THE STORY ON SNACKING
SNACKS CAN MAKE A DAY BETTER

Whether we’re running out the door in the morning, rushing to meetings, or picking up the kids from school, we’re busier than ever. So it’s only natural that what – and how - we eat has changed. Today, snacking is practically a way of life.

An average of 30% more people snack now than they did in the 1970s when the average American ate only one snack a day and 40 percent of adults and teens didn’t even snack at all.

90% of adults snack at least once daily and nearly half of adults snack two or three times a day.

45% of people throughout the world eat snacks as an alternative to meals.

Snacks account for more than 30% of all foods consumed daily in Brazil and India, and in the UK and Ireland people snack two to three times each day.

In the pages that follow we’ve gathered the latest evidence-based research as well as tips for making snacks work for every lifestyle. We hope that The Story on Snacking will provide a valuable resource for snacking deliciously and sensibly.

Number of times people snack each day

<table>
<thead>
<tr>
<th>Number of Times People Snack</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Snacks</td>
<td>60%</td>
</tr>
<tr>
<td>1 Time</td>
<td>10%</td>
</tr>
<tr>
<td>2-3 Times</td>
<td>20%</td>
</tr>
<tr>
<td>4-5 Times</td>
<td>20%</td>
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<tr>
<td>5+ Times</td>
<td>10%</td>
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</tbody>
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SNACKING ON THE RISE

Are snacks the new mini meals?

In addition to snacking more frequently, some people are also using snacks as a replacement for traditional meals. In 2015, 20 percent of people surveyed believed that it’s healthier to snack throughout the day than to eat three square meals. The trend of snacks as mini meals is gaining so much steam that many people are often eating snacks at home instead of meals. “Super snackers,” or adults who snack four or more times a day, are especially likely to snack throughout the day instead of eating three square meals.

The types of foods people prefer to snack on are changing as well. According to the research firm DataEssential, between 19 to 45 percent of people surveyed said that they are interested in snack sized versions of foods that are traditionally eaten as, or with, a meal such as salads, soups, pastas, sandwiches, burgers, pizzas, breakfast foods and desserts.
SNACK FACTS

Why we love to snack

People snack for lots of different reasons. Often it’s for energy or to curb hunger between meals. However, people also snack for reasons that are purely emotional such as boredom, stress or simply because they want a treat. Consumers also snack for nutrition too. According to a 2014 Nielsen report, 66 percent of people surveyed listed nutrition as one of their top reasons for snacking. vi

What are the most common snacks?

Snack choices can vary depending on the time, place or occasion. When it comes to snacking, these are the foods people reach for first: vii

1. Fresh fruit
2. Chocolate
3. Potato & tortilla chips
4. Bread & sandwiches
5. Cheese
6. Ice cream
7. Vegetables
8. Yogurt
9. Cookies
10. Nuts and seeds

Convenience matters

Today’s busy schedules often mean lots of snacking on the run. For snacking-on-the-go people are most likely to seek out these convenient, grab-and-go foods. vii

1. Chocolate & candy bars
2. Fresh fruit
3. Granola bars
4. Candy (not chocolate)
5. Donuts & cookies
6. Nutrition & protein bars
7. Potato chips
8. Nuts

WHO’S SNACKING?

Snacks aren’t just for kids. From children to older adults, people of all ages are snacking in similar amounts:

Percent of the snacking population

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Older women</td>
<td>18%</td>
</tr>
<tr>
<td>Children</td>
<td>18%</td>
</tr>
<tr>
<td>Older men</td>
<td>17%</td>
</tr>
<tr>
<td>Women</td>
<td>17%</td>
</tr>
<tr>
<td>Teens</td>
<td>16%</td>
</tr>
<tr>
<td>Men</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: NPD Group. “Trend-Size of Between Meal Snacking”
WHEN DO SNACKS HAPPEN?

A snack can happen any place, any time, from early morning until late at night. Snacks can be planned or they can happen on the spur of the moment. Roughly 55% of snacks are completely spontaneous. The time of day also matters. Scheduled snacks are more likely to take place in the morning while more spontaneous snacks usually occur in the afternoon. Today, some people are increasingly eating snacks as mini-meals instead of breakfast or lunch. Here’s when people are most likely to snack:

Times people are most likely to snack

- 17% Other
- 7% In place of lunch
- 14% In place of breakfast
- 20% Between breakfast and lunch
- 42% Between lunch and dinner

Since 2010, people are snacking more often at all times throughout the day, from morning through evening, with afternoon taking top honors as the most popular snack time:

Change in snacking frequency since 2010


WHO BENEFITS FROM SNACKING?

Snacks do more than deliver great taste and satisfy hunger. They also provide energy and can supply important nutrients for:

Physically active children and adolescents

Physically active children require sufficient energy and protein to fuel their growth and development. Because children store less carbohydrate than adults, they burn more fat during exercise. A post-sports snack such as yogurt with nuts or graham crackers with peanut butter can help replace fat, protein, carbohydrate and calories that are burned during training.

Teenagers

A study of 4,357 adolescents found that vitamin C, vitamin E and magnesium intakes were increased as teenage boys increased their snacking. Additionally, girls who snacked more often had greater intakes of vitamin C.

Adults who work out

Exercising adults require carbohydrates for energy. As a result, sports nutrition experts recommend a pre-exercise snack or meal that is rich in carbohydrates three to four hours before exercise, such as a banana or a granola bar. After exercise, a snack containing carbohydrates plus protein can help refuel and repair muscles, like a bowl of cereal with low-fat milk.
Want better nutrition? Here’s how snacks can help

Snacks can provide important nutrients

It can be hard to eat right at every meal. When meals don’t supply all the nutrition people need, certain snacks can help fill those nutritional gaps. A recent study found that adults who snacked on fruits, vegetables, legumes, grains and crackers and salty snacks as well as miscellaneous snacks had better diet quality than people who didn’t snack at all. The varied snacking patterns were also shown to help people obtain fiber, when compared to people who didn’t snack.\(^x\)

Snack time can be an opportunity to focus on foods that provide important nutrients that many people don’t get enough of at meals, such as fiber from grains, potassium from fruits and vegetables and calcium and vitamin D from dairy products.\(^{xi}\)

Think grain-based snacks

Getting the right nutrition each day helps our bodies work their best. Grains contain:

- Carbohydrates, the main energy source for our body and muscles.
- Protein, the building block of all cells.
- B vitamins
- Fiber
- Phytonutrients
- Minerals

All are important for a healthy diet.
SNACKS AND WEIGHT MANAGEMENT

Snacks provide roughly a quarter of the average person’s daily calories, with snackers frequently consuming more calories than non-snackers. Even though people who snack take in more calories, they aren’t necessarily more likely to be overweight or obese. In fact, adults who have a normal body mass (BMI) eat a similar number of snacks in a day as those who are overweight or obese. Teens who snack two, three or four times a day are found to have a similar BMI as those who snack once a day or don’t snack at all.

A growing body of evidence suggests that snacks may help protect against overweight and obesity when they are part of a diet that includes more small, frequent meals.

Studies find that children who eat frequently throughout the day may be less likely to be overweight and may have smaller waists compared to children who eat three or fewer times a day. Emerging research also suggests that eating more often throughout the day may be associated with lower BMI and smaller waists in men. This research would suggest that eating more, smaller meals throughout the day may be associated with a reduced risk of being overweight or obese when compared to fewer, larger meals. This may also be influenced by the fact that people who eat smaller meals may also have other healthy eating and physical activity habits. Additionally, a study in adults living in the US and UK found that greater intake of calories in the evening relative to intake in the morning was associated with a higher BMI suggesting when you eat calories may be important.

It is important to remember that most of the studies that have been discussed above have allowed the participants to report their own food intake and, as this is a very difficult task, it sometimes results in reports of eating fewer calories than one actually eats. Additionally, a dietary practice followed by many who are overweight or obese and are trying to lose weight is to eliminate meals from their daily diets, resulting in reports of fewer meals in a day compared with those who are not attempting to lose weight.
THE BENEFITS OF MINDFUL SNACKING

Snacking can be a helpful way to improve nutrition, satisfy hunger or simply enjoy a treat. However, when people are busy it can be difficult to pay attention to what – and how much – they’re eating, or what’s known as mindful eating. Helping people understand how to eat more mindfully, or to focus on the tastes, aromas and textures of food, as well as how much they’re eating, can help them to slow down. When they do, they may be less likely to eat too much too quickly and more likely to enjoy their food.

Make it mindful
These tips can help people eat more mindfully:

**Unplug** Eating without the distraction of a computer helps people stay in touch with their feelings of fullness. In a recent study, researchers divided volunteers into two groups: One group ate lunch without distraction while the other played a game of solitaire on computers while they ate. Afterwards, the solitaire players reported feeling significantly less full than the group that focused on eating their lunch, even though both groups ate the same amount of food. The group playing solitaire also ate more food when they were offered a snack a half-hour later.iii

**Become a master of portion control** Portioning snacks onto plates or into bowls, rather than eating out of the bag, box or container can increase people’s awareness of how much they eat, and also decrease the likelihood that they’ll continue to eat until the package is empty.xxxiv For times when eating out of the package is the only option, choosing a single-serve container rather than a large, multi-serve bag or box can also be helpful.xxxv

**Turn off the TV** This is another way for parents to reconnect with their kids and an easy way to improve family health and nutrition. Research reveals that people tend to eat more [and feel less hungry] when they’re watching TV and not paying attention to their eating.x What’s more, a recent study of adolescents, ages 9 to 16, found that the more television children and teens watched and the more video games they played, the more sweets and salty snacks, and fewer fruits and vegetables, they ate.xi

**Slow down, enjoy food** and listen to your body’s hunger and fullness signals. Researchers in one study fed women two identical meals and asked them to eat one meal quickly and the other one slowly. The women who ate slowly reported feeling more full, yet consumed less food overall.xi

Is a drink a good snack?
Snacks aren’t always solid foods. They can also be drinks like smoothies, shakes, lattes or milk. However, research reveals that it can be easy to consume extra calories from liquids because people tend to drink them quickly and don’t compensate for the extra calories by eating less later in the day.xv,xvi To make the most of liquid snacks, encourage people to be aware of the calories in their favorite beverages, eliminate a future snack, sip drinks slowly and choose those that are thicker and high in fibers or protein. Because certain fibers and protein are sometimes digested slowly, they may help people stay full longer.xvii,xviii,xix

**Snacking can be a helpful way to improve nutrition, satisfy hunger or simply enjoy a treat.**
SIZE IT RIGHT

THESE RIGHT-SIZED SNACKS PROVIDE EASY PORTION CONTROL:

1 Special K® Cranberry Almond Nourish Bar

1 cup unsweetened applesauce + ¼ cup Special K® Low-Fat Granola

1 apple + 2 tablespoons peanut butter

Carrot sticks and hummus

27 Cheez-It® baked crackers

1 Pringles® Original Single-Serve Tub + guacamole, bean dip, or salsa

1 Nutri-Grain® Soft Baked Breakfast Bar

1 single-serve container of low-fat yogurt + 1 sliced banana

2 Keebler® Simply Made® chocolate chip cookies
Snacking can be an opportunity to enjoy a small treat in a moment of delight. Even though snacks of all kinds can fit into a healthy, balanced diet, it’s important to keep portion size in mind to help keep calories in check. Ideally, snacks should be just large enough to satisfy hunger yet small enough to complement other meals. If snacks become too big, they can provide more calories than people need.

Did you know?
Research reveals that smaller snack portions are just as satisfying as larger portions. Researchers at Cornell University offered volunteers large and small portioned snacks, containing either 1,370 calories or 195 calories, respectively to evaluate certain characteristics of the foods. Those eating the larger portion sizes, although not finishing the snacks, ate 103 more calories, yet didn’t report feeling any more full or satisfied than those eating the smaller snack sizes.

Make portion control easy!
Try these tips to promote portion awareness:

• The portion that a person serves themselves isn’t always the same as the serving size listed on the Nutrition Facts Panel. To keep serving size in check, review the Nutrition Facts Panel to help people learn to identify the size of a single serving and the number of servings a package contains.

• When possible, recommend snacks that are pre-portioned into a single serving.

• For times when people know in advance that they will be snacking on-the-go, show them how to measure out a single-serving with measuring cups or a kitchen scale and how to pack these in individual containers or zip top bags.

• For snacking away from home, show people how to eyeball appropriate serving sizes. You can do this by comparing standard serving sizes to everyday objects such as a baseball for a 1-cup serving or a tennis ball for a ½ cup serving.
HIGH IMPACT SNACKING

Snacking on nutritious foods is an easy – and tasty – way for people to improve the quality of their diets. No wonder more and more people are looking for healthier snacks:

- Roughly one-third of participants in a 2015 Mintel survey said that they were limiting sweet snacks and choosing healthier snacks than they did a year ago.iii
- According to a 2014 Nielsen report many consumers are seeking out snacks that are made with whole grains, high in fiber, naturally flavored, low in sugar and free of high fructose corn syrup.vii

Cereal is a smart snack

Cereal isn’t just for breakfast. Snacking on a bowl of cereal and milk can provide key nutrients. One study reported that cereal eaters had higher intakes of 10 important nutrients including those that many people don’t consume enough of such as calcium and fiber.xlix Choosing a cereal with three or more grams of fiber per serving can help people obtain more of this nutrient, which 90 percent of people in the United States fall short of.xli

Rich in complex carbohydrates, cereal additionally delivers long lasting energy, making it the perfect snack for recharging. When paired with milk, it provides protein, a nutrient that must be replenished daily to help build healthy cells and strong muscles. And cereal contains less sugar than you might think. Less than four percent of the daily added sugar intake in the United States comes from ready-to-eat cereals.xlvi

Milk, yogurt and cheese provide calcium and potassium for strong bones and protein to help build muscle.xli

Cereal, cereal bars and crackers may contain fiber that may help support digestive health and may promote satiety.xlvi

Fruits and vegetables also deliver fiber. They additionally supply potassium which helps attenuate the effects of sodium on blood pressure.xlvi Plus, diets low in saturated fat and cholesterol and rich in fruits, and vegetables and grain products that contain some types of dietary fiber may also reduce the risk of heart disease and some types of cancer.xlvi

Nuts, nut butters and seeds supply heart-healthy mono and polyunsaturated fats and vitamin E.xlvi Scientific evidence suggests but does not prove that eating 1.5 ounces of most nuts as part of a diet low in saturated fats and cholesterol may reduce the risk of heart disease.
It can be helpful to think of snacks as mini meals: The more food groups they contain, the greater their potential nutritional benefits. These are just a few ways to work even more nutrition into snacks:

- **Add ¼ cup strawberries to a bowl of cereal with low fat milk.** Nutrition bonus! Vitamin C
- **Add 1 ounce sliced lean deli turkey to a serving of crackers.** Nutrition bonus! Protein
- **Add 1 tablespoon flax or chia seeds to a smoothie.** Nutrition bonus! Fiber
- **Add 2 tablespoons chopped nuts to yogurt.** Nutrition bonus! Heart-healthy mono and polyunsaturated fats
- **Add ¼ cup of cottage cheese to graham crackers.** Nutrition bonus! Protein and calcium
- **Add 2 tablespoons sunflower seeds to a serving of popcorn.** Nutrition bonus! Vitamin E
From providing nourishment to a simple moment of delight, snacks can help make a day better. At Kellogg, we’re passionate about making delicious foods that are people’s first choice whenever and wherever they snack.

We are continually developing superior snack foods that provide more of what people want and need and less of what they are trying to reduce. That’s why we seek the finest ingredients that are sustainably grown and responsibly sourced. Whether you’re snacking for nutrition, for great taste or simply for fun, our goal is to produce a wide variety of delicious, high quality snacks from the very best ingredients.
Snacks can make a day better


ii USDA Food Surveys Research Group. “Snacking Patterns of US Adults. What We Eat in America, NHANES 2007-2008.”

Snacking on the rise


Snack facts


Looking for better nutrition?

Here’s how snacks can help.


xiii Six Things Message Series.pdf


Who benefits from snacking?


Snacks may help with weight management


ii USDA Food Surveys Research Group. “Snacking Patterns of US Adults. What We Eat in America, NHANES 2007-2008.”


REFERENCES


The benefits of mindful snacking


Size it right


High impact snacking


I National Institutes of Health: Office of Dietary Supplements. “Vitamin E: Fact Sheet for Health Professionals.”


