

5 December Lesson: Portion Distortion

Goals:

- *Students will understand the difference between a portion and a serving*
- *Students will learn the importance of managing portion sizes to maintain a healthy weight*

Audience: 5th grade

Optional Craft, Activity or Snack:

- Energizing Trail Mix

Materials:

- 5 clear plastic bowls
- 1 Set of measuring cups
- Dried Pasta noodles (macaroni, rotini, or penne)
- Portion Distortion Visual
- 31 Sugar cubes (optional)
- Snack Wrappers (optional)

Common Core Standards Taught:

- English Language Arts: Speaking and Listening: 5.1
 - Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and text, building on other's ideas and expressing their own clearly.
 - Pose and respond to specific questions making comments that contribute to the discussion and elaborate on the remarks of others.
- English Language Arts: Reading Informational Text: 5.7
 - Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

Lesson:

Leader: (Ask for 5 volunteers to come to the front of the room). Fill this bowl of pasta with how much you normally would eat for a meal.

Do you know the difference between a serving and a portion? A serving size is a set amount of food, such as 1/3 cup of pasta, whereas a portion is the amount of food you consume in one sitting, such as a bowl of pasta.

Let's see how many servings of pasta are in the bowls. Do you think that you poured less, more or exactly the right amount for a child your age? Let's now use these

measuring cups to find out how much you poured. (use a measuring cup and count out loud with the class) A serving of pasta should be about 1/3 cup. Who was close?

Serving sizes are relatively constant; however, portion sizes have significantly increased in the last few decades. Consuming too much food has led to obesity and increased risk for diabetes and heart disease. All foods can be enjoyed in moderation, but it is important to keep in mind your portion size.

To see how portion sizes have increased over the years, let's look at the size of sodas. When McDonald's first opened in 1955, they offered one drink size, it was 6 oz. (Show Slide #1). Six oz is half the size of a can of cola. If you go to McDonald's today and order a soda, the kid's size is 12 oz (the size of a can) and the large soda is 32 oz!

While it may seem like you're getting a deal by ordering a larger size, you're getting a whole more than you bargained for. Does anyone remember how many grams of sugar are in a teaspoon of sugar? (4) The 12 oz soda (with ice) contains 110 calories and 7 teaspoons of sugar (or 7 sugar cubes). How many grams of sugar is that? (28 grams) The 32 oz soda contains 310 calories or 84 grams of sugar. How many teaspoons of sugar is that? (21 teaspoons or 21 sugar cubes)!

To show you how much energy you would need to burn off if you drank the large soda vs. the small soda, I want everyone to stand up. Now jump up and down, until I say stop (about one minute). You would have to jump for approximately 35 minutes to burn off the extra calories in one large soda vs. the small!

(Show Slide #2) To give you another example, here is a picture of what a bagel looked like 20 years ago. This bagel is about 140 calories. Here is what a bagel looks like now (show picture); it is 350 calories. The difference of 210 calories is equivalent to 20 minutes of jumping rope!

As you can see, portion sizes have gotten significantly bigger in the last 20 years, as a result people have gotten bigger too! In order to maintain a healthy weight, you need to balance the amount of energy you put in your body (food) with the amount of energy you put out (exercise)! Walking, biking, dancing, swimming are all great ways to burn extra energy (calories).

When determining an appropriate portion size for snack foods, a good rule of thumb is to not eat more than what can fit in two hands. It is easy to eat too much when you eat straight out of a bag or in front of the television. It is best to put an allotted amount of food on a plate or in a bowl, and put the remainder of the snack bag or box back in the pantry.

Can you think of other ways to manage snack portion sizes? (Use a plate or bowl/don't eat directly out of the bag, read the nutrition labels, sit and eat rather than "on-the go", use smaller plates or bowls, split a snack with a friend, etc.)

All packaged foods are required to carry a nutrition label (Show Slide #3). The nutrition label will tell you the amount of energy (calories) in one serving. This is where you need to read carefully. Many snack foods contain more than one serving. For example, even a small bag of potato chips may contain up to 4 servings; so although the label says 155 calories, you have to multiply everything by 4 if you eat the entire bag. How many calories would that be? (620 calories)

To keep portion sizes in check when eating a meal, use MyPlate as a guide. Remember to fill half your plate with fruits and veggies. Plate sizes have changed over time also. Today's dinner plate is about 12" in diameter. How big do you think they were in the 1960's? (8.5") Which plate looks like the size of your plates at home?

Conclusion: All food can be a part of a healthy diet, but it is important to keep in mind appropriate portion sizes. Next time you enjoy a snack food, check out the nutrition label; are you getting more than you bargained for?

Resource: http://kidshealth.org/parent/nutrition_center/healthy_eating/portions.html

Tips: Activities can be added or subtracted depending on time allotment for lesson.

To reduce the lesson time – delete the first activity of measuring out pasta into bowls

To increase the lesson time – have the students look at food labels (*cookies, chips and crackers*) in order to identify where the serving information is located and how many servings are in one container or package.