## Script

[Slide 1] Hi everyone. We are very happy to have you today. We are [name of the speakers], and we are going to provide you with information about Portion Sizes.

[Slide 2] We hope that after the presentation you will be able to identify appropriate serving sizes for different food groups, recognize that the cooking process changes the volume of the food, recognize portion distortion and how to control it, determine how plate sizes influence portion sizes. At the end of the presentation, we will have a small activity, and prizes for those who show the most thorough understanding of the topics at hand.

[Slide 3] Hello my name is [speaker's name], and I will Identify appropriate serving sizes for different food groups from MyPlate, what we will be discussing in terms of food groups is typical portion control based off of a 2,000 daily caloric intake allowance, keep in mind it can vary from person to person based on different factors such as: weight, height, BMI, physical activity, and dietary restrictions due to nutrition related illnesses. Many of you may have seen this or heard of this, this is MyPlate, and it shows the different food groups: vegetables, fruits, grains, protein, dairy.

[Slide 4] The first group we will discuss will be grains, and it is important to note that whole grains are key because our bodies need the many nutrients they provide such as iron, the B vitamins, and dietary fiber. Women should have about 6 ounces per day, which amounts to about 2 ounces per meal and men should have 8 ounces per day, roughly 2 <sup>1</sup>/<sub>2</sub> ounces per meal, it does not have to be exactly like this, you can customize your diet based on how ever you like this is just to give you an idea. Now for some examples: one whole bagel is equivalent to 4 ounces, so if we are sticking to 2 ounces per meal you would eat half a bagel, a cup of cooked brown rice (which is about a slice of a light bulb), or a cup of whole grain pasta about the size of a baseball.

[Slide 5] The second group we will discuss is dairy, and it is really important when selecting dairy products to opt for low-fat or non fat, if you are vegan/lactose intolerant, or have a milk allergy opt for milk substitutes that are fortified with calcium and vitamin D such as soy or almond milk, both men and women need 3 cups of dairy per day, this can be broken down to 1 cup per meal or can be included in snack. Some examples include: A cup of yogurt which is about the size of a baseball, a cup of milk is equivalent to a cup of dairy, or 1/3 cup of shredded cheese.

[Slide 6] The third group, we are discussing are vegetables, when selecting vegetables for consumption it is important to have a variety, women should consume 2  $\frac{1}{2}$  cups per day, ~  $\frac{1}{2}$  a cup per meal, for 3 meals and 1 snack. Men should have 3 cups per day, 1 cup per meal. 1 cup of leafy greens is equivalent to half a cup of vegetables, 3 broccoli spears about 5" long is equivalent to a cup of vegetables as well, or 1 small baked potato.

[Slide 7] The fourth group are fruits, and just like vegetables, it is important to select variety. Men and women should consume 2 cups of fruits daily, this can be ½ cup per snack & 1 cup for one meal, or like I've said before customize to your personal preference. A serving of fruit is equivalent to a medium apple the size of a baseball, 12 strawberries, a large peach, or 16 small grapes.

[Slide 8] The final group is protein, when selecting protein make sure you opt for lean cuts of meat, also have a variety of protein. An egg, a slice of deli meat, 12 almonds, 24 pistachios, or 7 walnuts halves are equivalent to an ounce of protein. A piece of meat about the size of a deck of cards is equivalent to 3 oz. of protein.

[Slide 9] As mentioned previously by [name of the previous speaker], it is important to measure your portion size and make sure that your diet consists of a variety of food from different food groups. Estimating the portion sizes of foods that do not require cooking is relatively easy. We can use all the helping tools like a bulb, or baseball mentioned earlier. Also, to measure fruits or vegetable portions all we need is a cup. We can cut the amount of food we need and exactly know how much we have eaten. The same might be applied to dairy products like milk or cheese. It is easier to control the portion size of the food that does not change volume while cooking. Also, it is easier to control the sizes if you only prepare enough food that you need. How many of you cooked too much rice or pasta and then eat it all because it was too little to save it for another meal, but at the same time it was too much? I did this a few times to myself. Do you think that if you would know how much of dry ingredients you need to cook to get exact amount of cooked food you need, your preparation, cooking and at the same time controlling of portion sizes would be easier for you? I believe so!

[Slide 10] This table shows how much of a dry food you need to cook to get a certain amount of cooked food. Most of these items change the volumes by 3 to 4 times. For example, if you need a 1 cup of cooked brown rice, you only need to cook <sup>1</sup>/<sub>4</sub> cup of dry rice.

[Slide 11] Meat, fish, and poultry also change volume, but in contrast to grains, they shrink. Usually, meat products shrink around 25% during cooking. If you are planning to measure the portion of the meat, fish, or poultry, you should do it before cooking.

[Slide 12] I would be presenting information on portion distortion. Such information would include: What is portion distortion? It means having a misconception of the meaning of one portion of a particular food. Portion sizes began increasing at restaurants. Larger portions stimulate people to eat more. Studies show that people tend to consume 30 % more calories if served larger portions.

[Slide 13] I would also explain the difference between portion size and serving size by providing the following data: portion size is how much a person CHOOSES to have at one time. For instance, a slice of pizza used to provide 500 calories but the average small size of pizza

today provides 850 calories. Another common food item we have noticed increased through the years is popcorn. A small size used to give us 270 calories, but today it gives us 630. Lastly, a muffin used to be just 210 calories, but nowadays its small size is 500 calories.

On the other hand, serving size is the the amount of food listed in the product's nutrition facts label, suggested by the manufacturer. Just as shown in the label presented here. Some examples of serving sizes include a wedge of melon,  $\frac{1}{2}$  cup cooked pasta, or 1 cup of milk.

[Slide 14] To provide a better understanding of portion distortion, I would explain a particular study that showed that commercial cereal packaging showed exaggerated oversized serving sizes to stimulate people to overeat. The images of 168 cereal boxes were carefully considered and researchers concluded that the images were 64% larger than recommended portion sizes in nutritional fact labels of the same packages. This results in 221 calories versus 134 calorie consumption of the product. Study reflects that 17% of the studied population poured more cereal than the recommended serving. This leads to over-serving, hence portion distortion.

[Slide 15] How can one avoid portion distortions? Read food labels, compare marketplace portion size to recommended serving, MyPlate is a great resource of information, repackage supersized bags, eat half or less, use a smaller plate, skip repeating. The Academy of Nutrition and Dietetics suggests to "Eat from a plate, not a package, so you know how much you eat."

[Slide 16] Here are some alternative when eating out. Plan ahead, have an idea of the kind of food you will choose, eat a light dinner if you ate a large lunch, some restaurants offer menus online, check them before you visit the establishment. Bring leftovers home; eat half the meal at the restaurant. The leftover can be lunch the next day. Order an appetizer in place of an entree and a soup or salad. Share an entree, split it between you and your friend or loved one.

[Slide 17] So as [previous speaker's name] mentioned, you can avoid Portion Distortion by using smaller plate sizes. Why? Because a bigger plate has more room for bigger portions!

Now can anyone here recall how big their plates or bowls that they use are?

The standard dinner plate size nowadays is about a 12-in diameter plate. You may have this size plate in your home, or you can find it in a local restaurant.

Roughly 50 years ago, our plate sizes used to be smaller and people ate less food, as you can see from this graphic. Notice that there is less salmon and rice that can fit on this 9 inch plate.

A key change you can make is to pay attention to your plate size

Has anyone poured a bowl of cereal and measured the exact amount of cereal you put in? A bowl of cereal isn't one serving, in fact, a bowl of cereal, depending on the size of the bowl, can be at least 3 servings. This is one example of portion distortion [Slide 18] Another example is shown here with an average meal. Notice how the serving sizes of each food increase as the size of the plate increases. You can avoid that

It's as simple as using smaller plates to help portion out your meal.

[Slide 19] Maybe you're somewhere you can't control the plate size, like a restaurant. You can always ask for an extra "sharing" plate, usually smaller, and portion out your food. If not, just portion it out and ask for a to-go-box for leftovers.

Was anyone raised being told to "clean your plate"? You don't have to anymore, no one is forcing you. You can always save the rest. Your health is more important than social cues.

It's *okay* to not finish and clean your plate and have leftovers

[Slide 20 & 21] Hello everyone, my name is [speaker's name] and we will be practicing measuring different foods and using visual comparisons to accurately determine portion sizes when eating. As mentioned before, the plate or bowl size that you use will affect your perception of the amount of food you are serving and eating. On each of your tables there are baseballs, tennis balls, dice, deck of cards, and CDs that will help you to be able to accurately estimate your appropriate serving size of foods. The number of servings each person eats in a day is determined by factors such as physical features, like height or health conditions, and also how frequently a person exercises. There are a few ways to determine your portion needs but one simple way is to go to supertracker.usda.gov, create a profile, and it will generate different meal patterns with the appropriate servings of each food group. The website is on the bottom of your handouts. For now everyone will get a chance to practice physically measuring foods and putting in on a plate and comparing it side by side to the appropriate visual reference.

First, we'll start with fruits. One serving of fruit is considered ½ a cup which visually is about the size of a tennis ball. On your tables you have grapes, apples, and strawberries you can practice measuring onto a plate or in a bowl. Make sure to measure all the different types of food present because the shape of food also affects how we estimate it. Grapes have a nicer uniform, round shape that fills a ½ cup well but the strawberries are a bit more misshaped and don't fill the measuring cup quite as well. I also just want to point out that a lot of whole fruits such as apples and bananas tend to much bigger than one serving when purchasing from the grocery market which is why it is important that everyone here is able to confidently visually estimate portion sizes. [Pause and allow time for practice, walk around to observe and assist anyone] Next, is the grains food group in which you have rice, beans, pasta, and dry cereal. For this food group 1 serving is also ½ a cup but grains are a main staple for most diets and are typically about 60% of your diet, so for this food group we'll also practice measuring 1 cup of grains which visually is a baseball. You can also compare the foods to a CD which represents one serving of round grain foods such as pancakes, bagels, and english muffins. Please measure ½ cup and 1 cup portions of the different grains. [Pause and allow time for practice, walk around to observe

and assist anyone] Moving on, the vegetable food group consisting of green beans, broccoli, and baby carrots. For this food group we'll practice again both 1/2 cup and 1 cup measurements which are a tennis ball and baseball visually. I also want to encourage everyone to use other visuals for references such as your cell phone, wallet, or watches. Anything that you may carry with you on a daily basis is a good tool to help keep you portion sizes accurate. [Pause and allow time for practice, walk around to observe and assist anyone] Now we'll practice our "meat" or protein visualization with steak, shrimp, chicken breast and nuts. One serving of protein is considered 3 oz so this a bit different than our previous food groups which all use measuring cup sizes. For this visual there are card decks that represent one serving of 3 oz. [Pause and allow time for practice, walk around to observe and assist anyone] Great, we covered all the main food groups except dairy because those are more fluid or fluid like substances that we encourage you to practice visualizing on your own at home and when you go out to eat. We also did not practice fats and oils for the same reason as the dairy group but we do have dice on the tables which each represents 1 teaspoon. Using the nuts as a fat source, practice measuring that on to your dishes and keep in mind that this food group also includes salad dressings and nut butters such as peanut butter, almond butter, and the like. [Pause and allow time for practice, walk around to observe and assist anyone] Well now that is the end of our hands- on activity but there is one last activity for us to get through.

[Slide 22 & 23] To end our day here, we will play a game of Jeopardy that asks questions about everything you learned here in the past 40 minutes or so and each member of the winning team will receive a \$5 gift card to Target. Please stay where you are seated as I divide the class into even teams. Once the teams are established group together and review your notes and ask any questions you have now before the game starts to ensure you are clear about the topics discussed today. [Divide audience into teams and allow a maximum of 5 minutes for group introductions and rearrangements] Okay, so with group team jeopardy anyone in the group can give the answer but only one answer will be accepted from each team so before speaking aloud and giving an answer talk quietly within your group to get a consensus of the answer. Each team that chooses a question will have 15 seconds to answer and if they are wrong or don't have an answer the next team will have 8 seconds to answer. After reading the question I will ask if everyone understands and if not I will explain or rephrase the question for better understanding. No team will get negative points and whichever team has the most points after all the questions have been answered will be the winner. Any questions before we begin? [Pause] Okay, and so we begin. [If only two teams flip a coin for who goes first, if more than two teams one person from each group will pick pens from my closed hand and whichever pen doesnt have a cap will go first, order after will be from left to right]

\*Continues with game and declares winner once all questions are answered\*

I would like to congratulate our winning team and I would like to thank all of you to for your patiences and participation. Thank you and I really hope everyone learned something useful today. Have a good rest of your day.

## Project write up

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• Identify the objectives of your interactive educational experience.

Audience will:

- Identify appropriate serving sizes for different food groups on MyPlate.
- Establish understanding of the topic on hand through prop use during and after activity.
- Recognize portion distortion and how to control it
- Recognize that cooking process changes the volume of the food.
- Determine plate sizes influence portion sizes.
- Identify activities that you will use with your client

Lecture style presentation about information needed when measuring and weighing portion sizes. First is the introduction of the food groups and determining what one serving of each food group is, then the changes in food volume and weight when it is cooked as compared to when it is raw, next is the topic of portion distortion, and lastly is noticing plate and bowl sizes. We will also have a hands- on activity involving the audience to ensure they have time to practice visualizing food portions. The activity will have a demonstrator as a guide and the audience will be able to measure different foods, from all food groups, onto a plate using materials provided and a handout to help them follow along with space to take notes. After practicing all food group measurements, the audience will be split into teams and play a "Jeopardy" style game that encompasses main points from the presentation, and all members of the winning team will receive a \$5 Target gift card (to encourage participation).

• Identify how you will check for understanding of your client

At the end of the presentation, we are going to have an activity. The interactive activity will allow us to check if the audience absorbed at least some of the information that we provided during the presentation. The activity will consist of materials covered throughout the whole presentation, and it will touch on every topic presented. At the end of the activity, the audience will be split in two and play a jeopardy game based on the information presented during the lesson. If the audience answers most of the questions correctly, it will mean that they remembered and actually understood the topics covered.

• What materials will you need to use to complete your interactive educational experience?

To complete our interactive educational experience we will need access to a computer because our presentation will be presented in a PowerPoint program. Besides the technical tools, we will provide the audience with materials needed to follow along and participate. During the activity, we will use objects such as a baseball, tennis ball, deck of cards, and dice to teach and show the audience tips for estimating their portion sizes. For example, we will use a baseball to show them how it can represent a cup of strawberries. To better understand the topic of portion distortion, we will need different sizes of plates to show the audience how their sizes might influence a portion distortion.

Materials:

- Access to a computer
- Powerpoint
- Long tables
- Chairs
- Handouts
- Pens
- Different sized plates and bowls
- Portioned plates/ containers
- Props:
  - Baseballs
  - Tennis balls
  - CDs
  - Deck of cards
  - Dice
  - Fake foods: grapes, strawberries, apples, rice, beans, green beans, dry cereal, nuts, chicken breast, steak, shrimp, pasta, broccoli, and baby carrots
- How much time (total) will your interactive educational experience take?

The interactive education will take about 1 hour.

## References

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