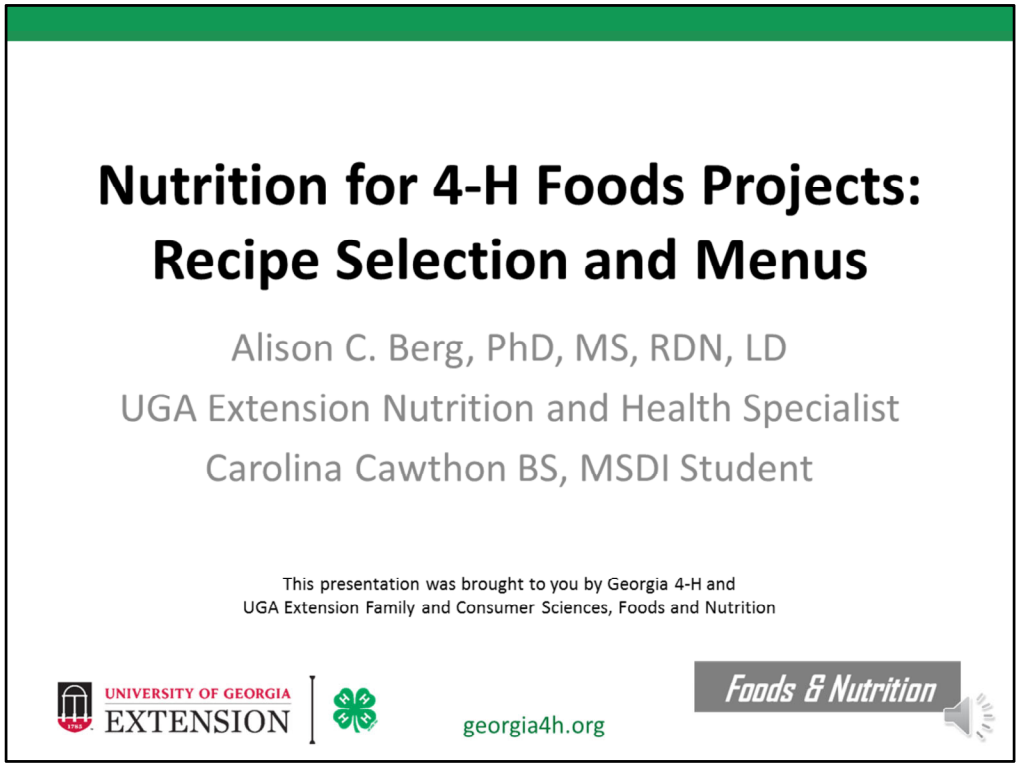
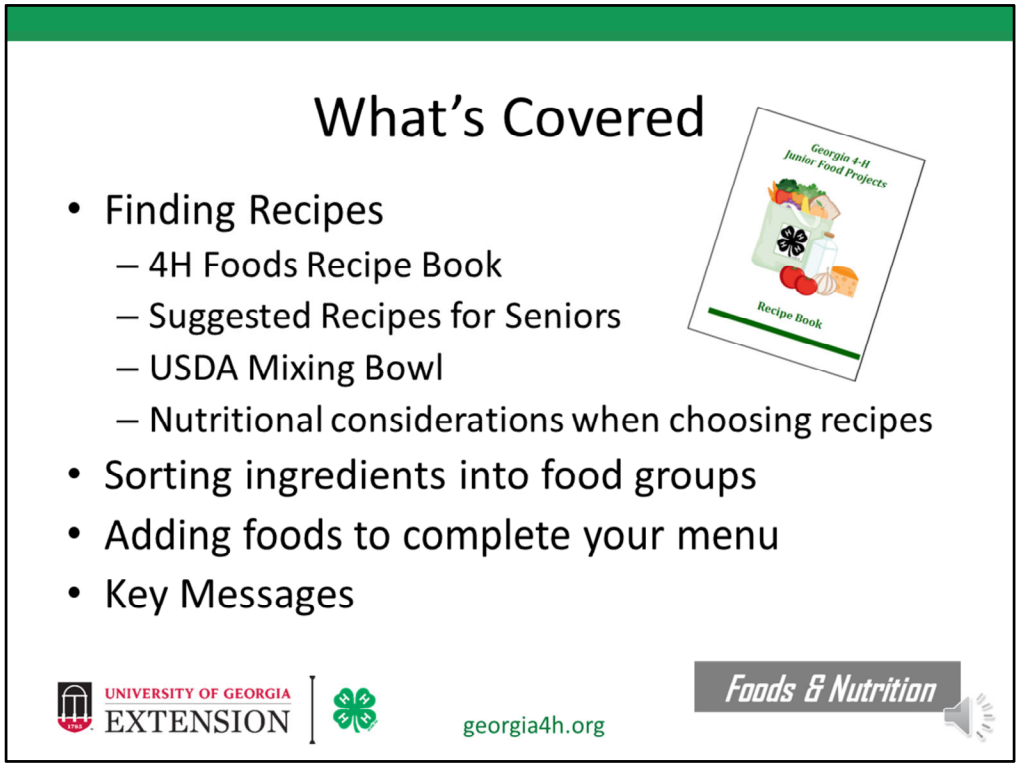


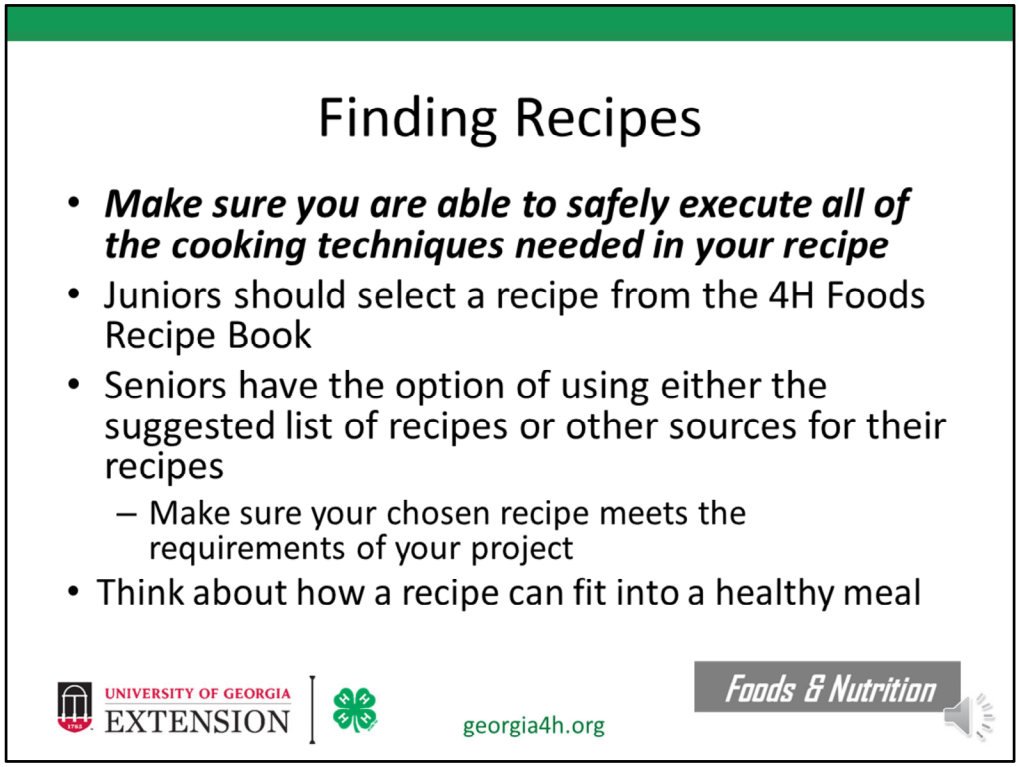
- Welcome to the Recipe Module of the nutrition training for 4H foods projects. We are glad that you are able to join us today. My name is Alison Berg and I am a UGA Extension Nutrition and Health Specialist. Carolina Cawthon, a graduate student at UGA is my co-author of these trainings. Thank you, Carolina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

- This module will help you understand how to choose a recipe and also how your recipe fits into the MyPlate guidelines that you learned about in the MyPlate Nutrition module. Understanding how your recipe fits into MyPlate will help you plan the rest of the meal and menu based on what is and isn't already included in your recipe. You may need to watch this video more than once to be really prepared for your project, and that's just fine. You may also want to print out the documentation on the website so that you can have this information available as you select your recipe, plan your complete menu, and brush up on these ideas before competition. Let's get started.



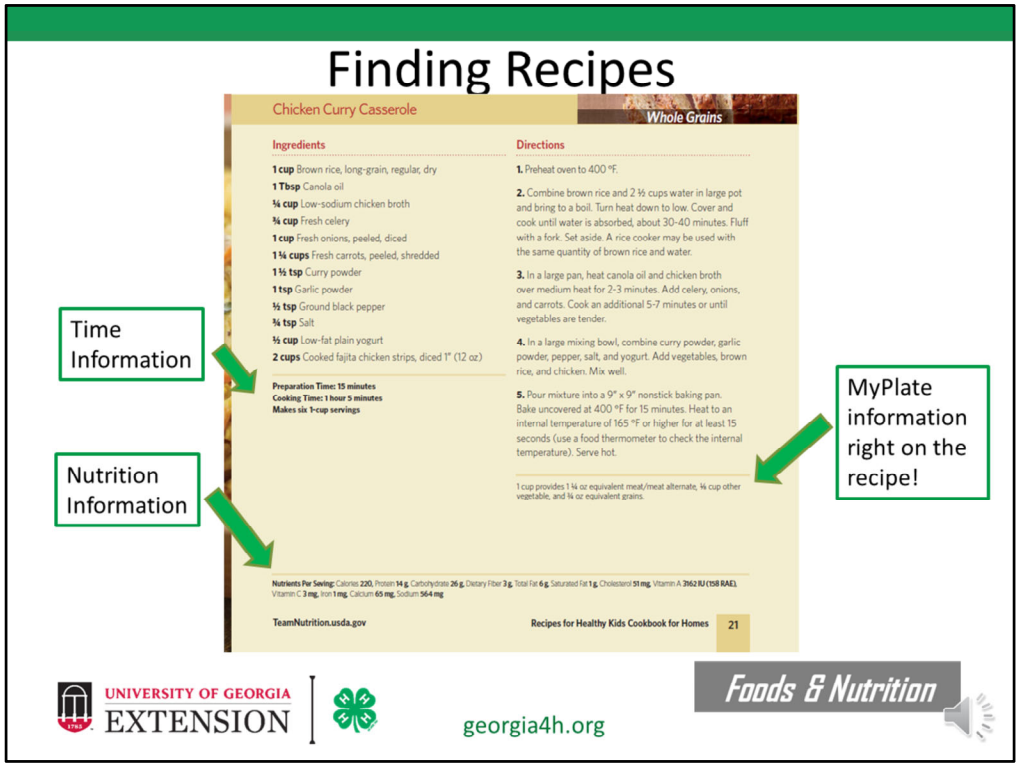
Here's what you can expect to learn about as we work through this recipe module today.

- Finding recipes, either in your 4H Foods Recipe Book, from the suggested recipe list, or from other sources like the USDA Mixing Bowl website,
- Nutritional considerations when choosing recipes
- How to sort the ingredients in your recipe into their food groups
- How to round out your menu to produce a tasty, attractive, nutritionally balanced meal
- Finally, we'll review the key messages before we finish up.

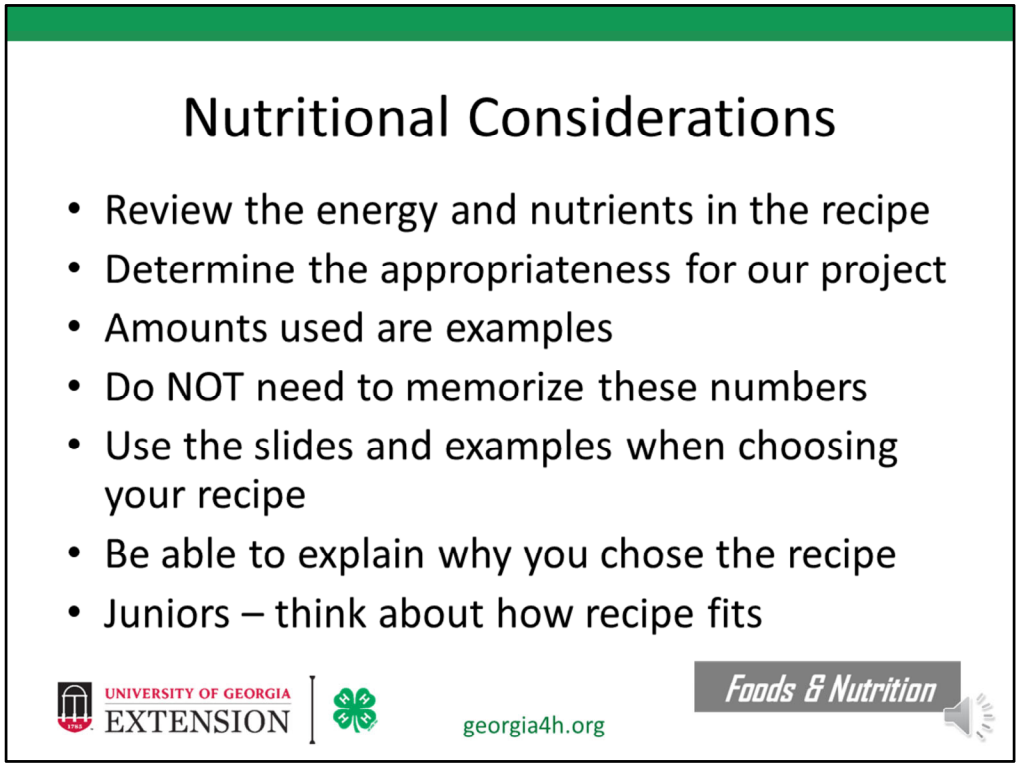


- When you are looking for recipes, one of the most important considerations is that you are able to safely perform all of the cooking techniques in your recipe. If you find a recipe you like, but you are unsure about a technique, your agent, a parent, or teacher can be good sources for instruction.
- Remember, if you are a junior 4Her, you will be selecting a recipe from the 4H Foods Recipe Book. Seniors have a list of suggested recipes, but are also allowed to use other sources (like USDA Mixing Bowl)
- Some projects have specific food requirements, like the dairy foods project, and you will want to be sure you meet those requirements before making a final choice.
- Next, you will want to think about how the recipe can fit into a healthy meal.

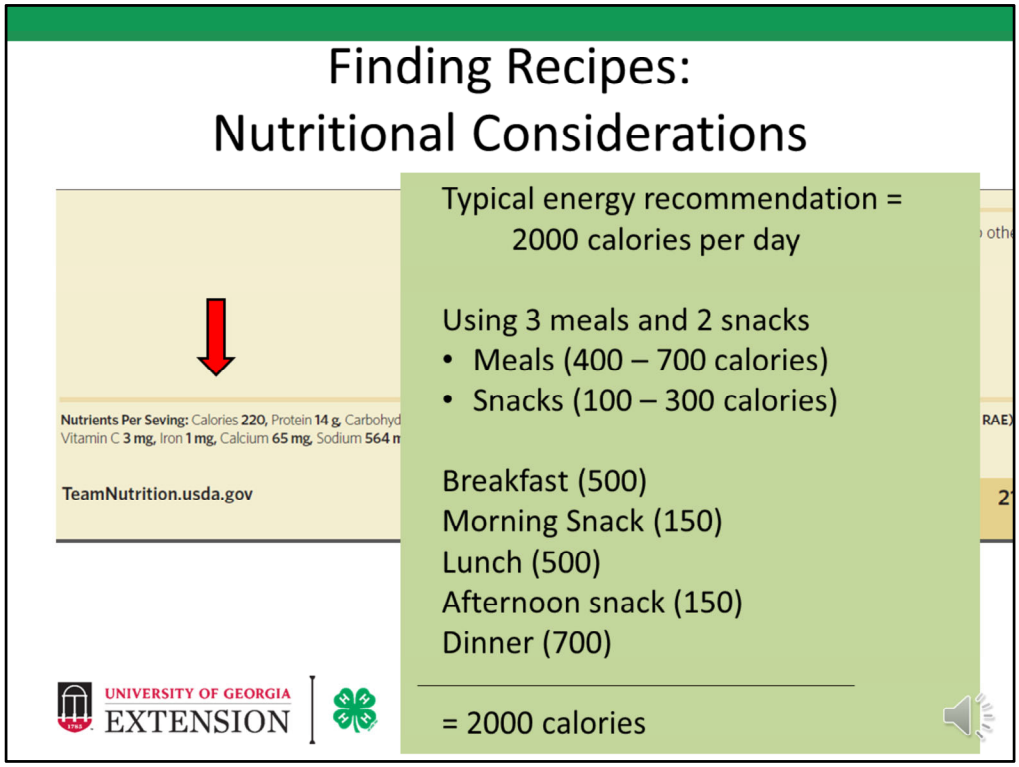
What's Cooking? The USDA Mixing Bowl (https://www.whatscooking.fns.usda.gov) is a great website for finding recipes. This is a screen shot from the home page. There is a standard search bar, and in your results, you can filter by different categories, such as food groups, health conditions, and budget recipes. There are also several complete cookbooks to look through. If you will be choosing a recipe on your own, we highly recommend you start your search here.



- For this demonstration, we will be looking at a Chicken Curry Casserole recipe from the USDA Mixing Bowl website. You may not use this recipe for your project
- Note that the total time for preparation and cooking for this recipe is 1 hour and 20 minutes, so it is too long to be prepared for a district or state foods project.
- That's one of the first things you want to look at when choosing a recipe. Ask yourself, can you prepare this recipe from start to plating in the amount of time for your project?
- One thing that's really nice about the USDA Mixing Bowl recipes is that most will have nutritional information and MyPlate information, which will help you plan the rest of your menu. These are important things you will want to consider, when choosing a recipe for your project.
- Now, lets focus on the nutrients in this recipe and think about whether or not they make sense for our project.



- In the next few slides we are going to review the energy and nutrients in the recipe to determine the appropriateness of the recipe for our project.
- The amounts used are examples to help guide you.
- You do NOT need to memorize these numbers.
- You can use the slides and examples when choosing your recipe, which you will do before your contest or event.
- While you don't need to memorize the numbers, you do want to be able to explain why you chose the recipe, when you are in the competition. For example, you might say "My recipe was a reasonable amount of calories for a meal. Or my snack was low in saturated and total fat compared to other similar recipes I considered. For the juniors, you might think about the recipe does or does not fit your daily needs.
- So lets walk through the nutritional considerations.

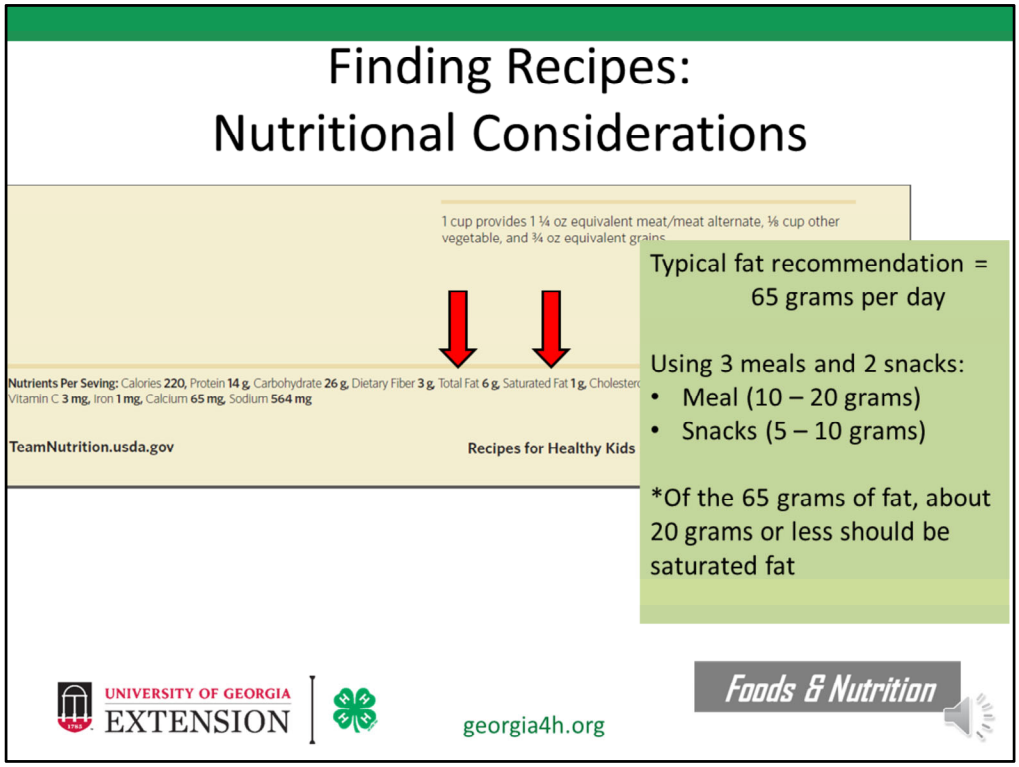


Lets review the nutritional information to determine if our recipe is a good fit for our project:

- First, we want to know, does the recipe provide an appropriate number of calories or energy?
    - The red arrow is pointing to the calorie count for one serving of our Chicken Curry Casserole.
    - Remember, calories are just a unit of measurement that tells you how much energy your food or recipe provides. As always, balance is the key!
    - So we would need to know how many calories we need in a day to know if this Chicken Curry Casserole is a good number of calories for a meal.
    - A typical energy recommendation is about 2000 calories per day for most teens, although some people will need more or less depending on their size and how active they are.
        - Larger people and more active people need more energy or calories every day
        - Smaller people and less active people need less energy or fewer calories every day
    - If you think about a typical meal pattern of 3 meals and 2 snacks each day, a good number of calories for a meal would be 400 to 700 and about 100 to 300 calories for a snack. Now not everybody eats this way, but it is common, so we will use it for our example.
        - If we look at this in an example, you can see how meals and snacks within these ranges can total to 2000 calories per day. We might have a

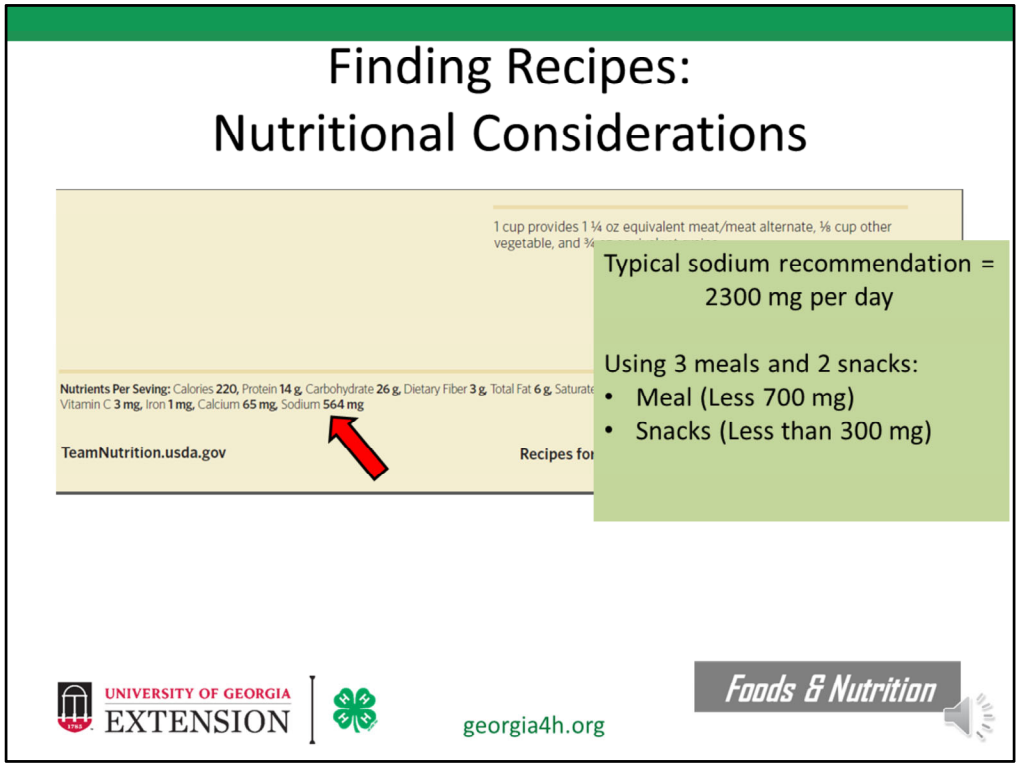
breakfast of 500 calories, morning snack of 150 calories, lunch of 500 calories, afternoon snack of 150 calories, and dinner of 700 calories which adds up to our total of 2000 calories for the day.

- This recipe has 220 calories per serving. How does that fit with the range for a meal, such as lunch or dinner?
    - Well, 220 is less than 400, but remember we will need to add some other foods to the recipe to get all the foods from MyPlate to complete our menu, so this amount of calories could be just right for an entree.

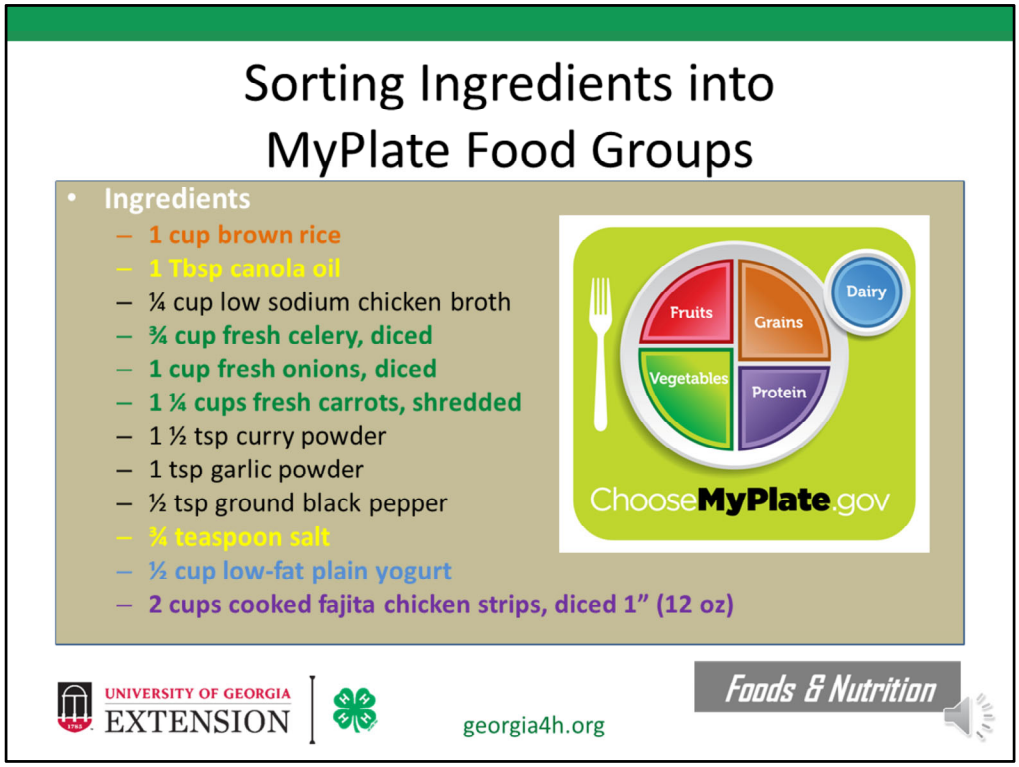


Next, let's think about how much <u>fat</u> is in our recipe.

- Does the recipe provide an appropriate amount of fat?
  - The red arrow is pointing to the total amount of fat in <u>one serving</u> of our Chicken Curry Casserole.
  - A normal, healthy diet should include fat, remember, fat is important for brains, nerves, absorbing vitamins, and many other functions. It also provides energy. So for fat, we want to make sure we get enough, but not too much to keep our energy in balance.
    - For our 2000 calorie example, a healthy amount of fat would be about 65 grams of fat every day
      - This is easily 10-20 grams per meal, or 5-10 grams for each snack, if we think about our 3 meals and two snacks example.
    - This recipe contains only 6 grams of total fat, so it will be easy to fit it into our daily allowance
    - Most people should limit their saturated fat. Of the 65 grams of fat allowed per day, only about 20 grams or less of your total fat should be saturated fat.
    - This recipe only has 1 gram of saturated fat, so it should be easy to fit into our daily allowance.



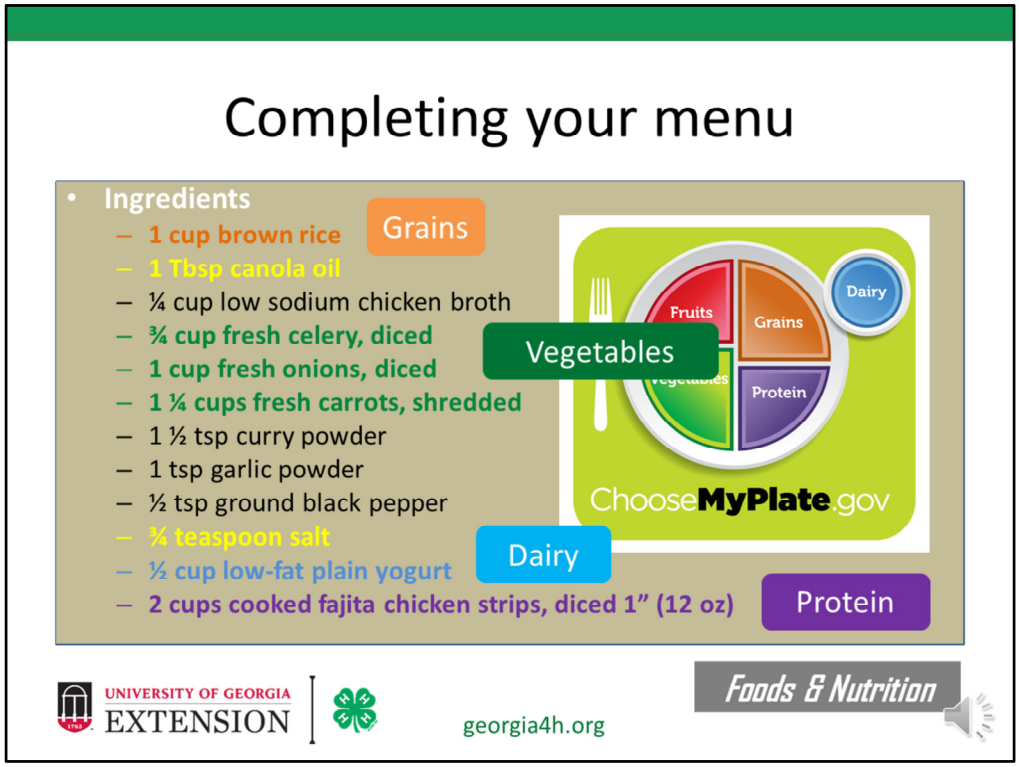
- One last thing to think about before we start looking at food groups is sodium or salt in our recipe
- Does the recipe provide an appropriate amount of sodium?
  - The red arrow is pointing to the amount of sodium in one serving of our Chicken Curry Casserole.
  - It is recommended that most people consume 2300 milligrams (mg) or less of sodium each day
  - Using our previous example of 3 meals and 2 snacks per day, a meal should include less than 700 mg of sodium and snacks less than 300 mg of sodium
  - This makes a dish with 564 mg of sodium fairly easy to include as part of a meal, but we will want to use care when completing the menu to keep the total sodium low enough that leaves us room for our other meals and snacks.
  - If a recipe seems very high in sodium, you can reduce any added salt and try to replace ingredients with low-sodium or “no salt added” versions to reduce the amount of sodium in each serving.



- Next, let's sort the ingredients into MyPlate food groups to see what our recipe provides. In our example, we have color coded the ingredients by MyPlate food group.
- You'll notice that this recipe contains brown rice, shown in orange, which is a whole grain. Remember that we like most of our grains to be whole grains because whole grains have more of the nutrients we depend on the grain group to provide. Often, you can successfully swap brown rice for white rice, whole wheat pasta for white pasta, or whole grain bread for white bread to make a recipe more nutritious.
- This recipe also contains some foods from the vegetable group, shown in green. Celery, onions, and carrots are all members of the vegetable group.
- The dairy group is represented by low-fat plain yogurt, shown here in blue. Notice that we have chosen low-fat yogurt for this recipe. This choice helps us keep the total fat and the saturated fat in this recipe to a reasonable amount for a main dish.
- The fajita chicken will help us meet our needs from the protein group, and is shown in purple. Fajita chicken is normally skinless chicken breast, and this is a choice is low in fat and comes from the "anytime" foods choices, which we will talk about in the MyPlate Nutrition Module.
- In yellow, we have oils and salt, which are ingredients that are foods with "allowances" instead of "requirements," as they are not food groups in MyPlate. This means that you *should* include these ingredients but be careful not to exceed your allowance.
- It is important to recognize that other ingredients in the recipe will also contain fat and sodium. For example, low sodium chicken broth was chosen to help keep the sodium in the recipe at a reasonable amount for a main dish, but it does add to the sodium content. Most likely, the packaged fajita chicken will also be a source of sodium in this

recipe because salt is necessary for keeping foods like chicken safe.

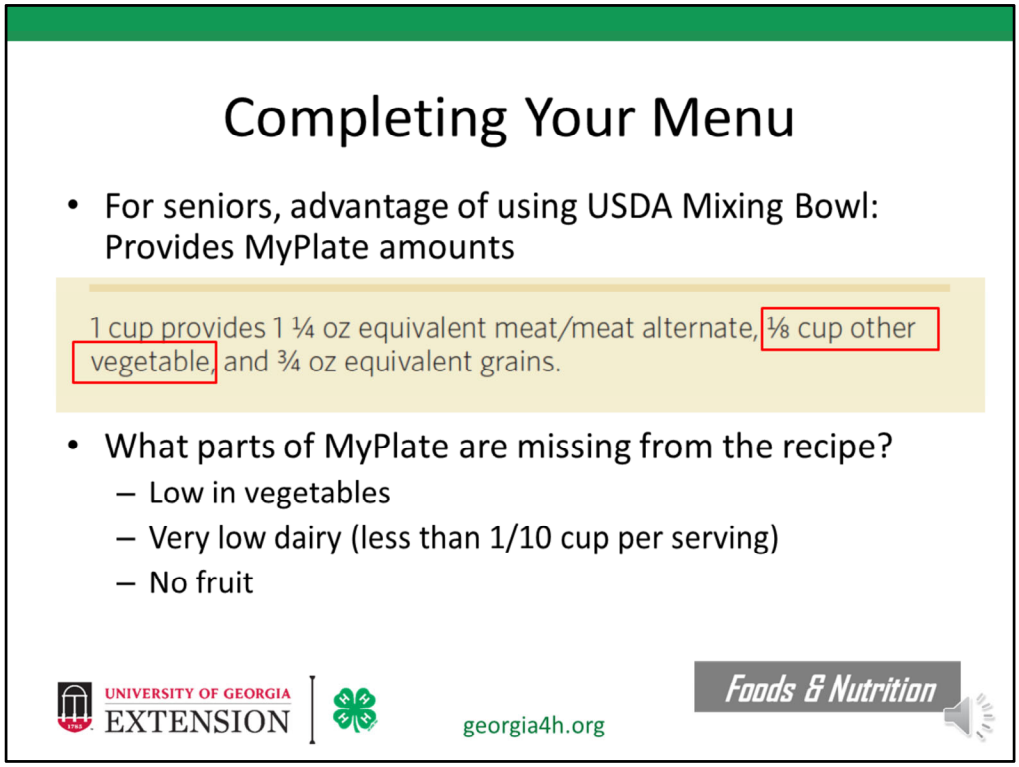
- The ingredients listed in black are spices and other extras that don't really contribute much in the way of energy or nutrients to the recipe,
- If you are not sure which food group an ingredient fits into, you can find detailed food lists on the MyPlate website to help you decide.



- So, we know we have grains, vegetables, dairy, and protein from my plate. What are we missing? Fruit!! We will need to add a fruit to the meal to make it complete. You could add a fruit salad, a bowl of strawberries on the side, or maybe some refreshing watermelon.

- Here's something else to think about. Although you don't need to do a lot of fancy math, you will want to consider whether the food ingredients from each group in the recipe will make a serving when the recipe is divided up into servings. For example, is 1/2 cup of yogurt divided into the six servings the recipe makes really very much dairy? No, it isn't. In fact, one serving of dairy foods is one cup. The whole recipe doesn't even include a full serving of dairy! So, we know that each serving will definitely NOT include a serving of dairy.
- So, for this recipe we will want to add a glass of milk or be sure to include dairy foods at our other meals or snacks during the day. This recipe would not meet the dairy requirements for the dairy foods project!

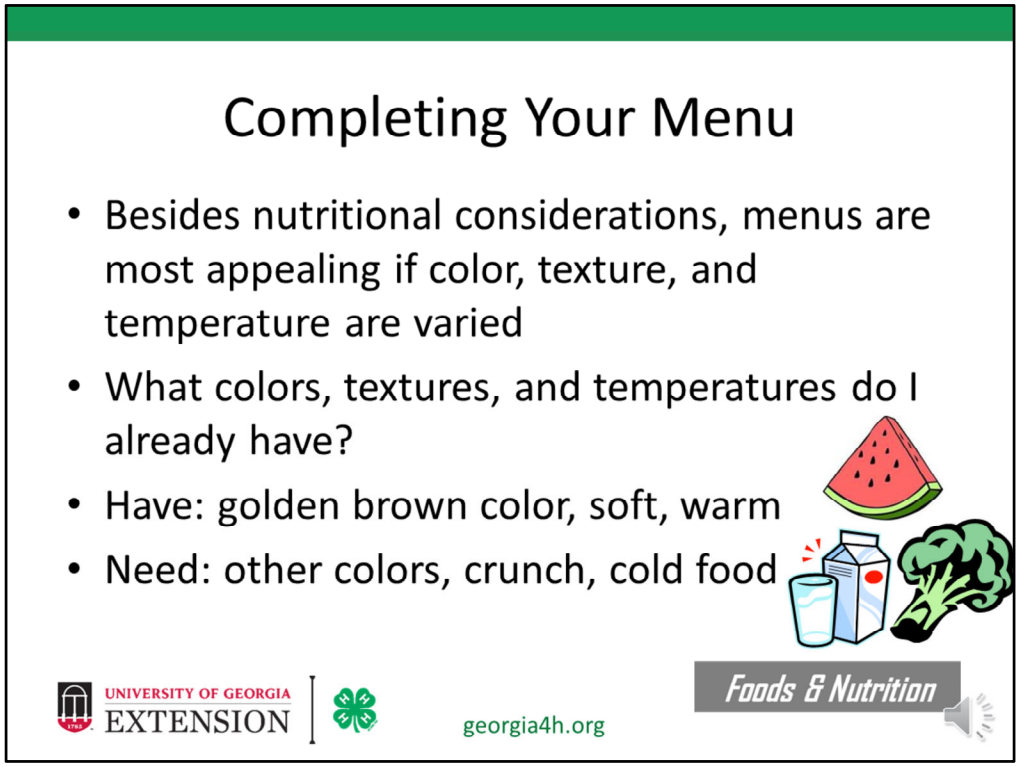
- For your foods projects, you just want to make sure each MyPlate food group is represented. You don't need to do the math to determine amount per serving, but it is good to think about. ***NOTE: You will need to make sure that for the dairy foods projects you have a full serving of dairy. Please see the dairy foods project module for more information.



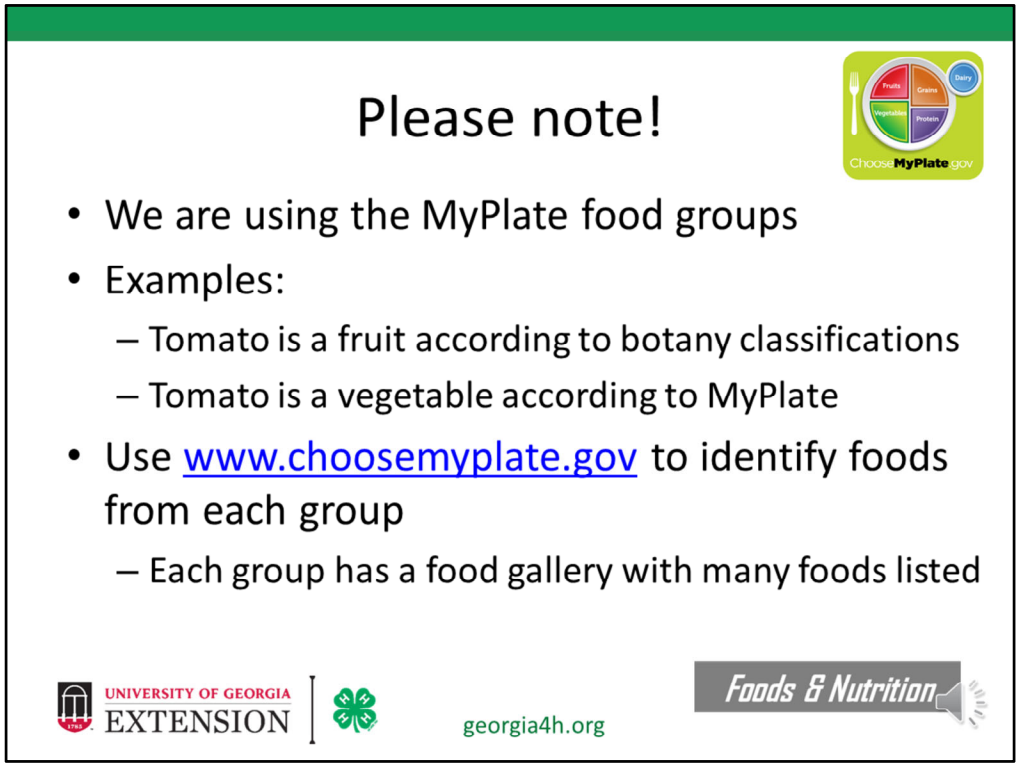
- For seniors, one advantage of using USDA Mixing Bowl to find your recipe is that many provide information about MyPlate servings. This is the information from the Chicken Curry Casserole.

- For example, in this case, we can easily see that we will get only 1/8 cup of vegetables—and 1 cup is a serving and we need 2 ½ cups every day. We should remember this when we are planning the rest of our menu.

- So, in addition to the dairy and the fruit that we determined we were missing when looking at the recipe on the last slide, we can now see from this information that the dish is also low in vegetables. So we might consider adding a vegetable side dish or a garden salad in addition to dairy and fruit.



- Lastly, there's more to menu planning than nutrition! Can you imagine what a meal made up of brown rice and diced chicken served with a brown roll, mashed potatoes and applesauce look like? A bunch of bland, colorless blobs! Gross! A well-planned menu will be nutritious AND appeal to your senses.
- Besides nutritional considerations, menus are most appealing if color, texture, and temperature are varied
- What colors, textures, and temperatures do I already have?
    - This recipe ends up being mostly golden brown, will be soft but not mushy, and is served warm.
    - We will want to add more colors, and it might also be nice to add a crunchy food or a cold food.
- One good way to round out this meal would be to add 1 cup of diced watermelon, 1 cup of steamed broccoli, and a glass of milk (1 cup).
    - notice that the watermelon not only adds the missing fruit to our meal, it also adds another color and temperature to the meal
    - the broccoli will add a nice dose of green, and may add some crunch
    - The glass of milk makes a nice way to add dairy and round out the meal.
- Of course, there is more than one "right" answer! Can you think of other ways to make this meal complete?
- Remember, think of adding colors, temperatures, and textures to make a meal that is delicious, nutritious, and beautiful on the plate!
- Remember, the MyPlate website is an outstanding resource for more ideas of foods from each group and how much is a serving.

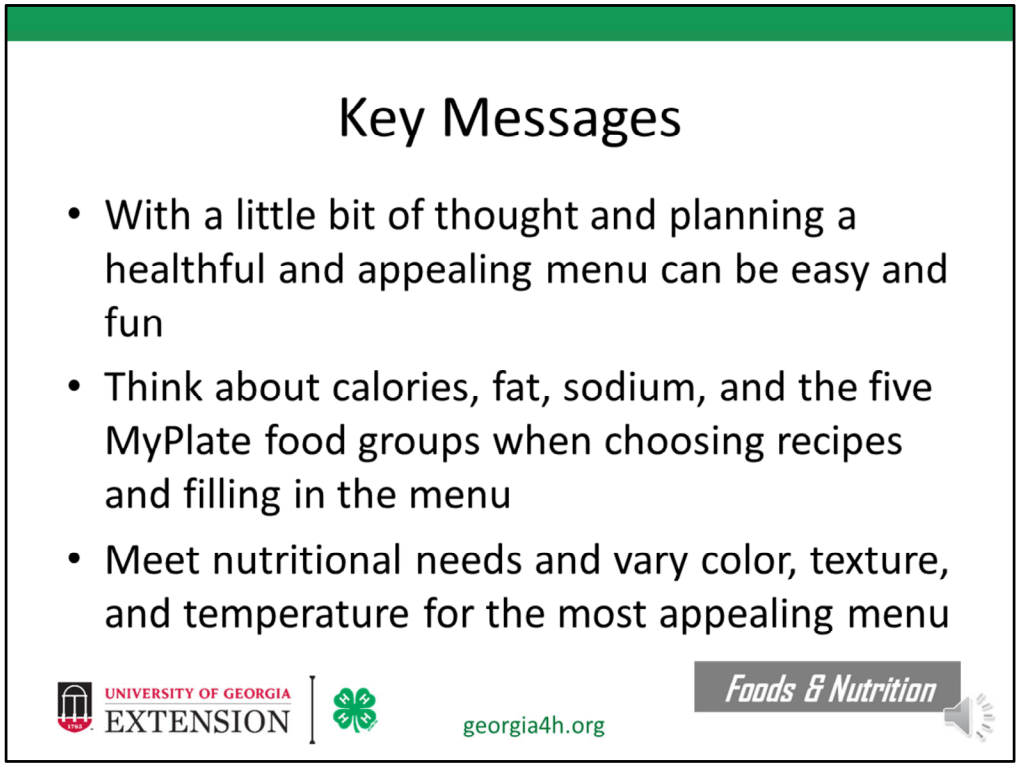


Please note that we are using MyPlate food groups to categorize the food ingredients in your recipe and on your menu. This is important because each MyPlate food group has specific nutritional characteristics that help determine what foods go in each group. Furthermore, people who study plants, like botanists and horticulturists, may refer to foods as being from different groups than nutritionists, dietitians, or chefs. Since the purpose of your 4-H foods projects is to learn about nutrition, we are following MyPlate guidelines for how to group foods.

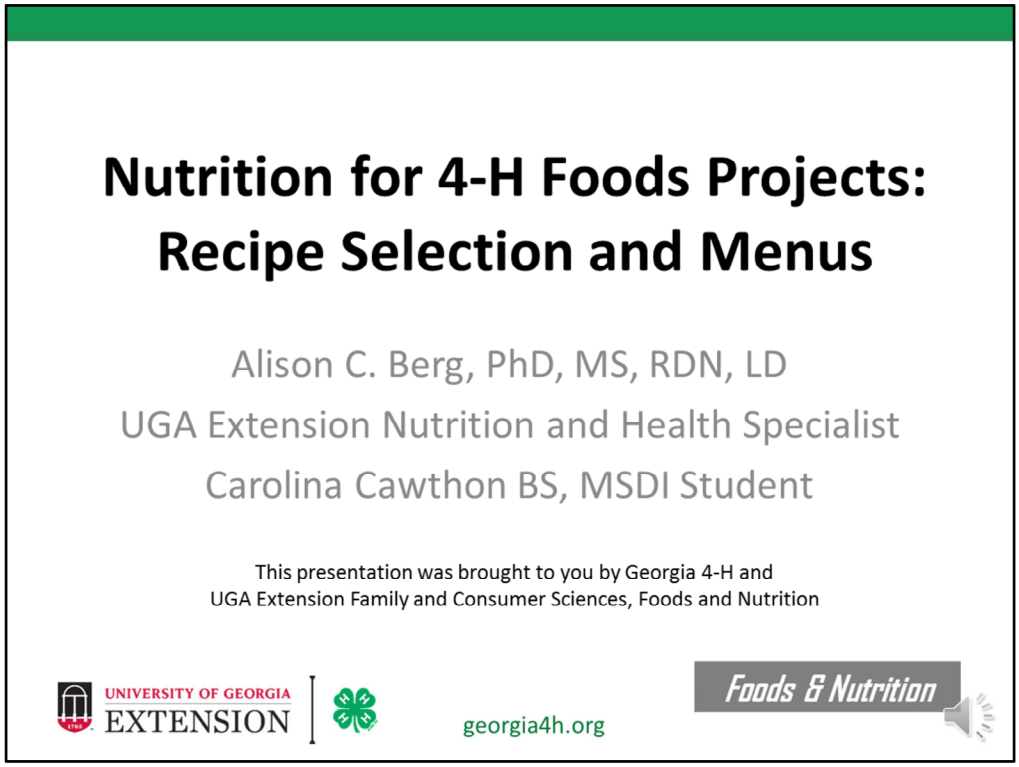
For example, botanists, or scientists who study plants consider tomatoes a fruit, because they are a ripened ovary of a plant containing the seeds. However, MyPlate categorizes a tomato as a vegetable. This is because a tomato is more nutritionally similar to other vegetables than it is to fruits. It is lower in sugar and carbohydrates than most fruits. It is also used in savory dishes like many vegetables.

Another example where there can be confusion is the protein foods group. Just because a food contains protein, like milk or corn, does not mean it is part of the protein foods group according to MyPlate.

So, please use www.choosemyplate.gov to identify the MyPlate food group to which your food belongs. On the website, under each food group is a food gallery where you can learn about the many foods in those groups.



- With a little bit of thought and planning a healthful and appealing menu can be easy and fun!
- Think about calories, fat, sodium, and the five MyPlate food groups when choosing recipes and filling in the menu.
- Remember! You **don't** have to memorize numbers! Use this slide show to help you in choosing your recipe and preparing your menu before the competition. At the competition, know why you made the choices you did.
- Remember, you will want to meet nutritional needs and vary color, texture, and temperature for the most appealing menu



This concludes our presentation. Thank you for your attention. Good luck choosing your recipe and menu for your project! I know you'll do great!
This presentation was brought to you by Georgia 4-H and UGA Extension Family and Consumer Sciences, Foods and Nutrition.

Additional Resources

- 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 recipes:
  - www.choosemyplate.gov
  - USDA What's Cooking, USDA Mixing Bowl: http://www.whatscooking.fns.usda.gov/
  - USDA Fruits and Veggies More Matters: http://www.fruitsandveggiesmorematters.org/main-recipes
  - Academy of Nutrition and Dietetics, KidsEatRight: http://www.eatright.org/resources/kids-eat-right-listing
- 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