> 30mg	<b>10%</b>
<b>Sodium</b> 470mg	<b>20%</b>
<b>Total Carbohydrate</b> 31g	<b>10%</b>
Dietary Fiber 0g	0%
Sugars 5g	
<b>Protein</b> 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

**1 Start Here** →

**2 Check Calories**

**3 Limit these Nutrients**

**4 Get Enough of these Nutrients**

**5 Footnote**

**6 Quick Guide to % DV**

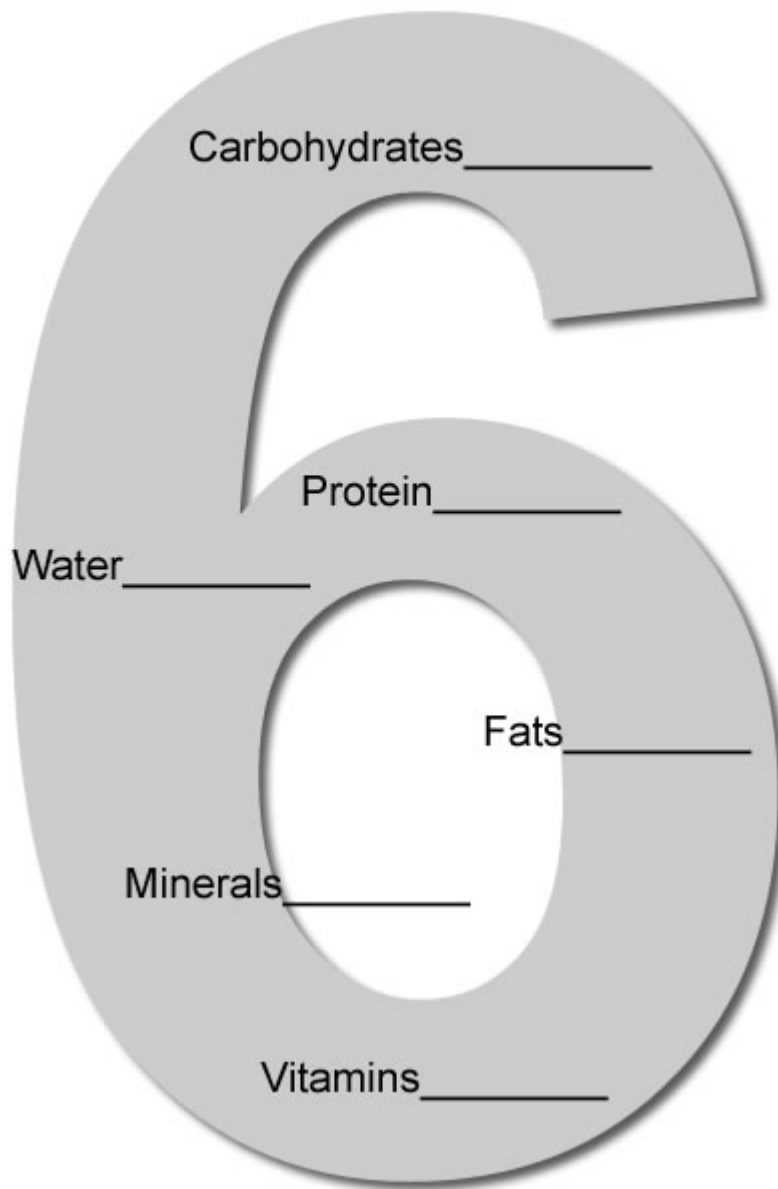
- 5% or less is Low
- 20% or more is High

**INGREDIENTS:** ENRICHED MACARONI PRODUCT (WHEAT FLOUR, NIACIN, FERROUS SULFATE (IRON), THIAMIN MONONITRATE (VITAMIN B1), RIBOFLAVIN (VITAMIN B2), FOLIC ACID; CHEESE SAUCE (WATER, CANOLA OIL, MILK, WHEY PROTEIN CONCENTRATE, MILK PROTEIN CONCENTRATE, SODIUM PHOSPHATE, MILKFAT, SALT, WHEY, CONTAINS LESS THAN 2% OF SODIUM ALGINATE, LACTIC ACID, SORBIC ACID AS A PRESERVATIVE, OLEORESIN PAPRIKA (COLOR), CHEESE CULTURE, ANNATTO (COLOR), NATURAL FLAVOR, ENZYMES, VITAMIN A PALMITATE)

Handout for Chapter 3, Lesson 1: Nutrient Knowledge

## The Big 6

Name of Food \_\_\_\_\_



Carbohydrates \_\_\_\_\_

Protein \_\_\_\_\_

Water \_\_\_\_\_

Fats \_\_\_\_\_

Minerals \_\_\_\_\_

Vitamins \_\_\_\_\_

## Handout for Chapter 3, Lesson 1: Nutrient Knowledge

*Recipe***Pyramid Salsa****UTENSILS**

Cutting knife  
Cutting board,  
Measuring cups/spoons  
Mixing/serving spoons  
2 mixing/serving bowls  
Can opener

**INGREDIENTS**

1 large can tomatoes, chopped  
1 cloves garlic, minced  
1 green pepper, finely chopped  
2 tablespoons lime juice  
4 green onions, finely chopped  
1 can corn, drained  
¼ cup chopped cilantro  
1 can black beans, rinsed  
1 small jalapeno, finely chopped  
Low-fat corn or flour tortilla chips

**DIRECTIONS**

Combine all ingredients. Serve with low-fat corn or flour tortilla chips.

Handout for Chapter 3, Lesson 2: Break It Up – Breakfast First!

## Building Better Breakfasts

Plan three easy, nutritious, breakfasts that you can fix by yourself. Make sure you include at least three different food groups in each one!

<b>Breakfast 1</b>	
<b>Breakfast 2</b>	
<b>Breakfast 3</b>	

Handout for Chapter 3, Lesson 2: Break It Up – Breakfast First!

## *Recipes*

### Four Fun Breakfasts

#### UTENSILS

Cutting board  
Sharp knife  
Measuring cups spoons  
Microwave oven  
Blender

RECIPE	INGREDIENTS	DIRECTIONS
<b>Fruit and Nut Oatmeal</b>	¼ cup dried cranberries 2 tablespoons sliced almonds Quick oatmeal Water	Add the cranberries and almonds (or any fruit and nut) to quick oatmeal and water. Microwave for sixty seconds or as directed on quick oatmeal package.
<b>Breakfast Smoothie</b>	½ cup low-fat milk (1% or lower) 3-5 frozen strawberries Banana	Place the milk, strawberries, and half a banana in a blender. Blend for 30 seconds. Enjoy your drink with a whole wheat bagel. Substitute any fresh or frozen fruits or 100% fruit juice.
<b>Banana Dogs</b>	1 tablespoon peanut butter Whole grain hot dog bun Banana 1 tablespoon raisins Optional: whole grain cereal	Spread the peanut butter on a whole grain hot dog bun. Add a banana and sprinkle with raisins. Instead of using a hot dog bun you may spread a banana with peanut butter roll it in a whole grain cereal.
<b>Breakfast Taco</b>	2 tablespoons grated Monterey Jack cheese Corn tortilla Salsa	Sprinkle the Monterey Jack cheese over a corn tortilla. Fold tortilla in half and microwave for twenty seconds. Top with salsa.

Handout for Chapter 3, Lesson 2: Break It Up – Breakfast First!

## *Recipe*

### **Banana Split Cereal**

#### **UTENSILS**

Cutting knife  
Cutting board  
Measuring cups/spoons  
Mixing/serving spoons  
Serving bowl  
Colander

#### **INGREDIENTS**

1 small ripe banana  
Blueberries (or other fresh fruit)  
½ cup nonfat vanilla yogurt  
½ cup low-sugar cereal (Cheerios, Wheaties, Grape Nuts or Bran Flakes)

#### **DIRECTIONS**

Peel banana and slice it lengthwise from tip to tip. Wash blueberries by placing in a colander and running water over them. If you use other fruits, wash them and cut into small pieces. Sprinkle the cereal on top of the yogurt. Arrange the banana halves on either side of the yogurt. Sprinkle the top with the blueberries or other fruit. Makes 1 breakfast serving or 4-6 samples.



## Handout for Chapter 3, Lesson 3: Snack Attack

*Recipe***Pyramid Pita Pizza****UTENSILS**

Cutting board  
Sharp knife  
Can opener  
Mixing/serving bowl  
Dinner plate  
Toaster oven or regular oven  
Baking sheet

**INGREDIENTS**

4 whole wheat pita breads  
¼ cup low-sodium spaghetti sauce or pizza sauce  
¼ teaspoon dried oregano  
1 cup chopped red or green bell pepper  
1½ cups canned pineapple chunks packed in 100% fruit juice, drained  
1/3 cup chopped lean, low-sodium ham  
¾ cup shredded reduced-fat cheddar cheese

**DIRECTIONS**

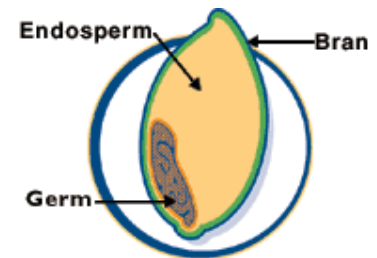
Heat oven to 400° F. Place pita breads on baking sheet. Spread each pita with 1 tablespoon of spaghetti sauce. Sprinkle with oregano. Top each pita with pepper, pineapple, ham, and cheese. Bake until hot and cheese bubbles, about 5 minutes. Remove pizzas from baking sheet. Place each pizza on a dinner plate and serve. Makes 4 (1 piece) servings.

Handout for Chapter 3, Lesson 4: Grainy Brains

## What Are Whole Grains?

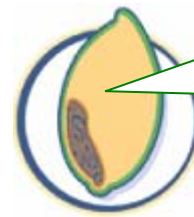
### WHOLE GRAIN COMPONENTS

Whole grains include all three parts of a grain kernel: the bran, germ, and endosperm. Whole grain foods are made with all three of these grain components. For instance, whole wheat flour, some breakfast cereals, brown rice, barley, and oatmeal are all considered whole grain foods. You'll find more information at: <http://www.bellinstitute.com>.



### THE WHOLE IS GREATER THAN THE SUM OF THE PARTS

The fiber, vitamins, minerals, and hundreds of phytochemicals found in whole grains work together in powerful ways. Though the exact mechanisms are unknown, scientific evidence shows that regular consumption of whole grains is linked to a reduced risk of certain diseases.



The whole is greater than the sum of its parts.

- Vitamins
- Antioxidants
- Carbohydrates
- Phytonutrients
- Minerals

### HEALTH BENEFITS OF WHOLE GRAINS

A diet that contains whole grains may have these benefits:

- Reduced overall risk for heart disease and heart disease mortality.
- Reduced instances of certain cancers - most notably gastrointestinal cancers.
- Whole grain foods appear to influence carbohydrate metabolism. Studies suggest that consuming whole grain foods may reduce the risk for developing Type II diabetes.



IN A LOW-FAT DIET, WHOLE GRAIN FOODS LIKE TOTAL MAY REDUCE THE RISKS OF HEART DISEASE and SOME CANCERS

### FINDING WHOLE GRAIN FOODS

To check for whole grains, scan the ingredient list on a food label. Look for the words "whole" or "whole grain" before the name of the grain (e.g., wheat, oats, corn, rice) and it should be the first ingredient.

Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

**INGREDIENTS:** WHOLE GRAIN OATS (INCLUDES THE OAT BRAN), MODIFIED CORN STARCH, WHEAT STARCH, SUGAR, SALT, OAT FIBER, TRISODIUM PHOSPHATE, CALCIUM CARBONATE, VITAMIN E (MIXED TOCOPHEROLS) ADDED TO PRESERVE FRESHNESS. **VITAMINS AND MINERALS:** IRON AND ZINC (MINERAL)

Handout for Chapter 3, Lesson 4: Grainy Brainy

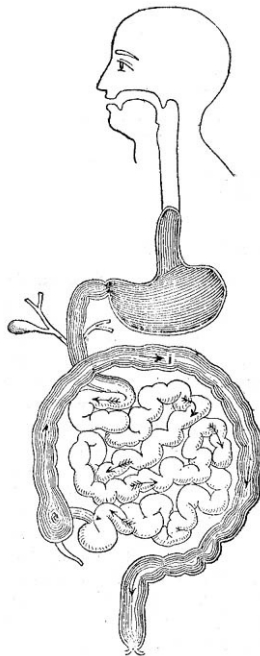
## Making A Model Of The Digestive System

### SUPPLIES:

Clothesline cord, ½ gallon plastic milk container, plastic teeth

### INSTRUCTIONS

You will be making a model of the digestive system. At the open end of a ½ gallon container, attach a piece of clothesline about 10 inches long. Attach the teeth to one end of the cord. The short piece of line represents the esophagus, attached to the stomach and teeth. At the other end of the container, cut a small opening and extend from it a braided piece of clothesline, which represents the small intestine. Make a braided clothesline by taking three strands, 20 feet in length and braiding. Finally, extend a thicker piece of braided clothesline from the end of the 20-foot piece. This represents the large intestine. Make the thicker braided clothesline using five or six pieces of rope, 5 feet in length.



## Handout for Chapter 3, Lesson 4: Grainy Brainy

## How Many Grains?



# How Many Grains?

This chart shows how much to eat from the Grains Group. This amount is right for persons who get less than 30 minutes of moderate physical activity each day. Young people who are more active may need to eat more food to meet their calorie (energy) needs. Individual needs vary, so use this as a general guide to food intake.

Group	Age	Daily Recommendation	Daily Minimum Amount of Whole Grains
Children	4 to 8 years old	4 to 5 ounces	2 to 2½ ounces
Girls	9 to 13 years old	5 ounces	3 ounces
	14 to 18 years old	6 ounces	3 ounces
Boys	9 to 13 years old	6 ounces	3 ounces
	14 to 18 years old	7 ounces	3½ ounces

## What counts as an ounce of grains?

In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or ½ cup of cooked rice, cooked pasta, or cooked cereal each counts as 1-ounce from the grains group.

Here are a few more examples:

1 mini bagel  
1 slice regular bread  
½ cup cooked rice  
½ cup cooked pasta



1 6-inch tortilla  
1 cup breakfast cereal  
1 packet instant oatmeal  
½ English muffin



University of Florida, IFAS Extension, Department of Family, Youth and Community Sciences, 2005, <http://fyces.ifas.ufl.edu/pyramid/index.htm>.  
For more information, visit <http://MyPyramid.gov>.



## Handout for Chapter 3, Lesson 4: Grainy Brainy

*Recipe***Bread In A Bag****UTENSILS**

1 zip-lock heavy duty freezer baggie (gallon size)  
Measuring spoons  
Measuring cups (dry and liquid)  
Rolling pin (optional)  
Bread pans or foil disposable pans  
Cooking spray  
Large shallow pan  
Baking sheet

**INGREDIENTS**

2 cups all-purpose flour  
1 package rapid-rise yeast  
3 tablespoons sugar  
3 tablespoons nonfat dry milk  
1 teaspoon salt  
1 cup hot water (125 to 130 °F)  
3 tablespoons vegetable oil  
1 cup whole wheat flour  
Boiling water

**DIRECTIONS**

Combine 1 cup all-purpose flour, undissolved yeast, sugar, dry milk, and salt in the 1-gallon heavy duty freezer bag with zipper-lock. Squeeze upper part of bag to force out air. Shake and work bag with fingers to blend ingredients. Add hot water and oil to dry ingredients. Reseal bag. Mix by working bag with fingers. Add whole wheat flour; reseal bag and mix thoroughly. Gradually add enough remaining all-purpose flour to make a stiff dough that pulls away from bag.

On floured surface, knead dough 2 to 4 minutes, until smooth and elastic. Cover dough; rest 10 minutes. After 10 minutes, roll dough to 12 x 7-inch rectangle. Roll up from narrow end. Pinch edges and ends to seal. Place in oiled 8 ½ x 4 ½ x 2 ¼-inch glass loaf pan; cover. Place large shallow pan on counter; half filled with boiling water. Place baking sheet over shallow pan; let dough rise 20 minutes or until double in size. Bake at 375°F for 25 minutes or until done. Remove from pan and cool on wire rack. Slice with serrated knife to serve.

## Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

*Recipe***Tacos****UTENSILS**

Measuring cups (dry and liquid)  
Mixing bowls/spoons  
Serving plate  
Saucepan  
Can opener  
Plates  
Bowls  
Cutting boards  
Cutting knives  
Grater

**INGREDIENTS**

Miniature taco shells, as needed  
1 16-ounce can vegetarian refried beans  
Shredded lettuce, as needed  
Finely diced, firm ripe tomatoes, as needed  
Grated Cheddar or Monterey Jack cheese or soy cheese, as needed  
Mild taco sauce, optional

**DIRECTIONS**

Heat the taco shells according to package directions while preparing the filling. Place on a serving plate. Combine the refried beans in a small saucepan with 1/4 cup water. Stir together and cook until warmed through. Transfer all or part of the warmed beans to a serving bowl. Arrange the lettuce, tomatoes, and cheese in individual small serving bowls or in small mounds on a platter. Have everyone fill their tacos with a little of the refried beans, then some lettuce, tomatoes, and cheese. Whoever wishes some can top their taco with a little sauce. Serve with plenty of napkins!

## Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

## *Recipe*

### **Hummus**

#### **UTENSILS**

Measuring cups (liquid)  
Measuring spoons  
Mixing bowls/spoons  
Serving plate/bowl  
Can opener  
Cutting boards  
Cutting knives

#### **INGREDIENTS**

15 ounce can chickpeas, rinsed and drained  
 $\frac{3}{4}$  cup water  
 $\frac{1}{2}$  cup Tahini  
 $\frac{3}{4}$  teaspoon salt  
1 clove garlic  
3 tablespoons olive oil  
Freshly ground black pepper  
2 tablespoons fresh parsley leaves, chopped  
2 teaspoons lemon juice  
Pita bread or chips

#### **DIRECTIONS**

In a food processor (or blender) combine first six ingredients and process until fully incorporated. Season with salt and pepper to taste. Refrigerate. When ready to serve stir in remaining 2 teaspoons of lemon juice and chopped parsley. Serve with pita bread or chips.

Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

page 1 of 4

## Losing Meat, But Keeping a Child's Diet Balanced<sup>11</sup>



By MINDY SINK

BOULDER, Colo. -- After seeing the movie "Babe" at age 9 and realizing the source of what was on her plate, Lauren Pierpoint of Boulder decided to stop eating meat. At age 6, Nathan Kessel of Boston was given a choice by his parents between a vegetarian diet and eating meat regularly; he has been a vegetarian for three years now. With a finicky toddler who would spit out any type of meat, Heidi Feldman of Norcross, Ga., decided "almost overnight" to put her entire family on a vegetarian diet. School lessons about endangered species combined with a visit to the zoo persuaded 7-year-old Laura Grzenda of Boulder to stop eating meat.

"Every time I put a piece of meat in my mouth, I felt like the animal was talking to me," Laura, now 12, said. "It was saying 'Moo, don't eat me.' " For Mrs. Feldman, the choice was a compromise. "Eating became a battleground and it was difficult for me to cook two different meals -- one for the three of us who ate meat and a vegetarian meal for Nicole," she said.

Vegetarian diets for children have become more accepted in recent years by some parents, pediatricians, nutritionists and even the renowned child care authority Dr. Benjamin Spock. In the seventh edition of "Baby and Child Care," published shortly after his death, in 1998, Dr. Spock recommended that a vegetarian diet begin at age 2, with fortified foods, drinks and daily vitamin and mineral supplements. Dr. Spock believed his own health improved after he switched to a vegetarian diet late in life.

Although Dr. Spock's push for a nearly lifelong vegetarian diet generated some controversy among his peers, it did not settle the matter of whether a meatless diet was ideal at any age, particularly in children and adolescents. Yet pediatricians in Colorado and elsewhere said in recent interviews that they were seeing more children and adolescents choosing vegetarian diets.

"I would say there is definitely a trend toward meatless diets," said Johanna Dwyer, a professor at Tufts University School of Nutrition and the director of the Frances Stern Nutrition Center at the New England Medical Center. But Dr. Dwyer noted that it was difficult to track the exact number of vegetarians, and therefore not easy to spot a trend.

A Gallup poll in September 1999 found that 6 percent of adult Americans considered themselves vegetarian. But an earlier poll commissioned by Vegetarian Times magazine went a step further to look at the families of adult vegetarians.

-----  
<sup>11</sup> Source: *Losing Meat, But Keeping a Child's Diet Balanced*, Mindy Sink, *The New York Times Learning Network*, July 25, 2000. This article can be found at:  
<http://www.nytimes.com/learning/teachers/lessons/20000725tuesday.html>.



Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

### **Losing Meat, But Keeping a Child's Diet Balanced**

**page 2 of 4**

In that poll, conducted in 1992 by Yankelovich, Skelly and White/Clancy Schulman, 37 percent of the 12.4 million people who described themselves as vegetarians had children under 18. Of those, 24 percent had at least one child at home who was also a vegetarian.

The reasons for choosing a vegetarian diet are varied and include picky eating, animal rights and environmental activism and the desire to be "hip" within certain peer groups. Parents sometimes choose the diet for their children, in an effort to reduce risks of certain illnesses or to adhere to religious or spiritual beliefs.

Stephanie Pierson, the author of "Vegetables Rock! A Complete Guide for Teenage Vegetarians" and the mother of a 17-year-old vegetarian, said she noticed a "hipness" factor for many kids. "It seems to work on a million different levels -- there are health reasons and animal rights, just a concern for the planet," she said.

The term vegetarian generally means a person who does not eat meat, and instead favors a diet of foods from plant sources. A lacto-vegetarian is someone who eats dairy products but no eggs, meat, fish, poultry or seafood; an ovo-vegetarian eats eggs but no meat, fish, poultry or seafood; a pesco-vegetarian will eat fish but no other meat; a pollo-vegetarian eats chicken but no other meat. One of the more strict diets is the vegan (pronounced VEE-gun), in which someone eats food only from plant sources and may also avoid eating honey or taking animal-based supplements and immunizations or wearing leather clothing.

Ms. Pierson's daughter, Phoebe, became a vegetarian at 13 after seeing an animal rights movie, where she learned the origin of veal. "I called it 'veal to zeal' and immediately I expected it to last maybe a week," Ms. Pierson said. At Ms. Pierson's house in South Salem, N.Y., meal times can be chaotic with a pot roast for her husband and stir-fried rice with tofu for her daughter. "Everybody in the family eats different stuff, but I try to have some sit-down meals together," she said.

Ms. Pierson said her daughter ate a lot of hummus and pita bread, as well as rice and beans, veggie burgers and non-cheese pizza for meals and bagels, guacamole and fresh fruit for snacks.

Some experts believe these types of healthier eating choices with low-fat, high-fiber foods should be introduced early. "Raising children as vegetarians has the advantage that we as adults tend to continue the diet we're raised on," said Dr. David Levitsky, a professor of nutrition and psychology at Cornell. "I find it almost impossible to make a nutritional argument against it."

But there is some concern that fat or sugar may replace meat in some children's diets. The American Dietetic Association has taken the position that "appropriately planned vegetarian diets are healthful, are nutritionally adequate and provide health benefits in the prevention and treatment of certain diseases."

Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

### **Losing Meat, But Keeping a Child's Diet Balanced**

**page 3 of 4**

The younger the children are, the more careful the parents need to be with their diets, said Dr. Nancy Krebs, co-director of Coordinated Nutrition Services at Children's Hospital in Denver. "Growth can easily be impacted, along with energy and nutritional requirements."

Concern lies with those who do not get enough protein, vitamins B12 and D, iron, calcium and zinc in their diets. All of these nutrients are found in animal sources, in which they are more easily absorbed by the body. Children need all of those elements for energy, cognitive thought and achieving maximum growth potential with proper tissue and bone density. When children are lacking essential nutrients, they can develop malnutrition, rickets, anemia and lack of menstruation in girls. They could also be susceptible to osteoporosis later in life.

"I see a lot of vegetarian kids who shouldn't be vegetarians," said Dr. Johanna Riley, a naturopath who practices in Boulder. "I'm not seeing swollen abdomens, like you would in Africa or Kosovo when there is malnutrition, but I'm seeing kids who are not vital. I see kids who are really pale, they get sick a lot with colds, they're tired and don't have good muscle tone."

Adequate caloric intake is an issue in any diet for children. "The big risk for growing children is getting enough calories in," said Dr. Nanci Grayson, a nutritionist in Boulder, who is raising her two children as vegetarians. "Because children have smaller stomachs, and they need to eat a great deal more bulk of legumes, nuts, grains, soy, beans and other foods. They might get full faster and, therefore, be eating less than their bodies need." Vegetarian diets are typically high in fiber, increasing the risk that nutrients will pass through the body before they are fully used, and weight loss may occur.

Fran Grzenda of Boulder said she tried to prepare vegetarian meals for the whole family, but added that she, her husband and their son looked forward to "burger nights" when their vegetarian daughter, Laura, had a sleepover at a friend's house. Laura acknowledged she was a picky eater, but said she liked "tofu in soups, pasta, guacamole, burritos" -- and chicken fingers with honey.

She said she noticed when she was 8, about a year after going vegetarian, that she felt weak and tired more often. She and her mother introduced some fish, chicken and turkey back into her diet. "Someday I'd like to be a strict vegetarian," she said. Many parents worry that, unsupervised, their children will fall back on pizza and bagels.

"That's the biggest unknown, the lunches," said Kim Pierpoint of Boulder, whose daughter has been a vegetarian for four years now. "Lauren's favorite things on the school lunch menu are pizza or nachos." To reduce fat in school lunches, the United States Department of Agriculture recently lifted restrictions on how much soy could be used in federally subsidized lunches.

Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

**Losing Meat, But Keeping a Child's Diet Balanced****page 4 of 4**

Soy, a popular protein source in vegetarian diets, can be found in tofu; soy cheese and milk and other soy foods are also available. Sloppy Joes might be replaced by veggie burgers or tofu-filled ravioli in school lunches.

Whether it is the choice of the parent or the child not to eat meat, there seems to be increasing support, in children's books with vegetarian characters, in restaurant and school cafeteria menu choices and in Internet chat rooms. The Vegetarian Resource Group has recently started a parents' network on its Web site where people can exchange recipes and advice.

The consensus among parents, nutritionists and doctors is that children need balanced and varied diets, whether they include meat or not. "Data show that young adults who consume a vegetarian diet are just as healthy or more so than those who are not, and the key is sufficient variability," Dr. Levitsky said.

Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

## Where's the Beef?

*Investigating the Benefits and Challenges of a Vegetarian Diet for Young People*

page 1 of 6

*The New York Times Learning Network, July 25, 2000.*

### Author(s)

[Eric Miller, The New York Times Learning Network](#)

**Grades:** 6-8, 9-12

**Subjects:** Health, Science

[Interdisciplinary Connections](#)

**Overview of Lesson Plan:** In this lesson, students create and conduct a community survey to evaluate the demographics of vegetarians in their community. Students compile data, create graphs, calculate percentages, and draw conclusions about their survey data. Students create an informational awareness pamphlet for other young people about the benefits and challenges of a vegetarian diet.

Review the [Academic Content Standards](#) related to this lesson.

**Suggested Time Allowance:** 45 minutes- 1 hour

### Objectives:

Students will:

1. Brainstorm the reasons choose to eat a vegetarian diet.
2. Explore the benefits and challenges of a vegetarian diet for young people by reading and discussing, "Losing Meat, but Keeping a Child's Diet Balanced."
3. Create a list of vegetarian demographic survey questions, conduct a survey of vegetarians about their eating habits and history, compile survey results, and compose a written and graphical analysis of the data.
4. Produce informational pamphlets about the benefits and challenges of a vegetarian diet for teens.

### Resources / Materials:

- Student journals or lab notebooks
- Paper
- Pens/pencils
- Classroom blackboard
- Copies of "Losing Meat, but Keeping a Child's Diet Balanced" (one per student)

### Activities / Procedures:

1. WARM-UP/DO-NOW: Students respond to the following in their journals (written on the board prior to class): "What do you think are some reasons why some people choose to follow a vegetarian diet? Have you or anyone you known eaten a vegetarian diet for a period of time? Explain." After five to ten minutes, students share and discuss their responses.

## Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

**Where's the Beef?** *Investigating the Benefits and Challenges of a Vegetarian Diet for Young People***page 2 of 6**

Record a list of student responses on the board, categorizing similar responses. Leave the list posted for the duration of the following activity.

2. As a class, read and discuss "Losing Meat, but Keeping a Child's Diet Balanced," focusing on the following questions:

- a. Why are some kids rejecting meat in their diets?
- b. How do vegetarian kids sometimes force compromises in the family diet?
- c. What has led to more widespread acceptance of vegetarian diets for children?
- d. For what reasons do people often choose a vegetarian diet?
- e. What are the different types of vegetarians?
- f. Why do some experts consider vegetarian diets to be generally healthier?
- g. What concerns do some experts have about vegetarian diets for young people?
- h. What types of concerns do parents have about their children eating vegetarian diets?
- i. What evidence from popular culture shows the growing interest in vegetarianism?

3. Explain to the students that they will be conducting a community survey to explore the demographics of the vegetarians in their community. With their teacher's guidance, students will create a survey that focuses on research questions of interest to the class. The following are suggested survey questions that teachers may choose from in creating a survey:

- Are you currently or have you ever in the past eaten a vegetarian diet? If so, for how long?
- What were your reason(s) for choosing a vegetarian diet? (i.e. picky eating, animal rights, environmental activism, desire to be "hip", health reasons, family diet, religious or spiritual beliefs)
- Are any immediate family members vegetarians? If so, did their diet influence your food choices?
- What do you see as the benefits of a vegetarian diet?
- What are the challenges of being a vegetarian?
- How would you classify yourself as a vegetarian? (lacto-vegetarian, ovo-vegetarian, pesco-vegetarian, pollo-vegetarian, vegan)

Students discuss anticipated results of their selected survey questions. Students interview members of the school community (students, faculty, and staff), family members and relatives, as well as any other members of the community. The class may decide before hand to focus on a particular age group. Once data is collected, students compile their data within like categories. Reproduce for each member of the class (or post in a prominent location) a summary of all compiled data. Using the focus questions chosen at the start of the survey, students create graphs, calculate percentages, and draw conclusions about the nature of the data they collected. Students create a data analysis packet that includes the above criteria and a final reflection of their research process and the relationship between their results and their initial expectations.

Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

**Where's the Beef?** *Investigating the Benefits and Challenges of a Vegetarian Diet for Young People*

page 3 of 6

4. WRAP-UP/HOMEWORK: Students create awareness pamphlets for teens that provide information and resources about the challenges and benefits of a vegetarian diet. Students use information from the featured article and information from additional research (Internet recommended) to complete their pamphlet. You may want to divide students into small groups for this project, assigning each a different vegetarian diet (lacto-vegetarian, ovo-vegetarian, pesco-vegetarian, pollo-vegetarian, vegan, etc.) to research.

**Further Questions for Discussion:**

- Are you or anyone you know a vegetarian?
- What do you think are some of the advantages and disadvantages of being a vegetarian?
- Do you agree with the saying, "You are what you eat"? Why or why not?
- Do you think vegetarianism is popular among your peers?
- What evidence from popular culture have you noticed as evidence of vegetarianism's popularity (celebrities, movies, etc.)?

**Evaluation / Assessment:**

Students will be evaluated based on journal entries, participation in class discussions and community survey, complete and detailed analyses of group data, creative and informative educational pamphlets.

**Vocabulary:**

cognitive, anemia, osteoporosis, naturopath, consensus, variability

**Extension Activities:**

1. Interview your pediatrician or school nurse and create a chart or poster of the necessary physical and development milestones for normal development in humans' birth to 18. What role does proper nutrition play? How does nutrition impact physical and cognitive growth? What remedies do health professionals recommend to families of children who are not developing at standardized rates?

2. Learn more about the United States Department of Agriculture's Food Guide Pyramid. (<http://www.nal.usda.gov/fnic/fpyr/pyramid.html>) Explore the history of the Food Guide Pyramid and track the way it has changed over time. Investigate the social and political forces that have influenced the shape of the Food Guide Pyramid over time. Create a timeline overview of the pyramid.

3. Maintain a lunch food diary for a week. Track the ingredients of your school lunch menu, your own lunch, or the lunches of your friends. Compare the lunches you monitor with the USDA Food Guide Pyramid. Write an analysis of how these lunches compare with the USDA guidelines. (See Extension Activity 2 more information of the Pyramid).

Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

**Where's the Beef?** *Investigating the Benefits and Challenges of a Vegetarian Diet for Young People*

page 4 of 6

4. Research the impact of vegetarian and non-vegetarian diets on the environment. Use the Internet or other available resources to explore how our dietary choices impact the condition of the environment. Write a position paper presenting your opinion on whether human diets create a significant impact on the environment or not.

**Interdisciplinary Connections:**

**Civics-** Learn more about those who choose vegetarianism due to their concern about the ethical treatment of animals. Visit the Web site of PETA (People for the Ethical Treatment of Animals) (<http://www.peta-online.org>). Follow up your research with a written position letter in which you take a stand on the issue of animal treatment and diet choice. Do you agree or disagree with the points presented on the PETA Web site? Why or why not?

**Global History-** Research and write a comparative analysis in which you address how and why religious dietary laws were established for at least two of the world's major religious groups. How have religious teachings affected modern day food conventions in these groups? How have changes in food preparation and lifestyles affected the following of particular practices? Does the manner in which these religious groups follow their dietary laws differ across geographic locations?

**Language Arts-** Write a biography on the life of Dr. Benjamin Spock. For what is he most known? What interests outside of medicine did he hold? For what national office did he run?

**Media Studies-** Critically analyze and compare how either of the following pairs of Web sites present information about diet. Visit the Web site of EarthSave (<http://www.EarthSave.org/>) and the Web site of The National Cattlemen's Beef Association (<http://www.beef.org/nutrition/index.htm>). OR the Web site "got milk?" (<http://www.got-milk.com>) and the PETA Web site (<http://www.MilkSucks.com/>). (Analyze and compare the presentation of nutrition information on each pair of sites. Use the following "Six Questions to Ask about Any Media Message" to guide your analysis:

- Who is "speaking" and what is their purpose? (Who produced or sponsored the message?)
- Who is the target audience, and how is the message specifically tailored to them?
- What techniques are used to attract attention?
- What values and lifestyles are promoted? (What is communicated as good to be, or have, or do? What is not good to be, or have, or do?)
- What is implied without being specifically stated (especially about the credibility of the message)?
- What is left out of this message that might be important to know?

**References:**

"Six Questions to Ask about any Media Message" courtesy of Project Look Sharp ([www.ithaca.edu/looksharp](http://www.ithaca.edu/looksharp)).

Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

**Where's the Beef?** *Investigating the Benefits and Challenges of a Vegetarian Diet for Young People*

page 5 of 6

### Other Information on the Web

Vegetarian Youth Network (<http://www.geocities.com/RainForest/Vines/4482/index.html>) is a vegetarian organization run by and for vegetarian/vegan teenagers.

Veggie Kids (<http://www.execpc.com/~veggie/tips.html>) provides fun recipes, tips for feeding vegetarian kids, and more.

VegHead Magazine (<http://members.aol.com/vegheadmag/index/>) is a publication written for and by vegetarian youth.

Vegetarian Resource Group (<http://www.vrg.org/>) is dedicated to educating the public on vegetarianism and the interrelated issues of health, nutrition, ecology, ethics, and world hunger.

### Academic Content Standards:

This lesson plan may be used to address the academic standards listed below. These standards are drawn from [Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education: 2nd Edition](#) and have been provided courtesy of the [Mid-continent Research for Education and Learning](#) in Aurora, Colorado.

In addition, this lesson plan may be used to address the academic standards of a specific state. Links are provided where available from each McREL standard to the [Achieve](#) website containing state standards for over 40 states. The state standards are from [Achieve's National Standards Clearinghouse](#) and have been provided **courtesy of Achieve, Inc. in Cambridge Massachusetts and Washington, DC.**

### Grades 6-8

Science Standard 16- Understands the scientific enterprise. Benchmarks: Knows that the work of science requires a variety of human abilities, qualities, and habits of mind; Knows various settings in which scientists and engineers may work; Knows ways in which science and society influence one another

### Connect to State Standard

Health Standard 6- Understands essential concepts about nutrition and diet. Benchmarks: Understands how eating properly can help to reduce health; Knows appropriate methods to maintain, lose, or gain weight according to individual needs and scientific research

Health Standard 7- Knows how to maintain and promote personal health. Benchmarks: Knows personal health strengths and risks (e.g., results of a personal health assessment); Knows how positive health practices and appropriate health care can help to reduce health risks; Knows strategies and skills that are used to attain personal health goals



Handout for Chapter 3, Lesson 5: Vegetarianism In a Nutshell

**Where's the Beef?** *Investigating the Benefits and Challenges of a Vegetarian Diet for Young People*

**page 6 of 6**

Grades 9-12

Science Standard 16- Understands the scientific enterprise. Benchmarks: Understands that science involves different types of work in many different disciplines

[Connect to State Standard](#)

Health Standard 6- Understands essential concepts about nutrition and diet. Benchmarks: Understands how nutrient and energy needs vary in relation to gender, activity level, and stage of life cycle; Understands the reliability and validity of various sources of food and nutrition information; Understands the role of food additives and their relationship to health

Health Standard 7- Knows how to maintain and promote personal health. Benchmarks: Knows how personal behaviors relate to health and well-being and how these behaviors can be modified if necessary to promote achievement of health goals throughout life; Understands the short- and long-term consequences of safe, risky, and harmful behaviors

## Handout for Chapter 3, Lesson 7: Energy Drinks And Foods

*Recipe***Homemade Sports Drink****UTENSILS**

1 gallon container  
Measuring cups/spoons (liquid)  
Mixing spoons  
Can opener

**INGREDIENTS**

1 6-ounce can frozen concentrated orange juice (follow instructions on can)  
2 tablespoons lemon juice  
1 tablespoon lime juice  
3/4 teaspoon salt  
Water

**DIRECTIONS**

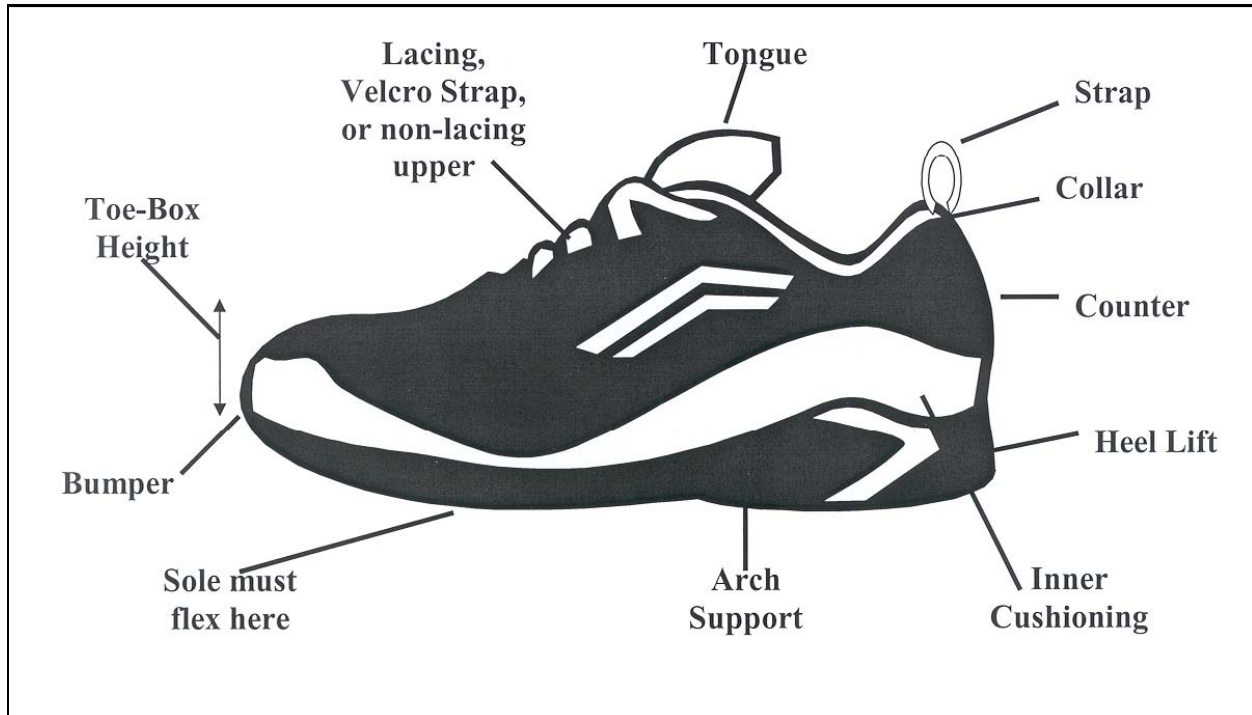
Mix all ingredients to equal one gallon. Refrigerate and use as a refreshment in the coming week.

**OPTIONAL**

Try this even easier recipe: 1 cup of orange juice, 1 cup of water and a pinch of salt.

Handout for Chapter 4, Lesson 2: If The Shoe Fits

## Identifying The Parts Of A Shoe<sup>12</sup>



**Bumper:** built up rubber strip at the toe of the shoe, designed to protect toes from impact

**Collar:** the part of the shoe where the foot is inserted

**Heel Counter:** this is where the shoe grips the heel of the foot to keep it from moving around inside the athletic shoe

**Insole:** well-cushioned pad the foot rest on inside the shoe; this may be removable

**Mid-sole:** a layer of padding between the insole and the outsole that provides shock absorbing protection for the foot

**Outsole:** the hard patterned surface on the bottom of the shoe that gives it traction when in contact with the playing or running surface

**Reflector:** found on shoes to help with visibility of being seen when outside at night

**Strap:** loop at the back of the shoe that helps you pull the shoe on

**Toe Box:** area of the shoe where the toes are

**Toe Cap:** a rubber, suede or leather patch at the top of the toe box that provides extra shock protection for the toes

**Tongue:** flap that protects the foot from being rubbed by the laces

**Upper:** the top of the shoe

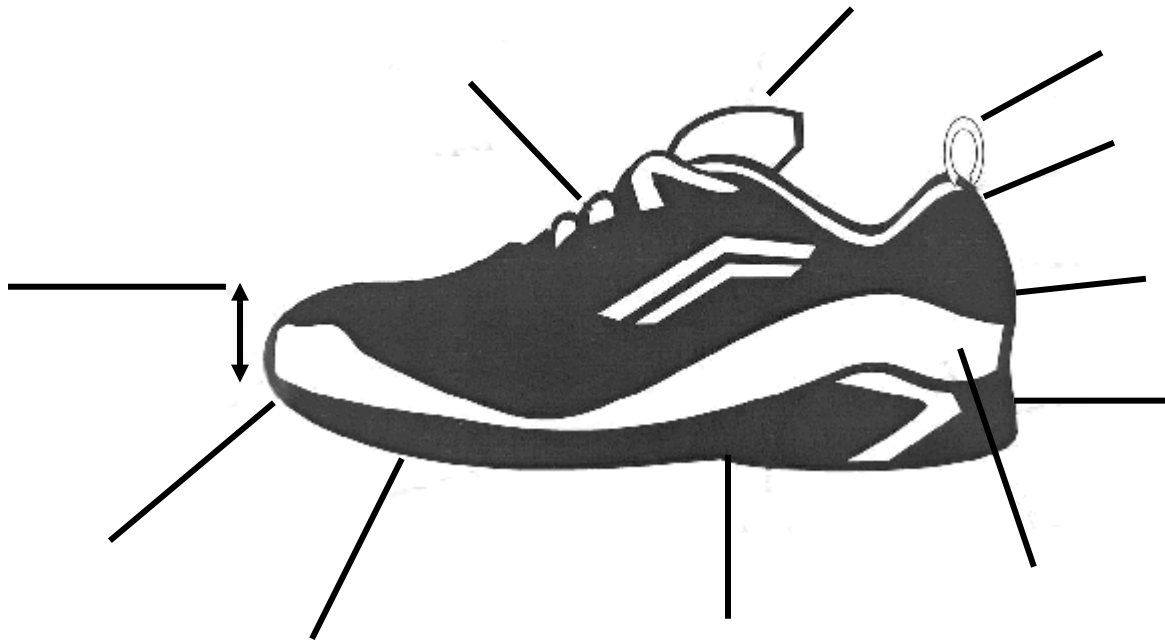
**Vamp:** the area on the upper that surrounds the laces; provides support to the instep

**Wedge:** cushiony rubber layer between the mid-sole and the outsole giving extra padding under the arch and heel

<sup>12</sup> Source: New Mexico 4-H Consumer Decision Making Classes R-2004

Handout for Chapter 4, Lesson 2: If The Shoe Fits

## Can You Label The Shoe Parts?<sup>13</sup>



-----  
<sup>13</sup> Source: New Mexico 4-H Consumer Decision Making Classes R-2004

## Buying Shoes: Construction, Fit/Comfort, And Price

Here are the most important qualities you should look for when buying an athletic shoe:

### CONSTRUCTION

Look for stitching that is even and straight. The sole of the shoe should be firmly attached to the upper. Check the inside and outside for irregular bumps and rough spots

### 6. FIT AND COMFORT

If shoes don't fit properly, you won't be able to run and jump your best. Shoes that fit poorly can make your feet hurt and contribute to foot problems. Here are some tips on fitting:

- Shop late in the day as this is when your feet are their largest.
- Measure your foot each time you need to purchase a new pair of shoes. You are growing and the size that fit you six months ago might not fit now.
- Try on the shoes with the type of socks you will be wearing with the shoes.
- Try on both shoes. It is common for one foot to be slightly larger and the shoe may feel comfortable on one foot, but not on the other.
- Look for shoes that give your toes room to wiggle. There should be about ½ inch or a thumb width between the biggest toe and the end of the shoe. This should be done while standing.
- Make sure the heel is securely in the shoe and does not slip.
- At the shoe store, wear them walk around while before purchasing the shoes and give them a short test run. If you are going to play basketball in these shoes, then try jumping, turning, and running a little to see how they feel. The shoes should feel comfortable when you first try them on.
- Some brands may fit a particular shape of foot better than other brands.

### COST

No matter who is advertising the shoe or what name brand is on the shoe, the most important thing to consider when buying a shoe is making sure it fits your foot comfortably. But you have to consider cost as well. The most expensive shoe, or the most advertised shoe, is not necessarily the best buy for your feet. Some cost tips are:

- Shoe costs vary greatly from one shoe to another. Some shoes are advertised heavily to get you excited about buying these shoes.
- Some may use a sports celebrity to advertise for them and some shoes are named after famous athletes. No matter who is advertising the shoe or what name brand is on the shoe, the most important thing to consider when buying a shoe is making sure it fits your foot comfortably.
- Some brands may fit a particular shape of foot better than others.

Handout for Chapter 4, Lesson 2: If The Shoe Fits

page 2 of 2

**Buying Shoes: Construction, Fit/Comfort, And Price continued****LAST**

The form on which a shoe is constructed is called a last. The last determines the inside shape of the shoe. There are three types of lasts; straight, curved, or semi-curved. If you turn a shoe up so you can look at the sole, you can see what kind of last has been used in the construction of the shoe.

- Straight last – If you draw a line from down the middle of the bottom of the shoe, both sides will look symmetrical. This last good for someone with a low arch or flat foot because it has more material at the midsole to add support.
- Semi-curved last – This last has a slight curve inward at the insole and is good for someone with a normal arch.
- Curved last - This last curves inward at the insole and is good for someone with a high, rigid arch.

Handout for Chapter 4, Lesson 2: If The Shoe Fits

## Shoe Part Definitions<sup>14</sup>

**Bumper:** built up rubber strip at the toe of the shoe, designed to protect toes from impact

**Collar:** the part of the shoe where the foot is inserted

**Heel Counter:** where the shoe grips the heel of the foot to keep it from moving around inside the athletic shoe

**Insole:** the well-cushioned pad on which the foot rest on inside the shoe; this may be removable

**Mid-sole:** a layer of padding between the insole and the outsole that provides shock-absorbing protection for the foot

**Outsole:** the hard patterned surface on the bottom of the shoe that gives it traction when in contact with the playing or running surface

**Reflector:** found on shoes to help with visibility of being seen when outside at night

**Strap:** loop at the back of the shoe that helps you pull the shoe on

**Toe Box:** area of the shoe where the toes are

**Toe Cap:** a rubber, suede or leather patch at the top of the toe box that provides extra shock protection for the toes

**Tongue:** flap that protects the foot from being rubbed by the laces

**Upper:** the top of the shoe

**Vamp:** the area on the upper that surrounds the laces; provides support to the instep

**Wedge:** cushiony rubber layer between the mid-sole and the outsole giving extra padding under the arch and heel

-----  
<sup>14</sup> Source: New Mexico 4-H Consumer Decision Making Classes R-2004

Handout for Chapter 4, Lesson 3: Which Sport, Which Shoe?

## Athletic Shoe Situations

### SITUATION 1 – SHOES FOR PHYSICAL EDUCATION CLASS (School Age)

It is back to school time and you need a new pair of shoes to wear to school and to use for PE class. You want a shoe that looks good, but also can be used to run on the track and play a variety of sports. The shoe must be durable and able to stand up to everyday use and provide comfort and support to your foot as you will be wearing it all day. You have \$50 to spend on this shoe and your parents are willing to pay extra for the tax. Use this space to show which shoes you considered. Explain why you chose the one you did.

---

---

---

---

---

### SITUATION 2 - SHOES FOR BASKETBALL (Middle School • Teen)

You tried out for the school basketball team and were selected to play on the team. You now need to purchase a new pair of basketball shoes that will be comfortable and withstand a lot of use as you will be practicing in them every day. The team colors are green and gold and you want shoes that will look good with your uniform too. Your parents have allowed \$65 for this purchase and this includes the cost of tax. Find at least 4 pairs of shoes that fit these criteria and then choose the one you think is the best for you to purchase. Use this space to show which shoes you considered, and why you chose you the one you did.

---

---

---

---

---



Handout for Chapter 4, Lesson 4: Label Lingo

## Working On The Macaroni and Cheese Label

### STEP 1: THE SERVING SIZE

- What is the serving size for macaroni and cheese?
- How many servings are in this product?
- How much macaroni and cheese do you usually eat?

If you consumed 2 cups of macaroni and cheese:

- How many calories did you consume?
- How many grams of fat (total fat) did you consume?

### STEP 2: CALORIES (AND CALORIES FROM FAT)

- Did you answer the fourth question above correctly?
- What are the general guidelines for calories?
- How many calories are considered “low”?
- How many calories are considered “moderate”?
- How many calories are considered “high”?

### STEP 3 AND 4: THE NUTRIENTS: HOW MUCH?

- Which nutrients should we limit?
- Which nutrients are we striving to get enough of?

### STEP 5: UNDERSTANDING THE FOOTNOTE ON THE BOTTOM OF THE NUTRITION FACTS LABEL

- All of the information on the Nutrition Facts Label is based on how many calories a day?

### STEP 6: THE PERCENT DAILY VALUE (%DV)

- What percent daily value is considered “low”?
- What percent daily value is considered “high”?
- How does “calcium” rate? Is it “low” or “high”?

Handout for Chapter 4, Lesson 4: Label Lingo

## **Label Scavenger Quest**

Which foods in your kitchen are labeled “whole grain”?

Which foods are considered “low” in fat? Recall that it has to be less than 5% total fat.

Which foods in your kitchen are considered “high” in fat? They have to contain 20% or more total fat.

Which foods in your kitchen are foods that are high in the nutrients that you are striving to get more of? For example: calcium, Vitamin A, Vitamin C.

Compare labels looking for descriptive words. Check the ingredients list for whole grains. A food is considered a whole grain food if the first ingredient listed is “whole grain.”

Check for fiber on the label. Remember that high fiber has 5 or more grams per serving. Read the ingredients on the labels on crackers, cereals and breads.

Handout for Chapter 4, Lesson 4: Label Lingo

## Trans Fat Worksheet<sup>15</sup>

### DEFINING TRANS FAT

What is trans fat?

When did we start to include trans fat on the label?

In what food products are trans fats typically found?

What makes trans fat different from other fats?

How will I know if a product has trans fat?

Why would you want to limit the amount of trans fat that you get in your foods?

### THE HUNT FOR TRANS FAT

Check your kitchen and make a list of any products you can find that have trans fat.

Look at your margarine labels. Do they list trans fat?

Based on what you know about trans fat, should it be listed on the label?

If it should, then why isn't it? Recall the date listed on the web page?

-----

<sup>15</sup> Source: <http://www.MyPyramid.gov>

Handout for Chapter 4, Lesson 5: Media Mania

## Advertising Sells!

What is your favorite television advertisement?

Describe your favorite food advertisement and tell why you like it. The ad can be one you saw on TV, in a magazine, on the radio, on the Internet, or other place.

If you like the ad, the marketing company has done its job well. Would you buy their product based on this ad? \_\_\_\_\_Yes \_\_\_\_\_No

What in the ad makes you want to buy the product? Or, if you wouldn't buy it, why not?

Do you think this is a healthful food choice? Why or why not? Does it fit into My Pyramid food groups?

Do they mention anything about the nutritional value of this food product in this ad? If so, what does it say about that?

In what ways does this ad appeal to you and your friends? Advertisements appeal to people in different ways. For example, it may be appealing because it:

- Appeals to your sense of health and happiness
- Appeals to your senses — tastes good, looks good, smells good, etc.
- Saves you money
- Offers “freebies”
- Is appealing to everyone, or to a group you identify with; appeals to your need to belong to the group
- Allows you to feel you are like the spokesperson. For example, the “Got Milk” ads focus on celebrities. The milk mustache says they drink milk, just like you.
- Is clearly the best choice — you’ve made a comparison between two products, Pepsi vs. Coke, for example

## Handout for Chapter 4, Lesson 5: Eating Out

**Ten Tips For Choosing Healthier Food When Eating Out**

You can enjoy eating at your favorite fast food restaurants and not even have to give up your favorite foods! Here are some tips.

1. Plan what you will eat instead of eating impulsively. You can budget your calories. If you know you will be eating calorie-laden foods later, you can eat lighter meals at other times of the day.
2. Avoid super-size portions. Choose a regular burger instead of the double burger, or a small order of fries instead of the large order. For example, a Whopper has 660 calories while a Whopper Junior has 400 calories. A small French Fries has 50 calories and a king sized serving has 590 calories.
3. Use ketchup, mustard, salsa, or other fat-free spreads instead of high calorie spreads like mayonnaise or special sauces.
4. Use low-fat or fat-free salad dressings and ask for them "on the side." If you overdress your salad it can be as high in calories as a Whopper.
5. When using a salad bar, choose fewer high-calorie ingredients. Also avoid toppings such as fried croutons, bacon bits, olives, avocados, eggs, etc.
6. Avoid pre-made salads that are made with heavy dressings and mayonnaise.
7. Choose baked, grilled or broiled foods instead of fried foods. A baked potato (watch the toppings) or grilled or broiled chicken, are good choices.
8. If you choose deli sandwiches, the best choices are roast beef or turkey. Remember that adding just one tablespoon of mayonnaise can more than triple the fat in these sandwiches.
9. Remove the skin and breading from chicken and avoid wing meat. This can cut the fat in half!
10. You can ask for the nutrition information. Some fast-food restaurants post nutrition information. Use it to make healthier choices.

## Handout for Chapter 4, Lesson 5: Eating Out

**Fast Food - Line 'Em Up**

Here are some favorite fast food items and their total calories.

Burger King Double Whopper with Cheese	1,010
Burger King Croissan'wich with Sausage, Egg and Cheese	450
Burger King Fries	590
McDonald's Deluxe Warm Cinnamon Roll	590
McDonald's Egg McMuffin	300
McDonald's Quarter Pounder with Cheese	530
Sausage, Egg and Cheese McGriddle	560
Burger King Chicken Sandwich	710
Burger King Whopper Junior	400
Domino's Pizza – 2 slices pepperoni cheese	614
Domino's Meatzza Feast – 2 slices	754
Dunkin Donut – glazed yeast	180
Dunkin Donut – blueberry muffin	490
Kentucky Fried Chicken (KFC) extra crispy breast	470
Taco Bell Taco Salad	850
Taco Bell Burrito Supreme with Beef	430
Taco Bell Soft Beef Taco	210
Taco Bell Taco Supreme	260
Subway Veggie Delite Sub	232
Subway Classic Italian BMT Sub	456

## Handout for Chapter 4, Lesson 5: Eating Out

*Recipe***Toaster Oven Pizza****UTENSILS**

Cutting board  
Cutting knife  
Measuring cups and spoons  
Toaster oven or regular oven  
Cheese grater  
Pizza pan or cookie sheets

**INGREDIENTS**

2 tablespoons pizza or spaghetti sauce  
½ whole wheat English muffin  
½ cup assorted veggies (sweet peppers (red, green, yellow), mushrooms, broccoli, onions, black olives, roasted peppers or others.  
2 tablespoons shredded cheese

**DIRECTIONS**

Split English muffin and share the other ½ with a friend. Spread pizza sauce on muffin half. Top with assorted veggies of your choice. Sprinkle with cheese. Place in toaster oven and bake at 400° for 10 minutes or until cheese is melted. Enjoy!!! Makes 1 serving

## Handout for Chapter 4, Lesson 5: Eating Out

**Clarifying Menu Muddle**

Tips to help you get the most from the menu.

1. Read the menu carefully.
2. Look for key terms that would indicate low fat preparation, such as:
  - Steamed
  - In it's own juice
  - Poached
  - Broiled
  - Garden fresh
  - Roasted
  - Baked
  - Grilled
3. Beware of the type of terms below. For example: ask for broiled instead of fried, toppings on the side (salad dressing, butter, sour cream, etc.).
  - Fried, pan-fried, crispy
  - Buttered
  - Au gratin, cheesy, scalloped
  - Custom order
4. Ask to make healthier substitutions – baked potato instead of fries, salad or steamed vegetables, etc.
5. Share – feel free to ask for a 2<sup>nd</sup> plate. When you order a meal that is plenty for two.
6. Scrutinize the buffet line and the salad bar.
7. Buffet lines can often become temptations to overeat. Select what you want and know when to stop!
8. Look for items that are not swimming in sauces.
9. Avoid heavily breaded items.
10. Watch your portion size.
11. Avoid salad items that are heavily dressed.
12. Enjoy the variety of fresh fruits, vegetables and broiled, baked and grilled meats.
13. Ask for whole grain breads.
14. If a dessert sounds tempting order wisely and share it.



Handout for Chapter 4, Lesson 7: New and Unusual Foods: Why Not Give It A Try?

## New Foods Taste Test

**Rating Scale:**

- 5 – Yummy
- 4 – Pretty Good
- 3 – Okay
- 2 – Not so good
- 1 – Yuck!

**Your Name:** \_\_\_\_\_

Food To Be Tasted	Rating	What I Liked Or Didn't Like About This Food.

Handout for Chapter 4, Lesson 8: It's All About Size

## **Portion Control: Sizing It Up!**

1/2 cup fruit, vegetable, cooked cereal, pasta or rice = a small fist

3 ounces cooked meat, poultry or fish = a deck of cards

1 tortilla = a small (7 inch) plate

1/2 bagel = width of a large coffee lid

1 muffin = a large egg

1 teaspoon margarine or butter = a thumb tip

2 tablespoons peanut butter = a golf ball

1 small baked potato = a computer mouse

1 pancake or waffle = a 4 inch CD

1 medium apple or orange = a baseball

4 small cookies (like vanilla wafers) = four half-dollar coins

1½ ounces of cheese = 6 dice

Handout for Chapter 4, Lesson 5: Eating Out

## A Measured Serving

Record your measurements on the chart below.

Food Or Beverage To Be Measured	Amount You Served Yourself	One Serving According To The Label

- How do your serving sizes measure up to the recommended serving sizes on the label?
- On the label how many calories for one serving? \_\_\_\_\_
- You do the math! How many calories for the amount you served yourself? \_\_\_\_\_
- What can you do to reduce the portions you serve yourself if they are too big?

Handout for Chapter 5, Lesson 1: Walk Your Way To Fitness

## Goal Setting Worksheet – School Age Youth

### FITNESS GOALS I CAN REACH!

#### Short Term Goals

(Examples: Watch TV less, play outside more).

---

---

---

---

#### Medium Term Goals

(Examples: Work up to 60 minutes of physical activity nearly every day).

---

---

---

---

#### Long Term Goals

(Examples: Be healthy and strong).

---

---

---

---

Handout for Chapter 5, Lesson 1: Walk Your Way To Fitness

## Goal Setting Worksheet – Middle School and Teen

What are your short-term fitness goals? (Examples: walk one mile two times per week; ride your bicycle to your friend's house, etc.)

---

---

What are your medium-term fitness goals? (Examples: try out for the high school soccer, basketball, or swimming team; lose five pounds, etc.)

---

---

What are your long-term fitness goals? (Examples: good health, strong muscles, feel and look good, etc.)

---

---

What are some obstacles you might encounter trying to meet these goals? (Examples: lose motivation, no time, etc.)

---

---

List at least three things that will help you to overcome these obstacles. (Examples: support from friends and family, join a gym, etc.)

---

---

Handout for Chapter 5, Lesson 1: Walk Your Way To Fitness

**Progressive Walking Marathon Log**

Name \_\_\_\_\_

WEEK	SUN	MON	TUES	WED	THUR	FRI	SAT	RECOM- MENDED WEEKLY MILEAGE	ACCUM- ULATED MILEAGE	INITIALS OF SUPERVISING ADULT
Week 1								1.50		
Week 2								1.50		
Week 3								1.50		
Week 4								1.75		
Week 5								1.75		
Week 6								1.75		
Week 7								2.00		
Week 8								2.00		
Week 9								2.00		
Week 10								2.00		
Week 11								2.00		
Week 12								2.00		
Week 13								2.00		
Week 14								2.45		

**NOTE:** Every 30 minutes of organized sports practice (e.g. soccer, basketball) during which registrants are actively running, can count as one mile.

I have successfully walked/run  
a marathon!

Signature of Participant (or Supervising  
Adult if under age 18)

Date

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## Appendix B Resource Kit

1.	Laminated <i>Activity Pyramid</i> poster	Ch 1, Lesson 1: Get in the Movement Groove Ch 1, Lesson 4: In Beat - The Heartbeat
2.	<i>MyPyramid</i> poster	Ch 1, Lesson 2: MyPyramid: The Beginning Challenge Ch 1, Lesson 7: Picking Protein Ch 1, Lesson 9: Eating Rainbows Ch 3, Lesson 2: Break It Up – Breakfast First! Ch 3, Lesson 3: Snack Attack Ch 3, Lesson 4: Rainy Brainy Ch 4, Lesson 8: It's All About Size
3.	<i>MyPyramid Worksheet</i>	Ch 1, Lesson 2: MyPyramid: The Beginning Challenge Ch 1, Lesson 9: Eating Rainbows Ch 3, Lesson 4: Rainy Brainy Ch 3, Lesson 5: Vegetarianism In A Nutshell
4.	Black light	Ch 1, Lesson 3: The Importance of Good Hygiene
5.	GlitterBug lotion	Ch 1, Lesson 3: The Importance of Good Hygiene
6.	<i>Buddy Bear's Handwashing Troubles</i>	Ch 1, Lesson 3: The Importance of Good Hygiene
7.	<i>Heart Rate Chart</i> poster	Ch 1, Lesson 4: In Beat - The Heartbeat Ch 5, Lesson 3: Jump Into Fitness
8.	Fat and muscle models	Ch 1, Lesson 6: Muscle Mania - Move it or Lose It
9.	Plastic food models	Ch 1, Lesson 7: Picking Protein Ch 1, Lesson 9: Eating Rainbows Ch 2, Lesson 2: Calories In - Calories Out Ch 3, Lesson 1: Nutrient Knowledge Ch 3, Lesson 3: Snack Attack Ch 3, Lesson 4: Rainy Brainy Ch 5, Lesson 5: Cooperative Play
10.	Dairy Council food model pictures	Ch 1, Lesson 7: Picking Protein Ch 1, Lesson 9: Eating Rainbows Ch 2, Lesson 3: Snack Attack Ch 3, Lesson 1: Nutrient Knowledge Ch 3, Lesson 4: Rainy Brainy
11.	Streamers	Ch 1, Lesson 8: Flexibility is Fabulous



12.	Video: <i>Basic Yoga Workout for Dummies</i> , distributed by Anchor Bay Entertainment, Inc. 1699 Stutz Drive, Troy, MI 48084	Ch 1, Lesson 8: Flexibility is Fabulous
13.	<i>What is Normal Supposed to Look Like Anyway?</i> poster, source: Oregon Dairy Council <a href="http://www.oregondairycouncil.org">http://www.oregondairycouncil.org</a>	Ch 2, Lesson 1: Body Image
14.	<i>Grab Quick and Easy Snacks</i>	Ch 3, Lesson 3: Snack Attack
15.	<i>Pack Your Snacks &amp; Go</i>	Ch 3, Lesson 3: Snack Attack
16.	<i>Kernel Of Wheat</i> poster, <a href="http://www.kswheat.com">http://www.kswheat.com</a>	Ch 2, Lesson 4: Grainy Brainy
17.	<i>Mind Over Matter: The Brain's Response To Steroids</i> , Produced by the National Institute on Drug Abuse, National Institutes of Health, NIH Publication No. 03-3860. Printed 1997. This article can be read at this site: <a href="http://teens.drugabuse.gov/mom/mom_ster1.asp">http://teens.drugabuse.gov/mom/mom_ster1.asp</a>	Ch 2, Lesson 6: The Truth About Vitamins, Steroids, & Supplements
18.	<i>Tips for Teens</i> , United States Department of Health and Human Resources. <a href="http://ncadi.samhsa.gov/">http://ncadi.samhsa.gov/</a>	Ch 2, Lesson 6: The Truth About Vitamins, Steroids, & Supplements
19.	Assignment 24 from 45 <i>Internet Projects for Food and Nutrition</i> Classes, Learning Zone Express, Owatonna, MN, Catherine Macpherson, MS, RD.	Ch 4, Lesson 1: Selling or Telling
20.	<i>Portion Distortion</i> handout	Ch 4, Lesson 6: Eating Out Ch 4, Lesson 8: It's All About Size
21.	<i>Handy Portion</i> poster	Ch 4, Lesson 8: It's All About Size
22.	<i>Pedometers</i>	Ch 1, Lesson 4: In Beat - The Heartbeat Ch 5, Lesson 1: Walk Your Way To Fitness
23.	<i>Native American</i> dance CD	Ch 5, Lesson 4: Dancing For All Seasons

# Index

- A Walk In The Forest, 34
- Activity Pyramid*, 33
- aerobic, 19
- aerobic activity station, 73
- Animal/Plant Protein Relay, 52
- animal-based proteins, 51
- anorexia, 83
- athletic shoe, 143
- bacteria, 29
- Benefits of Breakfast, 95
- benefits of exercise, 18, 22
- beverages, 40
- binging and purging, 86
- body size, 86
- body weight, 66
- bran, 104
- breakfast, 95
- calculate a heart rate, 33
- calories, 70
- Carbohydrates, 91
- Carotid method, 33
- Circuit Training Stations, 46
- commercials, 158
- cool-down, 19
- cooperation, 205
- Daily Value, 153
- dance, 200
- Double Dutch, 189
- drink choices, 40
- Dyna bands, 46
- eating disorders, 86
- endosperm, 104
- energy drinks, 125, 128
- enriched, 104
- essential nutrients, 90
- experiential learning, 12
- fast food, 162
- fat, 91
- Fat and muscle models, 46
- Fat Test Tubes, 40
- fiber, 104
- Fight BAC!, 29
- flexibility, 56
- Flexibility exercises, 22
- food ad, 158
- food bars, 125
- Frisbee golf, 184
- germ, 104
- Germ Jars, 30
- GlitterBug, 29
- Go/Slow/Whoa, 100
- Goal Setting, 179
- grocery store tour, 168
- handwashing, 29
- Handwashing Challenge, 30
- Healthy Lifestyles, 12
- heart rate, 33
- Heart Rate Chart*, 186
- Heart Rate Log*, 37, 186, 216
- heartbeat, 33
- How Far is 1,000 Steps?, 37
- jump roping, 186
- kernel, 104
- Lacto-ovo vegetarians, 109
- Low-Fat, 40
- low-fat dairy, 40
- Make A Game, 19
- Make Mine Orange, 40, 43
- Memory Ball Toss, 205
- Mine Field, 203
- Minerals, 91
- models, 66
- Move to the Music, 19
- MyPyramid, 26, 40
- MyPyramid Worksheet*, 26, 27, 60, 108
- new foods, 168
- NHANES, 9
- nutrition label, 153
- obesity, 171
- overweight, 9
- Partnership for Food Safety Education (PFSE), 29
- pedometer, 37
- plant-based proteins, 51
- portion, 171
- Portion Scavenger Hunt., 173
- Proper Handwashing, 29
- protein sources, 51
- Proteins, 91
- Recipe: *Banana Split Cereal*, 98
- Recipe: *Bread In A Bag*, 108
- Recipe: *Crazy Mix Veggie Burgers*, 170
- Recipe: *Crunchy Vegetable Burrito Banditos*, 64
- Recipe: *Four Fun Breakfasts*, 98

- Recipe: Fresh Spinach and Cilantro Salad, 54
- Recipe: *Garbage Pasta Salad*, 170
- Recipe: *Good for You and Good Too – Bean Tacos*, 54
- Recipe: *Homemade Sports Drink*, 132
- Recipe: *Hummus*, 111
- Recipe: *Insect Infested Logs*, 170
- Recipe: *Kidney Bean and Tuna Salad*, 54
- Recipe: *Let's Try Lentils*, 54
- Recipe: *Make Your Own Yogurt*, 44
- Recipe: *Pyramid Kabobs*, 28
- Recipe: *Pyramid Pita Pizzas*, 102
- Recipe: *Pyramid Salsa*, 94
- Recipe: *Rainbow Fruit Kabobs*, 64
- Recipe: *Savory School Paste*, 170
- Recipe: *Tacos*, 111
- Recipe: *Three Fruit Drinks: Fruit Juice Spritzer, Juice Float, Power Me Up Smoothie*, 44
- Recipe: *Toaster Oven Pizzas*, 165
- Regular Fat, 40
- resting heart rate, 33
- Rules for using the Internet, 137
- search engine, 137
- serving, 171
- shoe construction, 143
- shoe last, 146
- skim milk, 42
- Snacks, 99
- Sodas, 40
- sports gels, 125
- steroids, 114, 117
- Strength-training, 22
- stretching, 56
- Sugar, 43
- super-sized portions, 171
- supplements, 121
- Taste it and Decide!, 42
- Tinikling, 195
- Trans Fat*, 153
- Using MyPyramid – Children and Youth*, 26
- Vegans, 109
- vegetarians, 109
- Vitamins, 91
- walking, 177
- walking club, 181
- warm-up, 19
- Water, 91
- weight-bearing exercise, 47
- wellness team, 12
- whole grains, 104
- Wrist method, 33
- yoga, 56



Copyright 2006 AMWRF. All rights reserved.  
Photocopying or reproduction strictly prohibited  
except within the Department of Defense and National 4-H.

