## Portion Sizes

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## Objectives

Audience will:

- Identify appropriate serving sizes for different food groups on MyPlate.
- Recognize that cooking process changes the volume of the food.
- Recognize portion distortion and how to control it.
- Explain how plate sizes influence portion sizes.
- Demonstrate understanding of the topics through prop use during and after activity.


## Food Groups



## Grains

- Whole grain is KEY
- 6 ounces for women
- 2 ounces per meal
- 8 ounces for men
- $21 / 2$ ounces per meal



## Dairy

- Low-fat/Non-fat is KEY!
- Men \& Women:
- 3 cups/ day
- 1 cup/ meal



## Vegetables



- Variety is KEY!
- Women
- $2 ½$ cups/ day
- $1 / 2$ cup per meal \& 1 snack
- Men
- 3 cups/ day
- 1 cup per meal


## Fruits

- Again, variety is KEY!
- Men \& Women:
- 2 cups/day
- $1 / 2$ cup/ snack \& 1 cup/ meal


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## Protein

- Opt for lean cuts, and variety of protein.
- Women:

- 5 ½ oz./day
- 1 ½ oz./meal \& ½ oz. snack - Men:

- 6 ½ oz./day
- ~ 2 oz./meal


How to control portion size of products that change their volumes during cooking?

| 1 cup of grain | Cooked amount (cup) |
| :---: | :---: |
| Brown rice | $3-4$ |
| Wild rice | $31 / 2$ |
| Quinoa | $3+$ |
| Millet | 4 |
| Oats, steel cut | 4 |
| Amaranth | $31 / 2$ |
| Buckwheat | 4 |
| Barley | $31 / 2$ |
| Cornmeal | $21 / 2$ |
| Couscous | 3 |
| Pasta | Varies |

## Raw vs. Cooked Food



## Raw vs. Cooked Food

Meat, fish, and poultry shrink $25 \%$.
Measure it before cooking.


## Portion Distortion

- 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



## Portion Distortion

There is a difference between portion size and serving size.

Portion size

- "How much food you choose to eat at one time."


## Serving size

- "The amount of food listed in a product's nutrition facts label"
- Suggested by manufacturer
- Example serving sizes:
- 1 slice of bread
- $1 / 2$ cup cooked rice or pasta
- 1 wedge of melon
- 1 cup of milk

Serving Per Container 2
Amount Per Serving
Calories $200 \quad$ Calories from Fat 120

|  | \% Daily Value |
| :--- | ---: |
| Total Fat 15 g | $\mathbf{2 0} \%$ |
| Saturated Fat 5 g | $\mathbf{2 8} \%$ |
| Trans Fat 3 g |  |
| Cholesterol 30 mg | $\mathbf{1 0} \%$ |
| Sodium 650 mg | $\mathbf{2 8} \%$ |
| Total Carbohydrate 30 g | $\mathbf{1 0} \%$ |
| Dietary Fiber 0 g | $\mathbf{0} \%$ |
| Sugars 5 g |  |
| Protein 5 g |  |

## Portion Distortion

- Research has shown that commercial packaging exaggerates pictured portion sizes to promote overeating.
- Images of 168 cereal boxes were $64 \%$ larger than recommended portion size on nutrition fact panel on the same packages
- This equals to 221 vs 134 calorie increase
- Study reflects that $17 \%$ of the studied population poured more cereal than the recommended serving.
- This leads to over-serving, hence portion distortion.


## Portion Distortion

- How to avoid portion distortion
- Read food labels

- Compare marketplace portion size to recommended serving
- MyPlate is a great resource of information
- Repackage supersized bags
- Eat half or less
- Skip repeating
- The Academy of Nutrition and Dietetics
suggests to "Eat from a plate, not a package, so you know how much you eat."


## Alternatives 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 the next day.
- Order an appetizer in place of an entree and a soup/salad.
- Share an entree.
- Split it between you and your friend or loved one.


## Plate Sizes

- Plate sizes can influence portion sizes
- Why?
- Bigger plates $\rightarrow$ more room for more food $\rightarrow$ bigger portions
- Smaller plates $\rightarrow$ less room - --> smaller portions


3 oz Tuna 1 12 cup Wild Rice 1 cup Carrots

5 oz Tuna
$11 / 2$ cups Wild Rice 2 cups Carrots


11 inches
12 inches

4 oz Tuna
1 cup Wild Rice
$11 / 2$ cups Carrots

5 oz Tuna
2 cups Wild Rice
2 cups Carrots

## Plate Sizes - Solutions

- Use smaller plates!
- At a restaurant with big plates?
- Portion the food and save the rest for leftovers
- Don't feel obligated to "clean your plate" by finishing all your food
- It's okay to not finish and have leftovers


## Activity

- Demonstration
- Interactive
- Handout for notes
- Jeopardy
- Assessment
- Prize incentive



## Set Up

- Equipment
- Long tables fitting 3-4 people
- Chairs
- Handouts
- Pens
- Measuring cups
- Baseballs
- Tennis balls
- Deck of cards
- Dice
- Fake food: grapes, strawberries, apples, rice, beans, green beans, dry cereal, nuts, chicken breast, steak, shrimp, pasta, broccoli, baby carrots
- All tables will have visual references, food, plates, and bowls
- Handout and pens for every individual


## Portion Size Visuals

| Food <br> Group | Amount | Visual <br> Reference | Notes |
| :--- | :--- | :--- | :--- |
| Grains |  |  |  |
| Vegetables |  |  |  |
| Fruit |  |  |  |
| Meat/ <br> Protein |  |  |  |
| Dairy |  |  |  |
| Oil |  |  |  |
| https://www.supertracker.usda.gov |  |  |  |

## Jeopardy Questions

| A Twinkle in the Eye | The Specifics | Taste the Change |
| :---: | :---: | :---: |
| What size of a cup does a <br> tennis ball equal to? | How much vegetables are <br> recommended for a day? | What foods were smaller <br> 20 years ago? |
| How much is 2 servings of |  |  |
| grains? | What are types of protein <br> foods? Name 3. | How much does 1 cup <br> uncooked oats expand to <br> after cooking? |
| What should be considered <br> when going out to eat? | What is the unit difference <br> between proteins and other <br> food groups? | What are the best choices <br> of foods in each group? |

## Jeopardy Answers

|  | A Twinkle in the Eye | The Specifics | Taste the Change |
| :---: | :---: | :---: | :---: |
| 100 | 112 cup | 2- 3 cups, $21 / 2$ cups for Woman, 3 cups for Men | Burger, pizza slices, muffins, juices/ drinks, popcorn, packaged foods, restaurant serving sizes |
| 200 | 2 cups/ 2 baseballs | Beef, chicken/ poultry, fish, nuts, beans, legumes, eggs | 4 cups |
| 300 | Plate size, super size/ medium/ small/ kids meals, reading labels, splitting or sharing meals | Ounces for meat vs cups/ tablespoons/ teaspoons | *Double Jeopardy* 600 Grains- whole wheat, brown rice, Dairy- lowfat, nonfat, Veg- variety, dark and leafy, colorful, Fruit- whole, fiberful, variety, colorful, Protein- lean meats(fish and chicken), cheese, beans, nuts, legumes |

Questions


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