

Eat How Much You Feel You Need -- NOT What You Are Served

Americans are known for excess, and food is not excluded. Portion sizes of food are often large and include more than one serving, which may be contributing to the increased prevalence of obesity in the country. Recent studies have examined the effect of portion size on amount of food consumed in an attempt to prove this theory, however results are conflicting.

One study, in which experimenters served men increasing portions macaroni and cheese, found that participants ate more food when portions were increased by as little as 27 percent. Although intake increased with the amount of food presented, ratings of fullness after the meal were not affected. This suggests that portion size may influence hunger and the feeling of satisfaction after a meal, according to researchers, because as more food was offered, it took longer for participants to reach satiation.

Conversely, in another study researchers manipulated portion sizes of lasagna and found that men consumed a substantially greater amount of food only when portion size was at least doubled. These two studies show that people responded to both small and large portion size increases.

Serving method may influence whether portion size affects food intake, the report notes. In studies where people ate more with greater portion sizes, people were given predetermined amounts of food, which they ate directly from the plate it was served on. On the other hand, when people themselves determined the amount of food on their plates, their intake was constant.

Previous studies have shown that when adults serve themselves, the amount of food taken remained constant and they ate a relatively consistent amount of food. In the study where participants were served, the amount of food in the serving dish varied, and participants' intake of food varied. Researchers hypothesized that portion size would be influenced by who, experimenter or participant, determined the amount of food on a plate.

Another recent study showed that when young children were served food, they consumed about 25 percent more food than when they helped themselves. It is not clear why the adults and children differed in their responses to portion size when they served themselves. Researchers speculate that children may be encouraged to "clean their plates" and therefore ate more, or that they may have used their own hunger as a guide of how much food to take when serving themselves. Adult participants, however, were influenced by portion size even when they served themselves.

This may be explained by a recent survey in which 25 percent of those polled agreed that the amount of food they are served helps them decide how much food to eat. Moreover, in another survey 67 percent of participants said that they finish their entrees when eating out all or most of the time. As many restaurants serve large portions, researchers note that this could be problematic and recent studies have shown a link between body weight and frequency of consuming meals from restaurants.

Researchers note that future studies should examine whether specific factors, such as age, food type or packaging, influence a person's tendency to alter food intake with portion size.

Additionally, educating people on appropriate portion sizes may be effective in the treatment and prevention of obesity.

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What's in a Serving Size?

Finding it hard to picture a serving size? Everyday examples can help you compare your portion size with the standard Food Guide Pyramid serving size. Note: hands and finger sizes vary from person to person! These are GUIDES only.

The Bread, Cereal, Rice, and Pasta Group

- 1 pancake..... is a compact disc (CD)
- ½ cooked cup rice, pasta..... is a cupcake wrapper full or a rounded handful
- 1 piece of cornbread..... is a bar of soap
- 1 slice of bread is an audiocassette tape
- 1 cup of cereal..... is a fist or a tennis ball
- 1 roll is a bar of soap

The Vegetable Group

- 1 cup green salad is a fist or a tennis ball
- 1 baked potato..... is a fist or a tennis ball
- ¾ cup tomato juice is a small Styrofoam cup
- ½ cup cooked broccoli..... is a scoop of ice cream or a light bulb
- ½ cup serving..... is 6 asparagus spears/7 or 8 baby carrots/1 ear of corn

The Fruit Group

- ½ cup of grapes (15 grapes)..... is a light bulb
- ½ cup of fresh fruit..... is 7 cotton balls
- 1 medium size fruit is a fist or a tennis ball
- 1 cup of cut-up fruit is a fist or a tennis ball
- ¼ cup raisins..... is a large egg or a golf ball

The Milk, Yogurt, and Cheese Group

- 1½ ounces cheese..... is a 9-volt battery or your index and middle fingers
- 1 ounce of cheese is a pair of dice or your thumb
- 1 cup of ice cream is a large scoop the size of a tennis ball

The Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts Group

- 2 tablespoons peanut butter is a Ping-Pong ball
- 3 ounces cooked meat, fish, poultry..... is a palm, a deck of cards or a cassette tape
- 3 ounces grilled/baked fish..... is a checkbook
- 3 ounces cooked chicken..... is a chicken leg and thigh or a breast
- 1 cup cooked dried beans..... is a fist or a tennis ball
- 1 ounce of nuts is one handful

Fats, Oils and Sweets

- 1 teaspoon butter, margarine..... is the size of a stamp the thickness of your finger
- 2 tablespoons salad dressing..... is a ping-pong ball
- 1 ounce of chocolate is one package of dental floss
- 1 ounce of small candies..... is one handful
- 1 ounce of chips or pretzels is two handfuls
- ½ cup of potato chips, crackers or popcorn is one handful