



# Portion Control

## PORTION DISTORTION

Research has shown that people consistently eat more when portions of food are larger. Check out the table<sup>1</sup> below to see examples of how portions have changed over the years.

Food	20 years ago		Today	
	Portion	Calories	Portion	Calories
Bagel	3" diameter	140	6" diameter	350
Cheeseburger	1	333	1	590
Spaghetti with meatballs	1 cup sauce 3 small meatballs	500	2 cups sauce 3 large meatballs	1020
Soda	6.5 ounces	82	20 ounces	250
Blueberry muffins	1.5 ounces	210	5 ounces	500

Retrieved from: <http://www.nhlbi.nih.gov/health/educational/wecan/eat-right/distortion.htm>

## PORTION PROOF

**Macaroni and cheese.** A study<sup>1</sup> tested to see how much food adults consumed on different days of four different portions of macaroni and cheese. Participants consumed 30% more when offered the largest portion (1000 grams) compared to the smallest portion (500 grams). They also reported similar ratings of hunger and fullness after each meal despite the intake differences. After the study, only 45% of the subjects reported noticing there were differences in the portion sizes.

**Potato chips.** Researchers<sup>2</sup> on five different occasions gave men and women an afternoon snack of potato chips packaged in bags that looked the same except they progressively increased in size — from 28g to 170g. Women ate 18% more from the 170 gram bag and men consumed 37% more when served the 85 gram bag.

**Soup.** People were served soup from normal bowls to determine their usual intake. During the study<sup>3</sup>, researchers secretly substituted trick bowls that slowly refilled from a hidden reservoir under the table. All participants ate more than their usual portion. After being informed about the trick, normal-weight individuals adjusted their intake while obese individuals continued to overeat.

## PORTION EQUIVALENTS

A serving size is listed on the Nutrition Facts panel of a food package and is a standardized measurement of the amount of food usually eaten at one time, whereas a portion size is the amount of food that you actually eat.

Portion Equivalents	
3 ounces of meat	Deck of cards
1 ounce of deli meat	CD/DVD
1 ounce of cheese	4 dice
1 teaspoon of peanut butter	Tip of thumb
½ cup of ice cream	Racquetball
1 medium apple or peach	Tennis ball

### References

1. Rolls BJ, Morris EL, & Roe LS. Portion size of food affects energy intake in normal-weight and overweight men and women. *American Journal of Clinical Nutrition* 2002;76:1207-1213.
2. Rolls BJ, Roe LS, Kral TVE, Meengs JS, Wall DE. Increasing the portion size of a packaged snack increases energy intake in men and women. *Appetite* 2004;42(1):63-69.
3. Pudel VE, Oetting M. Eating in the laboratory: behavioral aspects of the positive energy balance. *Int J Obesity* 1977;1:369-386.



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**Downsize dishes.** Research shows the more food people have on their plates, the more they tend to eat. To avoid this, use smaller bowls, plates, and cups when portioning meals, snacks and beverages.

**Pre-portion.** Buying pre-portioned meals and snacks can be convenient and limit how much you eat in one sitting. Try pre-portioning meals in individual plastic or glass containers and freezing them ahead of time for future meals, and putting snacks in small ziplock bags.

**Share or split.** When dining out, sharing or splitting meals with someone (i.e. friend, family member, significant other) can help you save money and prevent you from overindulging in a meal with a larger portion.

**Make specific requests.** Ask for specific things, like having salad dressing on the side, cutting a sandwich in half and putting the rest away in a to-go container, having wheat bread instead of white, asking for one "strip" of mayonnaise instead of the usual glob, or a "sprinkle" of cheese instead of a handful, etc. Many places tend to be accommodating if people ask, nicely. :)

**Take the amount you need.** Reality check – we usually want to eat more than what we need, especially our favorite foods. However, if we eat roughly 3 times per day, 7 days per week, 52 weeks per year, etc. we have plenty of time to eat the things we enjoy in life, so what's the rush? Take what you need and you can always have more when hungry again.

**Skip seconds.** If you ever feel "hungry" after eating a plate of food, consider if you are head/heart hungry or stomach hungry. People can eat a lot of food in one sitting before feeling full, and it may be more food than what the body needs, especially if you are inactive after a meal. If head/heart hungry, consider skipping seconds and find alternative activities you can do instead.

**Cut it in half.** Most portions are nearly double the amount a person needs. Try cutting a portion in half and either sharing/splitting with someone, putting half in a to-go container for later, or be ok with throwing it away.

**Be ok with throwing it away.** If you aren't able to share extra food with others, keep the leftovers for later or will be too tempted to consume all of the food in one sitting, be ok with throwing it away. While it's admirable to not waste food, eating more than what you need doesn't help you out or anyone else in need of food.

**Out of sight, out of mind.** Typically when people don't see food they don't think about it as much, so put away or hide tempting treats or snacks. For some people, this may mean hiding the food in a cabinet or pantry, asking a friend or family member to store the food for you, or not keeping the food at home and going out to get it in a small, pre-portioned amount instead.

**Think before you drink.** It can be very easy to consume a lot of unnecessary calories with beverages, especially since there are a lot of options to choose from (ex. soda, lemonade, sweet tea, flavored coffee, fruit juice, milk, energy drinks, sports drinks, alcohol, etc.). Limit the amount you drink (i.e. 1-2 cups per day) or limit how frequently you have it (i.e. 24 fluid ounces per week). You can also alternate between a beverage with calories and one without (ex. water, tea, coffee, fruit-flavored water, etc.).

**Pre-portion tempting treats.** Try making or purchasing small, pre-portioned treats. That way, you have the "best of both worlds" by having a little but not a lot and won't be tempted to eat more.

**Avoid the mindless munch.** Find alternative activities you can do when not hungry that you can do when bored, sleepy, stressed, while studying, etc. Check out these alternative activities you can do when not hungry.