

Nutrition for 4-H Foods Projects: MyPlate

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This presentation was brought to you by Georgia 4-H and
UGA Extension Family and Consumer Sciences, Foods and Nutrition



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Foods & Nutrition



--Welcome to the MyPlate module on Nutrition for 4-H foods projects. We are glad you are able to join us today. My name is Alison Berg and I am a UGA Extension Nutrition and Health Specialist. Carolina Cawthon, a graduate student at UGA is my co-author of these trainings. Thank you Carolina for your help!!

-This module is supposed to help you understand the basics of nutrition so that you can prepare for your district and state foods projects. We recommend that you watch this video more than once to be really prepared for your project. There are several times during the presentation where I will recommend you stop the video if you need some more time to review or if you just need a break. It is OK to stop the video at these points and review, especially if this is your first time learning about these topics. You can always come back at a later time to view the next sections.

-There is also a document posted on the website with additional resources for information and a script for this power point so you can follow along, or study without the audio. If you're a senior or attending State Conference, it will be especially important for you to brush up on your nutrition knowledge! So lets get started.

What's Covered

- What is MyPlate?
- Nutrients and energy from food
- The food groups
 - Nutrients
 - How much you need
- Building a healthy plate
 - Anytime v. sometimes foods
 - Maximizing nutrition
- Key Messages



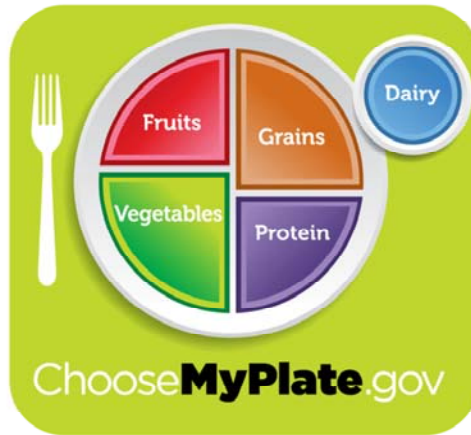
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Here's what you can expect to learn about as we work through the MyPlate module
What is MyPlate? Nutrients and energy from food, the food groups, nutrients, how much
you need, building a healthy plate, anytime v. sometimes foods, maximizing nutrition, and
Key Messages

What is MyPlate?



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So, What is MyPlate? MyPlate is a teaching tool that shows us the five food groups that are the building blocks for a healthy diet using a familiar image – a place setting for a meal! My plate helps us visualize what our plates should look like to plan a healthy meal.

You will see that the plate setting shows five food groups: Fruits, vegetables, protein, grains, and dairy. In the next slides we will learn why these foods are grouped this way and why it's important to eat these foods.

What is MyPlate

- The foods we eat provide big and small things that our bodies need to live and grow!
- These big and small things are called nutrients!
- Foods in the same MyPlate group are made up of similar amounts of nutrients



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Foods & Nutrition



The foods we eat provide big things and small things that our bodies need to live and grow. These big and small things are called nutrients.

Foods in the same MyPlate group are made up of similar amounts of nutrients

Let's talk about each of these nutrients, why they are important, and which foods provide them

Nutrients from Food

- Big nutrients include:
 - Protein
 - Fat
 - Carbohydrates
- Small nutrients include:
 - Vitamins
 - Minerals



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As we said, The foods we eat provide big and small nutrients that our bodies need to live and grow.

Big nutrients include protein, fat and carbohydrates. Big nutrients also provide energy and are needed in bigger amounts.

Small nutrients include vitamins and minerals. Smaller nutrients do not provide energy and are needed in smaller amounts

So let's talk about each of these nutrients, why they are important, and which foods provide them

Big Nutrients (Energy Providers)

- Energy = the capacity to do work
- Food contains stored energy
- We use energy to do the body's work:
 - Digestion of our food
 - Run and play
 - Think, breathe, heal!



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It's important to know that the big nutrients, carbohydrates, proteins, and fats, give us the energy we need

Energy is the capacity to do work. Food contains stored energy. The energy we take in from food is used to help us do the body's work: like digest our food, run and play, think, breathe and heal. We need energy to live!

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Energy Providers

- Carbohydrates, protein and fat provide energy



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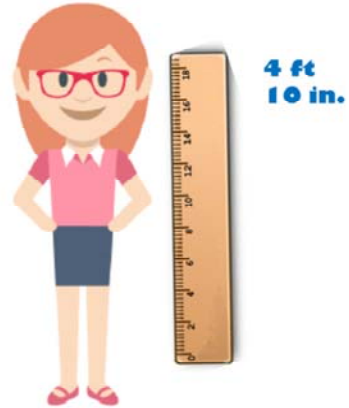
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The big nutrients, carbohydrates, protein, and fat provide energy.

Energy Providers

- Carbohydrates, protein and fat provide energy



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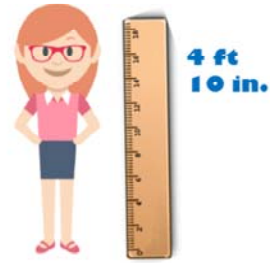
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Just like we measure your height in inches or feet,

Energy Providers

- Carbohydrates, protein and fat provide energy
- Energy is measured in calories



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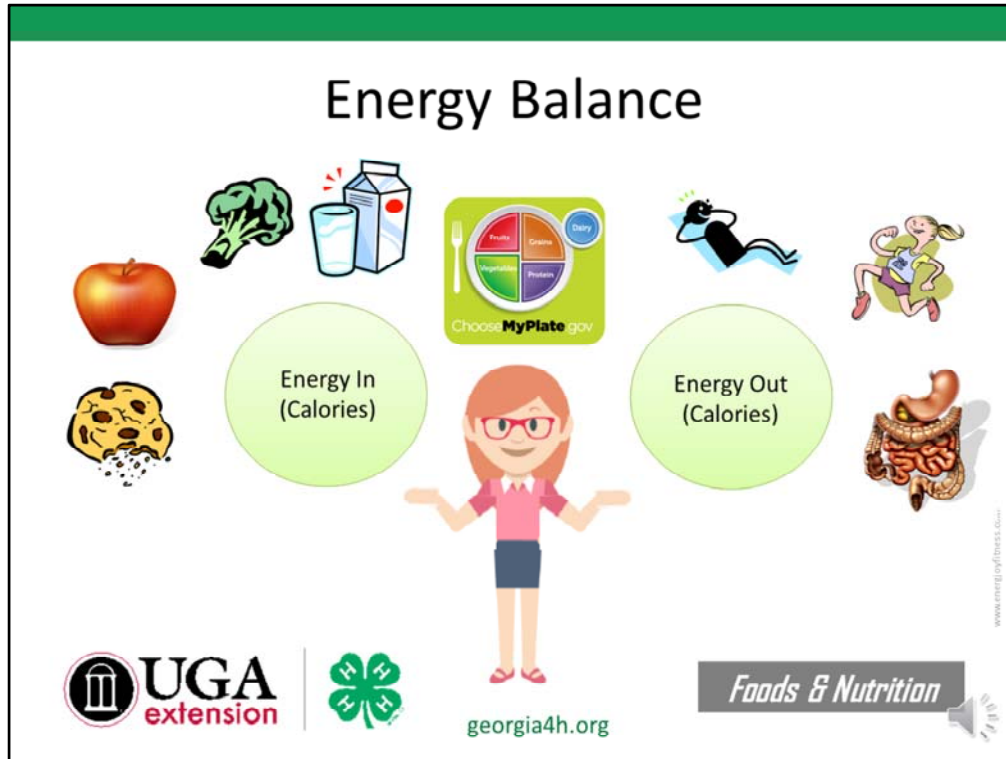
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Energy is measured in calories. So don't be scared of the word calorie. It's just a unit of measurement like an inch or a foot.

http://www.freepik.com/free-vector/delicious-food-dishes_790697.htm>Designed by Freepik

http://www.freepik.com/free-vector/illustrated-healthy-food_783192.htm>Designed by Freepik



This may all seem confusing, but really the important message is fairly simple. We need to balance our energy. We want the energy we take in from food to be in balance with the energy we use in our daily activities. Balance is the key and using MyPlate can help us achieve balance. How many calories we need (Energy IN) depends on how much energy we put out, both measured in calories. When we're growing as teens we need more energy. When we are really active we need more energy. Check out ChooseMyPlate.gov to determine how many calories you need for your age, gender, and activity.

Now that we know about
energy, let's talk more about
the nutrients



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Now that we know about energy, let's talk more about the nutrients

Nutrients from Food

- Big nutrients include:
 - Protein
 - Fat
 - Carbohydrates
- Small nutrients include:
 - Vitamins
 - Minerals



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As we said, Big nutrients provide energy and are needed in bigger amounts. But these nutrients also have functions beyond just providing energy. Small nutrients include vitamins and minerals. Smaller nutrients do not provide energy, and are needed in smaller amounts, but they have big roles to play in the body. So let's talk about each one individually.

Big Nutrients (energy providers!)

Nutrient	Why we need it?	MyPlate Food Group
Protein		



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Let's start with the big nutrients, protein, fats, and carbohydrates. Remember, big nutrients provide energy.

Big Nutrients (energy providers!)

Nutrient	Why we need it?	MyPlate Food Group
Protein	Strong muscles Important in every cell Healing and repairing Provide energy	Protein foods Dairy Grains Vegetables



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You've probably heard that protein is important for building strong muscles. But did you know that protein is important in every cell of the body? It is involved in many chemical reactions in every cell. Protein is also very important in healing, like when you get sick, break a bone or get a scrape. Protein helps heal and repair.

Protein can also provide energy, but the body would rather use other nutrients for energy. Like fats and carbohydrates.

Protein foods and dairy foods are the main sources of protein in the diet. However, grains also provide protein and some vegetables, especially beans and peas provide protein as well.

Big Nutrients (energy providers!)

Nutrient	Why we need it?	MyPlate Food Group
Protein	Strong muscles Important in every cell Healing Provide energy	Protein foods Dairy Grains Vegetables
Fats	Provide and store energy Important parts of the brain and nerves Healthy body temperature Carry vitamins in the body	Protein foods Dairy Foods Grains *Oils and solid fats



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Fats are a great source of energy. Fat is really good for storing energy for times when we don't eat as much, like when we're sleeping. It's also an important part of the brain and nerves. Fat also helps us keep our body at a healthy temperature. Did you know that your body's internal temperature is a warm 98 degrees? Fat helps keep it there. Fat is also important for carrying vitamins in the body. So we need fat for health!

Fat is found in many foods. Protein and dairy foods both provide fat. We will talk more about this as we talk about these food groups. Grains also provide some fat. Oils and solid fats are pure fat. They are not a group on my plate, but we will talk about them later, as they are an important source of fat in the diet.

Big Nutrients (energy providers!)

Nutrient	Why we need it?	MyPlate Food Group
Protein	Strong muscles Important in every cell Healing Provide energy	Protein foods Dairy Grains Vegetables
Fats	Provide energy Important part of brain and nerves Healthy body temperature Carry vitamins in the body	Protein foods Dairy Foods Grains *Oils and solid fats
Carbohydrate	Provide energy <u>Sugar</u> is the main source of energy for our brain <u>Fiber</u> is important to digestive health	Grains Fruits Dairy Some vegetables



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Carbohydrates also provide energy. Sugar and Fiber are types of carbohydrates.

It's important to know that sugar (also known as glucose) is the main source of energy for our brain. This is why it's so important to eat breakfast, especially before school!

Fiber is also a carbohydrate. Fiber is important to digestive health. This means it helps your body break down the food you eat, use what it needs, and get rid of waste.

Grains, fruits, dairy, and some vegetables provide carbohydrates.

Small Nutrients (not energy providers)

Nutrient	Why we need it?	MyPlate Food Group
Vitamins		



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Vitamins and minerals are the smaller nutrients that our bodies need. They are smaller in size and don't provide energy, but they are big players for our health!

Why do we need vitamins? Vitamins help our bodies do so many things, so for your foods projects, we're going to just focus on a few vitamins that you'll see on the nutrition label on foods you buy.

Small Nutrients (not energy providers)

Nutrient	Why we need it?	MyPlate Food Group
Vitamins	<u>Vitamin A</u> : eye sight <u>Vitamin C</u> : fight off germs and sickness <u>Vitamin D</u> : strong bones and teeth	



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For example, vitamin A does many things in the body, but it is best known for helping your eye sight!

Vitamin C is best known for helping fight off germs and sickness.

Vitamin D is important for strong bones and teeth

Small Nutrients (not energy providers)

Nutrient	Why we need it?	MyPlate Food Group
Vitamins	<u>Vitamin A</u> : eye sight	Vegetables
	<u>Vitamin C</u> : fight off germs and sickness	Fruits
	<u>Vitamin D</u> : strong bones and teeth	Dairy
		Grains



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Vegetables and fruits are some of the best sources of these vitamins. Dairy foods are important sources of vitamins A and D. Grains also provide vitamins, especially B vitamins, which you may have heard about in the news, but B vitamins are not on food labels, so we won't talk about them too much for this project.

Small Nutrients (not energy providers)

Nutrient	Why we need it?	MyPlate Food Group
Vitamins	<u>Vitamin A</u> : eye sight	Vegetables
	<u>Vitamin C</u> : fight off sickness/germs	Fruits
	<u>Vitamin D</u> : strong bones and teeth	Dairy
		Grains
Minerals		



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Like vitamins, there are many minerals. Too many to discuss in this module, so for your foods projects, we will focus primarily on those you will find on the food label and just a few of their functions.

Small Nutrients (not energy providers)

Nutrient	Why we need it?	MyPlate Food Group
Vitamins	<u>Vitamin A</u> : eye sight	Vegetables
	<u>Vitamin C</u> : fight off sickness/germs	Fruits
	<u>Vitamin D</u> : strong bones and teeth	Dairy
		Grains
Minerals	<u>Calcium</u> :	
	<u>Iron</u> :	
	<u>Sodium</u> (Salt):	
	<u>Potassium</u> :	



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These minerals are Calcium, Iron, Sodium also known as Salt, and Potassium

Small Nutrients (not energy providers)

Nutrient	Why we need it?	MyPlate Food Group
Vitamins	<u>Vitamin A</u> : eye sight	Vegetables
	<u>Vitamin C</u> : fight off sickness/germs	Fruits
	<u>Vitamin D</u> : strong bones and teeth	Dairy
		Grains
Minerals	<u>Calcium</u> : strong bones and teeth	
	<u>Iron</u> : healthy blood cells, growth	
	<u>Sodium</u> (Salt): healthy blood pressure, hydration	
	<u>Potassium</u> : healthy blood pressure	



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Calcium works with vitamin D to build strong bones and teeth.

Iron is important for healthy blood cells that support exercise and energy. Iron is also really important for growth in kids and teens

Sodium is also known as salt. Sodium is important for healthy blood pressure, but too much can be bad for our health. Sodium is also important for hydration, or keeping the amount of water in our bodies steady. So the body needs sodium, but most Americans eat too much sodium.

Potassium is another mineral that is very important for healthy blood pressure. Sometimes potassium is on the food label and sometimes it is not.

Small Nutrients (not energy providers)

Nutrient	Why we need it?	MyPlate Food Group
Vitamins	<u>Vitamin A</u> : eye sight	Vegetables
	<u>Vitamin C</u> : fight off sickness/germs	Fruits
	<u>Vitamin D</u> : strong bones and teeth	Dairy
		Grains
Minerals	<u>Calcium</u> : strong bones and teeth	Dairy
	<u>Iron</u> : healthy blood cells, growth	Protein foods
	<u>Sodium</u> (Salt): healthy blood pressure, hydration	Fruits
	<u>Potassium</u> : healthy blood pressure	Vegetables
		Grains



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Dairy is an important source of all of these minerals. Protein foods are good sources of iron, as are some vegetables. Fruits and vegetables are great sources of potassium, and grains provide some of these too. Sodium is found in many foods and is important for food safety. But remember, too much sodium can be bad for our health.

What is MyPlate?

- Each of these big and small nutrients is important!
- Balance is the key to energy and nutrients
 - Too little is not healthy
 - Too much is not healthy
- MyPlate is a tool to help you find the right balance!



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So remember, each of these big and small nutrients is important,
but balance is the key to both energy and nutrients

Too little of a nutrient or energy is not healthy

Too much of a nutrient or energy is not healthy

But wow, we just learned a lot!

How do you know how much of each of these big nutrients and small nutrients we need?

And how do we know how to get them all? Well don't worry!!

That's why we have MyPlate! MyPlate makes this all easier. MyPlate is a tool to help you find the right balance of nutrients and energy, by focusing on foods. And we're familiar with foods right? So let's talk about the food groups.

If you're feeling a little
confused, now is a
good time to take a
break



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We just went over a lot of information. If you're feeling a little confused, now is a good time to take a break. You can review the materials up until now until you get comfortable. Take your time. It's ok if you need to try again.

When you feel good about
the material, come join us
again for the next part of
the presentation: The food
groups!



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When you feel good about the material, come join us again for the next part of the presentation: The food groups!



So let's look at the plate again. Here's a drawing of the plate with the food groups identified and some examples from each group. Notice the size of each section—using these sizes as a guide for your own portions helps you get just the right amount everything your body needs to be healthy.

Let's look at these groups individually.

The Five Food Groups

For each food group:

- The nutrients provided
- How much is needed per day
 - Fruits, vegetables, and dairy = cups (c)
 - Grains and protein foods = ounces (oz)




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For each of the food groups, we are going to talk about a few things that will be important for you to know for your project. We will talk about the nutrients provided by each group AND how much of each group is needed per day. You will notice that fruits, vegetables, and dairy are expressed in cups per day, because they are easier to measure this way. It's easy to think about a cup of milk, right? Grains and protein foods are measured in ounces.


Grains



- Grains provide
 - Carbohydrates
 - Fiber
 - Iron
 - Some vitamins
- Eat 6 ounces of grains every day
 - 1 oz of grains is
 - 1 slice of bread
 - ½ cup cooked rice or pasta
 - 1 oz of ready-to-eat cereal




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Let's talk about grains. Grains are important for us because they provide carbohydrates and fiber, which if you remember is a type of carbohydrate. Because grains provide carbohydrate, and carbohydrates are a good source of energy, that means grains are an important source of energy! They also provide iron, and other vitamins. They are shown as a little more than half of the right side of your plate to demonstrate that a good portion of our diet should come from grain foods so we get enough of these nutrients and energy that grains provide.

Teens need six ounces of grains every day. 1 ounce of grains is one slice of bread, ½ cup cooked rice or pasta counts as 1 ounce of grains, as does 1 ounce of ready to eat cereal. Ready to eat cereal just means that you don't have to cook it before eating it. Examples are cheerios, chex, raisin bran, wheaties, etc. The MyPlate website has a detailed list of what makes up one ounce of grains. The important thing is that you get a variety of grains to meet your daily needs of about six ounces per day.

Whole Grains


choose more of these (at least half)

<ul style="list-style-type: none"> Brown rice Buckwheat Bulgur (cracked wheat) Oatmeal Popcorn Whole wheat flour Whole grain barley Whole grain cornmeal Whole rye 	<ul style="list-style-type: none"> Ready-to-eat breakfast cereals such as: <ul style="list-style-type: none"> – Whole wheat flakes – Muesli Less common whole grains: <ul style="list-style-type: none"> – Amaranth – Millet – Quinoa – Triticale
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There are two types of grains: whole grains and refined grains. Whole grains contain all parts of the grain, while refined grains have had some of the grain parts removed. Generally, whole grain foods will have more of the things that make grain foods good for us, so MyPlate recommends that you make at least half of your grains whole grains. Here you will see examples of some whole grain foods.


Do you see the whole wheat flour? This means that breads and bread products like bagels, pizza dough, and english muffins that are made from whole wheat flour are whole grains. Many cereals are also whole grains. Some less common whole grains include amaranth, millet, quinoa, and triticale

Refined Grains


choose fewer of these

- All purpose (Enriched) flour
- Cornbread
- Corn tortillas
- Flour tortillas
- Couscous
- Saltine crackers
- Grits
- Noodles and pasta
 - Spaghetti
 - macaroni

- Pitas
- Pretzels
- White bread
- White sandwich buns
- White rolls
- White rice
- Ready-to-eat breakfast cereals such as:
 - Corn flakes



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Refined grains have less of the big and small nutrients that make grains good for us, but typically they provide the same amount of energy or calories. These are some examples of refined grains.

Do you see the All Purpose Flour? This means that foods made primarily from all purpose flour also known as enriched white flour are made from refined grains. Remember, you want to get half of your grains from whole grains, so you should choose less of your grains from the refined grains list.

In fact, enriched wheat flour is still considered a refined grain. The ingredient labels on foods can help you see what kinds of grains your food made from. You will want to see the word “whole” as one of the first ingredients to identify that food as a whole grain.

Please Note: If you are in the pizza project, it will be important for you to review the information on the ChooseMyPlate website on Grains. You should know a little more about grains than what we reviewed here.

Refined Grains

choose fewer of these

- All purpose (Enriched) flour
- Cornbread
- Corn tortillas
- Flour tortillas
- Couscous
- Saltine crackers
- Grits
- Noodles and pasta
 - Spaghetti
 - macaroni

- Pitas
- Pretzels

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Remember, refined grains are grains that have had some of the parts of the grain removed during processing. Refined grains have less of the big and small nutrients that make grains good for us, but typically they provide the same amount of energy or calories. These are some examples of refined grains.

Do you see the All Purpose Flour? This means that foods made primarily from all purpose flour also known as enriched white flour are made from refined grains. Remember, you want to get half of your grains from whole grains, so you should choose less of your grains from the refined grains list.

In fact, enriched wheat flour is still considered a refined grain. The ingredient labels on foods can help you see what kinds of grains your food made from. You will want to see the word “whole” as one of the first few ingredients to identify that food as a whole grain.

There is more information about whole grains and refined grains on the MyPlate website and at the links in the additional resources section.



Refined Grains


choose fewer of these

- A
- C
- C
- F
- C
- S
- G
- M

— macaroni


Please Note: If you are in the pizza project, it will be important for you to review the information on www.ChooseMyPlate.gov website on Grains in more detail. You should know a little more about grains than what we reviewed here.



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Please Note: If you are in the pizza project, it will be important for you to review the information on the ChooseMyPlate website on Grains. You should know a little more about grains than what we reviewed here.

Vegetables




- Vegetables provide
 - Vitamins A and C
 - Potassium
 - Fiber
- Eat 2 ½ cups every day
 - 1 cup of vegetables is
 - 1 cup of cooked or raw vegetables or vegetable juice
 - 2 cups of leafy salad greens

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Vegetables are really important, as they provide many vitamins and minerals, especially vitamins A, C, and potassium. Vegetables are also important sources of fiber. Vegetables are generally low in calories, but some provide more calories from carbohydrates than others.


Vegetables make up a little more than half of the left side of our plates to demonstrate how important these foods are for our health. They help us get many of the nutrients we need, especially vitamins, minerals, and fiber for relatively few calories. So they really help us to maximize nutrition and balance our energy.

You need about 2 ½ cups of vegetables every day. 1 cup of vegetables is


sure about what counts as a serving you can always visit the ChooseMyPlate website for detailed lists.



Vegetables


- Fresh, frozen, and canned are all nutritious choices
- Choose from all available colors
 - Red, orange, green, purple



- Red bell peppers
- Carrots
- Spinach
- Kale
- Romaine
- Okra
- Purple cabbage
- mushrooms




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Fresh, frozen, and canned vegetables are all nutritious choices. The important thing is to get a variety. You can do this by choosing from all available colors: red, orange, green, purple. The veggies on the right side show us many of the colors we can get by varying our veggies. Different colors mean different nutrients!

Fruits



- **Fruits provide**
 - Vitamin C
 - Potassium
 - Carbohydrates
 - Fiber
- **Eat 2 cups every day**
 - 1 cup of raw or cooked fruit or 1 cup of 100% juice is 1 cup
 - ½ cup of dried fruit = 1 cup

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Fruits, found in the top left corner of MyPlate are great sources of vitamins, minerals, carbohydrates and fiber. The carbohydrates in fruit are natural sugars that are good sources of energy. Since fruits generally provide more energy than vegetables, we need a little less of them to keep our energy in balance yet maximize nutrition, so they are a smaller part of the left half of our plate.


We need about 2 cups of fruit every day. 1 cup of fruit is about 1 cup of raw or cooked fruit or 1 cup of 100% fruit juice, no sugar added. ½ cup of dried fruit counts as one cup of fruit.


Fruits

- Fresh, frozen, canned and dried are all nutritious choices**
 - 1 cup = fresh, frozen, canned
 - ½ cup = dried
- Choose whole fruits over fruit juices often**




- Get variety!**
 - Apples
 - Strawberries
 - Blueberries
 - Kiwi
 - Cantaloupe
 - Watermelon
 - Oranges
 - Bananas
 - Grapes






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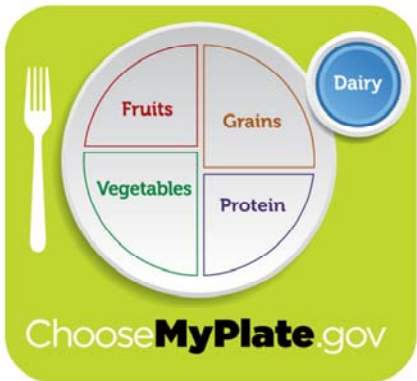


Like with veggies, fresh, frozen, canned and even dried fruits are all nutritious choices. Dried fruits are a great way to add fruit to your diet without worrying about spoilage. Removing most of the water concentrates the nutrients and energy in dried fruits. Since they are concentrated, the serving size for dried fruits is smaller than the serving size for fresh, canned, or frozen fruit.


Whole fruits, especially those eaten with the peel on, will have more fiber than fruit juices. Since fiber helps us feel full and keeps our digestive system moving, choose whole fruits over fruit juices more often.

Like with veggies, eat a variety of fruits of many colors to get all your vitamins and minerals.


Dairy



- Dairy foods provide
 - Protein
 - Calcium
 - Vitamin D
- Get 3 cups of dairy every day
 - 1 cup of milk, yogurt, or fortified soy milk = 1 cup
 - 1 ½ ounces of natural cheese = 1 cup dairy
 - 2 ounces of processed cheese = 1 cup dairy



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Next, we'll talk about dairy foods. Dairy foods are incredibly important for health because they provide protein, calcium, and vitamin D. Calcium and vitamin D are not found in large amounts in the other food groups, so it's really important to get these nutrients from dairy foods for strong bones and teeth.

On the MyPlate graphic, dairy is depicted by a beverage glass or a milk glass. While milk is a great way to get your dairy foods, yogurt and cheese are also good sources of dairy.

Most children and teens need 3 cups of dairy each day. 1 cup of regular milk or yogurt counts as one cup. Some people can't drink milk or don't like milk and so they might choose soy milk or almond milk instead. It's important to know that these milk substitutes must be labeled as "fortified" to be considered equal to milk in the nutrients they provide. So, one cup of fortified soy milk counts as 1 cup of dairy foods. One cup of unfortified soy milk does not count as 1 cup of dairy. Most of the milk substitutes you will see at the grocery store are fortified, but don't forget to read the labels!

Cheese is a little bit different. 1 ½ ounces of natural cheese counts as one cup of dairy, but 2 ounces of processed cheese counts as one cup of dairy. That's because processed cheese has water and other ingredients in it that make it have less nutrients per ounce than natural cheese. We will talk about this more on a later slide.



--dairy foods lab requirements—be sure to address these somewhere

- Understand the role dairy foods play in providing nutrients for health and growth
- Determine the amount of dairy foods needed each day for different age groups, from MyPlate
- Fortified lets you know that something has been added to a food to help make it more nutritious. In this case, since we depend on the dairy group as an excellent source of calcium, calcium is added to soy milk so it can be included in this food group.

Dairy


Milk and Milk Substitutes

<ul style="list-style-type: none"> • Naturally contain fat <ul style="list-style-type: none"> – Some is saturated fat • Choose low-fat or fat free • If you cannot or do not drink milk <ul style="list-style-type: none"> – Choose other foods rich in calcium – Lactose-free products are another option 	<ul style="list-style-type: none"> • All fluid milk <ul style="list-style-type: none"> – Fat-free, low fat (1%), reduced fat (2%), whole – Flavored milks <ul style="list-style-type: none"> • Chocolate • Strawberry – Lactose reduced milk – Lactose free milk – Calcium fortified soy milk
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Dairy foods naturally contain some fat, and some of that fat is saturated fat, which is not good for our health if we get too much of it. When choosing dairy foods, choose low fat or fat free dairy most of the time.

Lactose is a sugar that occurs naturally in all milk and some people need to avoid lactose. If you cannot or do not drink milk or choose not to drink milk, choose other foods rich in calcium, like cheese and yogurt. If you need to avoid lactose, lactose free products are another option.



All fluid milks can be part of a healthy diet, but again, whole milk should be chosen less often if at all. Lower fat milks provide the same protein, vitamins and minerals, but less fat. Flavored milks give you the nutrients you need, but they do contain added sugar, so choose them less often. As stated earlier, lactose free and lactose reduced, and fortified soy milk can be other options. Other milk substitutes like almond milk and coconut milk vary greatly in their protein, calcium, and vitamin D, so if you choose these products, make sure to read the label.

Dairy

in addition to fluid milk


- **Milk based desserts**
 - Remember these may have added sugars
 - Pudding made with milk
 - Ice milk
 - Frozen yogurt
 - Ice cream
- **Yogurt**
 - Fat free
 - Low fat
 - Reduced fat
 - Whole milk yogurt

- **Cheese**
 - **Hard natural cheeses**
 - Cheddar
 - Mozzarella
 - Parmesan
 - Swiss
 - **Soft natural cheeses**
 - Ricotta
 - Cottage cheese
 - **Processed cheeses**
 - American

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In addition to fluid milk, milk based desserts, yogurt, and cheese are common sources of dairy foods. Milk based desserts will have added sugars, which means more energy or calories, so choose these less often. As with milk, choose low fat or fat free yogurt more often.

On the previous slides, we mentioned natural versus processed cheese. Natural cheeses are typically made with milk, salt, and enzymes. Different types of milk, different enzymes, and different “curing” time give natural cheeses many different textures and flavors. There are hard cheeses to soft cheeses.

-Processed cheeses are made with some natural cheese plus added milk, oil, flavors, and sometimes colors. Processed American Cheese is very common, and is often packaged in single servings. If a product is processed cheese, it must say so on the label. Remember, because of these added ingredients, the serving sizes are different for natural v. processed cheese. See the previous slide and choosemyplate.gov for more information.



Dairy

Please Note: If you are in the dairy foods project, it will be important for you to review the module on dairy foods and the information on the www.ChooseMyPlate.gov website on dairy foods. You should know a little more about dairy foods than what we reviewed here.

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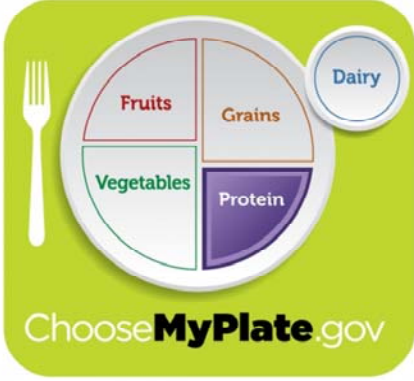
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Please Note: If you are in the dairy foods project, it will be important for you to review the module on dairy foods and the information on www.ChooseMyPlate.gov website on dairy foods. You should know a little more about dairy foods than what we reviewed here.

Protein Foods




- Every cell in your body needs protein to do its job
- Protein foods provide:
 - Protein
 - Iron
 - Fat (*Go lean with protein!*)
- Eat 5 ½ ounces every day
 - 1 ounce of lean meat, fish, or poultry = 1 ounce protein
 - 1 egg = 1 ounce protein
 - 1 TBS peanut butter or ½ ounce nuts = 1 ounce protein
 - ¼ cup beans or peas = 1 ounce protein

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Foods & Nutrition






So let's talk about protein foods. Remember, every cell in your body needs protein to do its job. Protein foods provide, well of course protein! But they also provide minerals. They are a great source of iron. Protein foods also naturally contain some fat and some of this can be saturated. So we often say, "go lean with protein!"

Teens need about 5 ½ ounces of protein foods every day. 1 ounce of lean meat, fish, or poultry, 1 egg, 1 tablespoon of peanut butter or ½ ounce of nuts all count as protein. Beans and peas are special, because they can be counted as protein foods or veggies. For people who choose to avoid meat in their diets, beans and peas are an important source of protein.

Protein Foods

- **Choose lean meats and poultry**
 - This means less fat
- **Bake, broil, or grill to avoid adding fat**
- **Remove skin on poultry**
- **Cut away visible fat on pork and beef**

- **Meats: select lean cuts**
 - Chicken breast has less fat than chicken drumstick
 - Pork tenderloin has less fat than bacon
 - Lean ground meats:
 - Sirloin
 - Round
 - Less than 10% fat



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--There are many healthy choices for protein foods. As we said, Go lean with protein. This means less fat. You can do this by choosing to bake, broil, or grill so that you cook your meat without adding fat.

You can also remove the skin on your chicken or turkey or cut away any visible fat on beef or pork.



Another way to reduce the fat in your meats is to choose lean cuts of meat. "Cuts" typically refers to the part of the animal that the meat comes from and some cuts are leaner than others. For example: choosing a chicken breast over a chicken wing. Pork tenderloin is leaner than bacon. When choosing ground meats, you can look for labels that say "ground sirloin", "Ground round" or "less than 10% fat."

--Some cuts have more fat than others and you should choose those that are lower in fat

Protein Foods


- **Fish**
 - Mostly lean
 - Fatty fish (salmon, tuna, mackerel) has unsaturated fats- healthier
- **Soy products**
 - Tempeh
 - Texturized vegetable protein, called TVP
 - tofu
- **Veggie Burgers**
 - Soy
 - Bean

- **Dry beans and peas**
 - Black beans
 - Black-eyed peas
 - Chickpeas (also called Garbanzo beans)
 - Falafel
 - Kidney beans
 - Lentils
 - Navy beans
 - Pinto beans
 - Soy beans
 - Split peas
 - White beans

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The protein group also includes fish. Most fish is fairly lean. There are a few fatty fish like salmon, tuna, and mackerel that are higher in fat, but it is mostly unsaturated fat which is healthier than saturated fat. We will talk more about this later.

Soy products can be a good source of protein. You might be familiar with tofu, but tempeh and texturized vegetable protein are others that are good sources of protein. “Veggie burgers” are typically made from some combination of soy and beans for protein, and some grains. Dry beans and peas are a great way to increase vegetarian protein in your diet. They come in many varieties that provide different amounts of protein, carbohydrates, and energy. So try them all!

Protein Foods


- **Nuts and Seeds**
 - Almonds/ almond butter
 - Cashews
 - Hazelnuts, also called filberts
 - Mixed nuts
 - Peanuts/ Peanut butter
 - Pistachios
 - Pumpkin seeds
 - Sesame seeds
 - Sunflower seeds
 - Walnuts
- **Be careful to read the labels on nuts and seeds**
 - Can be high in fat
 - Can be high in sodium

- **Finfish**
 - catfish
 - Cod
 - Flounder
 - Salmon
 - trout
- **Shellfish**
 - Clams
 - Crabs
 - lobster
 - Shrimp
 - squid
- **Canned fish**
 - Sardines
 - Tuna
 - Clams

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Nuts and seeds also count as protein foods. Peanuts, almonds, peanut butter are some you're probably familiar with. Sunflower seeds and pumpkin seeds are some more common seeds eaten in the US. It is important to read the labels on your nuts and seeds, as they can contain a lot of fat, although some of this will be unsaturated. Depending on how they are prepared and packaged, sometimes nuts and seeds can provide a lot of salt. So read your labels!

Seafoods such as finfish, shellfish, and canned fish are important members of the protein group. So not only are the fish we talked about before included, but also shellfish like lobster, shrimp, and crab are included. Canned fish is a great way to purchase fish for cheaper and that will last a long time.



So let's look at the plate again. We've reviewed all of the food groups on the plate. But there is one more food we should talk about.

Oils

- Oils are fats that are liquid at room temperature
- Mostly from vegetables and fish
- Oils are important for health
- Needed in very small amounts
- NOT a MyPlate food group



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Oils are fats that are liquid at room temperature. They come mostly from vegetables and fish. Oils are important for health, but they are needed in very small amounts. Because the amount needed is so small, AND because they are found within some foods already included in the MyPlate food groups, like fish, nuts, and seeds, oils are NOT a MyPlate food group.

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Oils

- Oils are important because they are made up of mostly unsaturated fats
- Unsaturated fats are important for our brains and nerves
- Unsaturated fats are also called “heart healthy fats”



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Oils are important because they are made up of mostly unsaturated fats. Do you remember when we talked about fats being important for our brains and nerves? Yes! Good!

Well it's the unsaturated fats that primarily make up oils that are important for our brains and nerves

Unsaturated fats are also sometimes called “heart healthy fats,” because when we eat the right amount, they are healthy for our hearts and our brains.

Solid fats

- Unlike *unsaturated* fats in oils, saturated and trans fats are bad for our heart health
- It's important to limit these fats
- Saturated and trans fats = solid fats
- Solid at room temperature
- Easy to see in foods such as butter
- Hard to see in foods such as cookies and whole milk



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Unlike unsaturated fats in oils, saturated and trans fats are bad for our heart health. It is important to limit these fats. Saturated and trans fats are also known as solid fats, because they are solid at room temperature. It's easy to see solid fats in foods such as butter, but these solid fats are harder to see in foods such as cookies, hot dogs, and whole milk. So remember, we want to limit our solid fats.

Sugar

- Many foods naturally contain sugar.
- Remember, we need sugar. Our brains use sugar exclusively
- Added sugars are sweeteners added during processing
 - Beverages such as soda
 - Foods like candy and cookies
- Provide “empty calories,” or energy with little nutrients – limit these




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There's one last food we should talk about, and that's Sugar. Many foods naturally contain sugar, for example, fruits are naturally sweet and come straight off the tree with naturally occurring sugar. Milk naturally has sugar as well. Remember, we need sugar. Our brains use sugar exclusively

Other foods, like cookies, cakes, and candy have sugar added to make them taste sweeter. and often these foods are not good sources of vitamins or minerals, but they do provide lots of energy or calories. Sometimes these foods are said to have “empty calories” because they provide energy without adding any other nutrients to your diet.

--Choose foods that give you more nutrients for the energy they contain. These foods are said to be “nutrient dense” because they provide things your body needs along with energy. Calories are the units we use to measure the amount of energy you can get from food, the same way we might use inches or centimeters to measure how tall you are.

--But, small portions of foods with added sugars or saturated fats can still be a part of a healthy diet, just remember that “empty calorie” foods are sometimes foods

What is MyPlate?



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So, now that you've learned about all the MyPlate Food groups, and a few other important foods, let's put it all together.

Feeling Confused?

This is another great place
in the presentation to stop
and review the materials.

Come back when you're
ready



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Feeling confused? It's ok. This is another great place to stop and review the materials.
Come back when you're ready.

Building a Healthy Plate

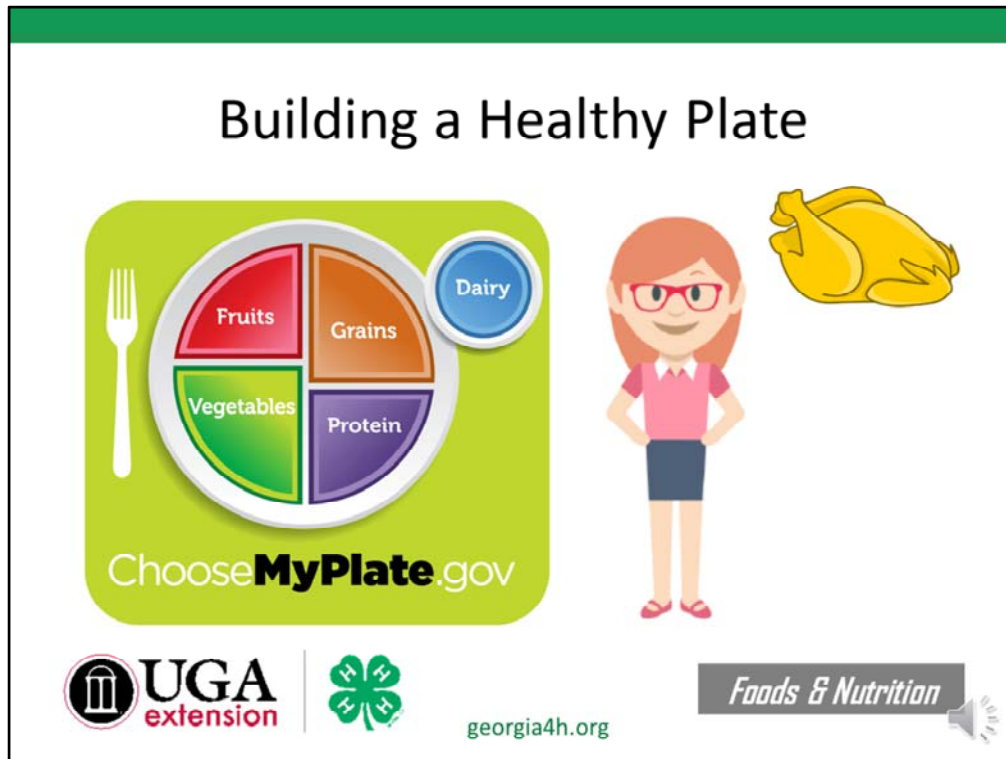


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So, are you feeling nervous about all the information you learned? It's OK. That's why we have MyPlate! It will help us build our plates to get the balance of nutrients we need without too little or too much of anything.



Building a healthy plate means choosing foods that help you get all of the big things and small nutrients that your body needs. So fill your plate according to my plate. It's easy! Let's use an example. Sally's mom tells her they are having chicken for dinner tonight, but Sally can help her plan the rest of the meal.

Sally knows that chicken is a protein food, so Sally will take a piece of chicken to fill her protein foods on her plate. By choosing a piece that fits her plate, Sally is making sure she gets the right amount of chicken.

Building a Healthy Plate



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Sally thinks to herself, what next? How about grains? Sally remembers that rice is a grain, and brown rice is a whole grain. She chooses brown rice for her grains.

Building a Healthy Plate



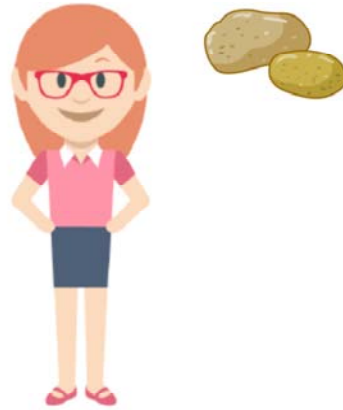
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By taking a scoop of brown rice that fits in the grains corner of her plate, she knows she is getting the nutrients she needs, but not too much.

Building a Healthy Plate



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Next, Sally thinks about vegetables. Mmmm... Sally really likes potatoes. She thinks about putting potatoes on her plate, and then she realizes that her plate is not very colorful. Lots of browns and whites.

Building a Healthy Plate



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What about broccoli? Sally loves broccoli! So she chooses broccoli instead.

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Next, Sally thinks about fruits. She thinks to herself, you know what, I think I'll be pretty full with that, meal since I had a big lunch. I think I'll save my fruit for dessert! Sally loves strawberries. So she chose strawberries for her dessert. It's OK that Sally isn't going to have all of her foods on one plate. Again, Sally makes sure to take about a cup of strawberries, which is what would fit in that corner of her plate.

Building a Healthy Plate



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Lastly, Sally decides to have milk with her dinner. Sally always has milk with her dinner, so this is an easy one for her. Sally and her family just decided to switch from whole milk to 1% milk to try to limit their solid fat intake. This is great news for Sally's heart.

Building a Healthy Plate



What a
Great
Plate!



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What a great plate, Sally! She really made choices to maximize nutrition and reduce those empty calories when she chose low fat milk instead of whole milk.



Remember, building a healthy plate means choosing foods that help you get all of the big and small nutrients that your body needs while balancing your energy. All foods can be a part of a healthy plate, but some foods should be chosen more often than others. These anytime foods are lower in added sugar, saturated fat, and sodium and provide lots of nutrients. These foods are easy to figure out where they go on the plate. Like the foods shown in this picture: milk is a dairy food, the carrot is a vegetable, the salmon is a protein food, whole wheat bread is a grain, and a banana is a fruit. These anytime foods can be chosen any time and should be included daily.



There are other foods that we call "sometimes" foods, and these can be harder to figure out where they go on the plate. Like where does candy like these gummy bears go? Or what about the chips? Are they vegetables? And the cookies? Are they grains? Sometimes foods can be harder to figure out where they go on the plate. Or, they might be foods like hot dogs that fit in the protein foods, but that are higher in fat and saturated fat.

These foods are less healthy choices, because they are higher in added sugars, solid fats, and salt or sodium. They also provide many of those empty calories we talked about before. Remember, these are foods that provided energy, but little nutrition. You won't see too many vitamins, minerals, or fiber on potato chips, cookies, or gummy bears.

It's not that you can't have these sometimes foods, that's just it: choose them sometimes! Not all the time! Choosing these foods too often makes it harder to keep your energy in balance.

Building a Healthy Plate

"Anytime" Foods



"Sometimes" Foods



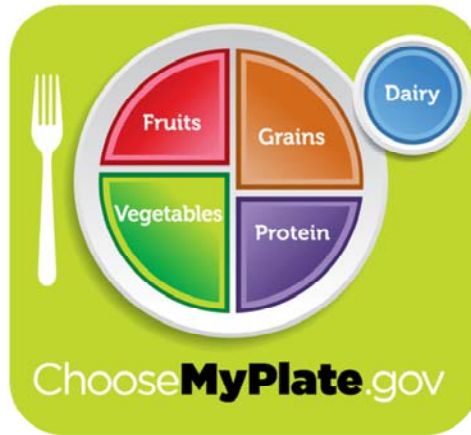
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Remember, it's not about depriving yourself of these sometimes foods. It's about balance. And balance means choosing anytime foods anytime you want, and sometimes foods only sometimes. By using MyPlate to build your healthy plate, you will be guided towards a nice balance of healthy anytime foods more often.

What is MyPlate?



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Remember, MyPlate is a teaching tool that shows us the five food groups that are the building blocks for a healthy diet using a familiar image – a place setting for a meal! My plate helps us visualize what our plates should look like to plan a healthy meal, get the nutrients we need and keep our energy in balance.

Key Messages

- MyPlate is a tool to help you find just the right balance of healthy foods, nutrients, and energy to fuel your life!
- The healthiest plan is to choose foods from each of the five food groups everyday
- Less healthy foods can be included sometimes
- The amounts discussed in this presentation will suit most 4-Hers. However, You may need more or less of the food groups or energy (calories) depending on your age, gender, and activity level
- Visit www.choosemyplate.gov for more information
- And check the additional resources on the 4-H webpage



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MyPlate is a tool to help you find just the right balance of healthy foods, nutrients, and energy to fuel your life!

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The amounts discussed in this presentation will suit most 4-Hers. However, You may need more or less of the food groups or energy (calories) depending on your age, gender, and activity level

Visit www.choosemyplate.gov for more information specific to you and also more information about the details of food groups

And check the additional resources on the 4-H webpage

Nutrition for 4-H Foods Projects: MyPlate

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This presentation was brought to you by Georgia 4-H and
UGA Extension Family and Consumer Sciences, Foods and Nutrition



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Thank you for your attention, and good luck studying Nutrition for 4-H Foods Projects.
This presentation was brought to you by Georgia 4-H and UGA Extension Family and
Consumer Sciences, Foods and Nutrition.

References

- All information in the Nutrition for 4-H Foods Projects Modules comes from www.choosemyplate.gov.
 - Please start with www.choosemyplate.gov for all of your nutrition research
 - For specific information on whole grains (may be helpful for the pizza project): <http://wholegrainscouncil.org/>
- For recipes:
 - USDA What's Cooking, USDA Mixing Bowl: <http://www.whatscooking.fns.usda.gov/>
- A few other resources for really interested 4-Hers:
 - General Nutrition Information, UGA FACS Extension:
 - <http://www.fcs.uga.edu/extension/food-select-and-prepare-healthier-food>
 - <http://www.fcs.uga.edu/extension/food-eat-right>



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