



Dole Diet Center

Building a Better Breakfast

Eating Breakfast is Associated with Better Nutrient Intake and Lower BMI



We've always heard breakfast is the most important meal of the day, but nearly 20% of the adult population is skipping out. Though eliminating a meal might seem like a step to losing weight, nutritionists and scientists agree this isn't the case. We've seen in the past, adolescents who skip breakfast gained 40% more weight than their breakfast eating peers. A 2014 study in the *Journal of the Academy of Nutrition and Dietetics* suggests eating breakfast can play a role in maintaining a healthy weight for adults, and choosing

the best foods at breakfast is a step to meeting daily nutrient requirements and achieving overall health.

For the study, researchers looked at data from 2001-2008 National Health and Nutrition Examination Survey (NHANES). They analyzed dietary patterns, diet quality, body mass index (BMI) and waist circumference in nearly 19,000 adults ages 19 years and older. Researchers focused on breakfast, categorizing the most common types of breakfast into twelve groups. Breakfast categories included whole fruit, low fat milk, grains, meat and poultry, and no breakfast.

Results showed, in general, most breakfast eaters had lower BMI's than breakfast skippers. Those who passed on the morning meal also had lower intakes of important nutrients such as vitamins A and C for the whole day than did breakfast eaters. But some breakfasts were better than others. Those who ate whole fruit at breakfast were least likely to be obese or overweight, and people who chose whole fruit or cooked cereal got the most daily fiber. Whole fruit eaters also consumed the least sodium, added sugars, and saturated fat at breakfast among those who ate in the morning.

"Choosing a breakfast of nutrient-dense foods, such as fresh fruits, whole grains, and low-fat or fat-free dairy, will make a positive impact on overall diet quality and may help in maintaining a healthy weight," explains lead researcher Carol E. O'Neil, PhD, MPH, LDN, RD. Smart breakfast choices include oatmeal; low-fat Greek yogurt; whole-grain toast; and fresh fruits like bananas, oranges and cantaloupe.

If you're just not hungry or can't stomach food early in the morning, don't worry. Nutrition experts agree a proper breakfast can be eaten within 2 to 3 hours after waking up, either at home or on the go, as long as it provides the energy and nutrients you need to power up your day. Though there are lots of options for getting a healthy breakfast, including fresh fruit is a sure fire way to round out the meal.

Here are a few ways to include more fruit into your usual breakfast:

- Stir a soft, ripe banana into bubbling stovetop oatmeal for natural sweetness and creaminess.
- Blend fresh or frozen berries with low-fat Greek yogurt for a protein-packed smoothie.
- Smash half an avocado onto a slice of whole-grain toast.

Hot News



COULD "E" BE FOR IMMUNITY?

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Featured Recipe



BANANA & BLUE BREAKFAST SMOOTHIE

- Add a sliced peach or nectarine to low-fat cottage cheese and granola.
- Serve a small mixed fruit cup with an egg white veggie omelet.
- Mix fresh pineapple, cantaloupe, or mango chunks into low-fat Greek yogurt.
- Slice a ripe banana onto whole-grain bread with peanut butter.
- Top a toasted whole-grain waffle with sliced strawberries and a dollop of low-fat Greek yogurt.

Making breakfast for two? Our [Banana & Blue Breakfast Smoothie](#) will get you both started with a serving of fruit and 7 grams of fiber. Round out the meal with some whole-grain toast if you need an extra energy boost to jump start your day.

What's a FODMAP?

An Explanation of Gluten and FODMAPs and Their Connections to Health



From pasta, to bread, and even to cupcakes, gluten-free foods are suddenly the rage. In the past five years, sales of gluten-free products have more than doubled, with an estimated 24% of consumers currently eating, or living with someone who eats, gluten-free foods. There are several reasons why a person might opt for a gluten-free lifestyle, but it's not always necessary to ditch gluten permanently. Here we'll discuss what gluten is, why some people can't eat it, and a group of sugars called FODMAPs (Fermentable,

Oligo-, Di-, Monosaccharides, and Polyols) that might actually be causing discomfort for others.

Gluten is a protein found in wheat, rye, and barley. It provides structure and elasticity to breads and dough and is a component of many packaged foods. There are a few different conditions in which a person would benefit from gluten-free diet.

Celiac disease is a genetic, autoimmune condition triggered by gluten that affects about 1% of the population worldwide. When a person with celiac disease ingests gluten, the small intestine inflames, leading to intestinal damage and possible complications. A person could also have a wheat allergy. With this, a specific immune response in reaction to proteins in wheat (maybe gluten, but maybe a different wheat protein) can lead to abdominal pain, nausea, vomiting, and skin rashes. Both of these conditions can be diagnosed by a doctor through testing.

From here it gets a little confusing. In some cases, autoimmune or allergic reactions to gluten-containing grains have been ruled out, but people still feel poorly after eating gluten. Doctors call this non-celiac gluten sensitivity. These people might have similar symptoms as those with celiac disease or wheat allergy, but symptoms can vary. One day they might have stomach pains after eating gluten, and the next day it might be a headache. There is no exact answer as to why symptoms might occur after eating foods with gluten, but abstaining from gluten might improve well-being.

Doctors are now looking at a different condition that might be mixed up with gluten sensitivity: FODMAP intolerance. FODMAPs are a group of sugars found in certain foods that, when eaten in excess, pull water into the intestine, may not be digested or absorbed well, and are fermented by bacteria in the intestinal tract. People who are sensitive to FODMAPs may experience cramping, gas, bloating, or diarrhea after eating foods high in these sugars.

A 2013 Australian study in the journal *Gastroenterology* found some patients with

self-reported non-celiac gluten sensitivity might actually be reacting to FODMAPs in wheat-containing foods, not gluten. A low FODMAP diet helped reduce fatigue and GI symptoms in these patients regardless of gluten content in the food. Low FODMAP foods include poultry and fish; oats and rice; lactose-free dairy or dairy alternatives; most vegetables; and fruits such as bananas, pineapple, raspberries, and kiwi. Apples, watermelon, mango, and blackberries are high in these sugars and should be avoided on a low FODMAP diet.

So, is a gluten-free diet for you? If you do not experience uncomfortable symptoms after eating foods with gluten, there is no reason to eliminate it from your diet. Whole grains offer a host of healthy nutrients such as fiber and B vitamins, so if you're living pain-free keep gluten on the menu.

If you do experience discomfort after consuming foods with gluten, speak with your doctor about how to best treat your condition. He or she can work with you to determine what might be triggering symptoms, and help you discover a diet that is best for you.

Go Long with Fruits and Vegetables

Fruits and Vegetables May Lower Risk of Death



Science keeps on singing fruits' and veggies' praise! In 2013 we reported a Swedish study finding people who said they ate at least three servings of vegetables a day lived almost three years longer than people who didn't eat vegetables. Last year we discussed a Dutch study concluding that for every 200 grams of daily produce people ate, risk of death was reduced by 6%. We now have even more evidence that fruits and vegetables may help add years to your life.

In a 2014 meta-analysis published in the *British Medical Journal*, researchers compiled 16 different studies, totaling over 833,000 participants across the United States, Europe, and Asia. After analyzing results from all of these studies, researchers concluded average risk of death from any cause was reduced by 5% for each additional daily serving of fruits and vegetables. They noticed this trend up until people hit five servings a day, which appeared to be the magic number for reducing risk of death. Anything over five servings yielded no additional risk reduction. For this study, researchers considered a serving to be 77 grams for vegetables and 80 grams for fruit.

Scientists propose antioxidants and polyphenols in fruits and vegetables, such as vitamin C, flavonoids, and carotenoids, might be to thank. These compounds have been shown to prevent cholesterol and fat oxidation and promote blood flow, and likely contribute to reduced risk of mortality. Fruits and vegetables are also packed with magnesium and potassium, which other studies have linked to lower risk of death. The observed threshold of five servings a day might be due to availability of these nutrients and the digestibility of fruits and vegetables.

This study, along with a plethora of past evidence, gives even more reason to fill your plates with fruits and vegetables. Eating a variety of colorful plant foods might be a step in promoting health and overall longevity. All you need is five servings a day. Though this study had its own serving standards, the U.S. Dietary Guidelines Committee recommends aiming for five full cups per day. What does this look like? Choose five of the following foods daily and you'll be sure to hit the five-a-day mark.

FRUIT

- 1 small apple
- 1 medium grapefruit or pear
- 1 large banana, orange, peach

- 1 cup sliced cantaloupe, watermelon, or pineapple
- 8 large strawberries
- 3 medium plums

VEGETABLES

- 1 cup broccoli or cauliflower florets
- 1 cup chopped tomato, cucumber, or bell pepper
- 1 cup cooked green beans, mushrooms, or squash
- 2 cups raw leafy greens
- 2 medium carrots
- 1 large sweet potato

Amp up your fruit and veggie count for the day by trying our [Power Colors Kale Salad](#), made with DOLE® Power Up Greens™ Baby Kale, apple, fennel, beets, and oranges.

Nutrition News Desk

Could “E” Be for Immunity?

Dietary Vitamin E May Protect Against Pneumonia in Aging Population



No one likes getting sick. A case of the flu might mean a few days in bed for some, but for others, infection can be fatal. Pneumonia, a lung infection, results in about 1.6 million deaths worldwide each year, and is a particular concern for the older population. As we age, our bodies' immune systems weaken and we become more susceptible to disease. This is partially due to low-grade chronic inflammation and impaired immune responses that go hand-in-hand with aging.

Vitamin E, an antioxidant, has been shown to enhance specific components of the immune system that tend to weaken as people age. Knowing this, researchers from Tufts University decided to test if adding extra vitamin E to the diet might help older adults ward off pneumonia.

In the 2014 study, researchers infected a group of young and old mice with pneumonia bacteria. All mice had a little vitamin E in their diets, but some mice were also fed extra alpha-tocopherol, a form of vitamin E. These mice were given what would equate to about 200 IU/day vitamin E in humans over a period of 4 weeks, which is nearly 10 times the RDA of 22.5 IU but still considered safe.

Among mice not fed extra vitamin E, older mice were much more susceptible to infection than younger mice. After just 48 hours, less than half of the older mice were alive, while 90% of the younger mice survived. However, among mice fed extra vitamin E, this difference did not exist. In fact, older mice given extra vitamin E had 1,000 times fewer bacteria in their lungs and 2 times fewer white blood cells (neutrophils) after infection than older mice eating normal amounts of the vitamin. Furthermore, vitamin E appeared to help prevent brain damage and weight loss associated with pneumonia. Researchers propose vitamin E helped reduce the lung inflammation associated with pneumonia, specifically by reducing the proinflammatory neutrophil (white blood cell) response to infection. Inflammation can hinder the clearance of bacteria from the body, so vitamin E may be a way to prevent harmful inflammation from occurring.

“Our present research is the first study to demonstrate that dietary vitamin E regulates neutrophil entry into the lungs in mice, and so dramatically reduces inflammation, and helps fight off infection by this common type of bacteria,” said first author Elsa N. Bou Ghanem, Ph.D.

Nuts, seeds, and vegetable oils provide some of the best sources of dietary alpha-tocopherol. Good sources include safflower oil, almonds, sunflower seeds, and peanut butter. Lots of fruits and vegetables pack vitamin E as well, including avocado, spinach, sweet potato, pumpkin, red pepper, kiwi, mango, asparagus, and broccoli. Try adding these foods to your diet to bump up your vitamin E and boost your immune system, especially if you are an older adult. Our [Twice-Baked Sweet Potatoes Stuffed with Spinach](#) delivers 20% of your daily vitamin E and a host of other health-promoting nutrients in just one serving.

BONUS: Want more tips to ramp up your immune system? In a 2011 study, David Nieman, PhD, scientist at the North Carolina Research Institute, found exercising five days a week and eating three servings of fruit per day was linked to fewer sick days.

Snack Attack

Healthy Snack Ideas for Kids to Eat at Home or On-the-Go



You can't get away from them – snacks are everywhere! As we reported back in 2010, snacks used to make up about 27% of kids' daily calories. Today, snacks provide as much as 42% of daily calories for kids. Unfortunately, as the nibbling trend keeps growing, so do kids' waistlines. In the past 30 years, childhood obesity has more than doubled, and one third of children are now considered overweight or obese. This could be in part due to “un-smart” snacking.

Snacks can be part of a healthy diet for both kids and adults, but choosing the right foods in the right amounts will make or break your snack time. Popular snacks like cookies and chips are typically high in sugar, saturated fat, and salt and lack important nutrients like vitamin D, iron, and fiber that kids really need.

A smart snack provides some carbohydrate, protein, and fiber for energy and fullness, plus a mix of vitamins and minerals to promote overall health. It's also important to keep snacks below 200 calories, or else they can turn into whole extra meals. When kids decide to snack smartly, these between-meal noshes go from health-derailing to energy-boosting.

A good way to ensure your child is making a smart snack choice is to start with a fruit or vegetable, then add a small amount of protein. This simple trick will provide your child with the nutrients he or she needs and will help keep total calories in check. Here are a few healthy and fun snack ideas that you and your child can enjoy at home or pack up to go.

Snacks at Home (serves one child):

- **Microwave Apple Crisp** – Wash one apple, chop into even chunks, and place in a microwave-safe bowl. Add a sprinkle of cinnamon, pinch of brown sugar, and tablespoon of oats. Mix together and microwave about 2 minutes. Top with a dollop of vanilla Greek yogurt.
- **Portobello Pizza** – Preheat the oven to 375°F. Place a washed Portobello mushroom smooth side down on a baking sheet. Add chopped tomatoes, 2 tablespoons part skim mozzarella cheese, and fresh basil. Bake about 20 minutes until the mushroom is tender.
- **Sweet Potato “Fries”** – Preheat the oven to 400°F. Scrub one sweet potato and slice into long, thin strips. Toss with 1 teaspoon olive oil, paprika, black pepper, and a pinch of salt. Spread sweet potatoes on a baking sheet and bake about 20 minutes until sweet potatoes are crisp. While “fries” are baking, combine Greek yogurt,

lemon juice, and dill for a cool and fresh dipping sauce.

Snacks to Pack:

- **Ants on a Log** – Pack washed celery sticks, 2 tablespoons peanut or almond butter, and ¼ cup raisins in separate containers. At snack time kids can assemble and eat. A classic!
- **Pears with Cinnamon Yogurt** – Slice a pear (hint: a sprinkle of lemon juice can prevent browning) and pack to go. Add a sprinkle of cinnamon to ½ cup vanilla Greek yogurt and pack in a separate container. Kids can dunk away!
- **Veggie Sticks and Dip** – Slice an assortment of colorful veggies such as carrots, bell peppers, cucumber, and jicama. Prepare our **Magical Pink Dip** made with beets and spinach ahead of time and pack separately for a veggie-packed snack.

Want more ideas for healthy kid-friendly fare? Try [these recipes](#) from Dole!

Salt Can Be a Pain

Cutting Sodium May Reduce Headaches



If you're often reaching for the painkillers, you're not alone. Worldwide, an estimated 46% of adults have an active headache disorder, regularly experiencing migraines or tension-type headaches. Frequent headaches are not only uncomfortable but can lead to missed days at work and poor quality of life. Though several factors can bring on a headache, diet can play a major role in how often you experience pain. Past research suggests alcohol, skipped meals, caffeine, chocolate, and even cheese can trigger migraines or cluster

headaches. Now, a 2014 Johns Hopkins study suggests the amount of sodium in the diet may be a factor, too.

The study, published in the *British Medical Journal*, included 390 adults with an average age of 48 years. Participants were assigned to a high (3,500 mg), medium (2,300 mg), or low (1,200 mg) sodium diet for 30 days, after which they switched to a different level sodium diet until they had completed the three diet cycle. During the last seven days of each diet, participants reported frequency and severity of headaches they experienced.

People on the high-sodium Western diet reported the most headaches, with 47% saying they experienced head pains. Comparatively, only 36% of people on a low-sodium diet based around fruits and vegetables reported having any headaches. Researchers weren't certain why more sodium increased risk of headaches, but past studies have suggested a direct relationship between headaches and blood pressure, which is elevated by high salt.

Importantly, this study offers even more evidence on the health risks associated with high-sodium diets that we have reported, including hypertension, weakened bones, and increased risk of stomach cancer. Most Americans over-consume this nutrient, with an average daily intake equaling that of the high-sodium diet in this study. The American Heart Association recommends getting no more than 1,500 mg sodium per day, unless otherwise recommended by a doctor for a medical condition.

What are some ways to start cutting sodium from your diet?

- Rethink sandwiches, the highest contributor of sodium in the average American diet. Substitute high-sodium ingredients like cheese and deli meats for lower sodium options like avocado and grilled chicken. Make your sandwich open-faced

to limit consumption of packaged breads.

- Do more home-cooking. Over 75% of the sodium Americans eat comes from restaurant-prepared, processed, and prepackaged foods.
- Go easy on the salt shaker. We suggest herbs and spices or lemon to flavor your food instead. Try our [Spinach and Edamame Kuku](#), a vegetarian Middle-Eastern dish that utilizes fresh dill and mint for vibrant flavor.
- Choose low-sodium or no-salt-added versions of packaged foods like soups and beans. Rinse canned beans and vegetables before you eat them.
- Load up on fresh fruits and vegetables, which are naturally low in sodium.

Featured Recipe

Banana & Blue Breakfast Smoothie

Ingredients:

- ½ cup old-fashioned rolled oats
- 1 DOLE® Banana
- 1 cup DOLE Blueberries
- 1 cup unsweetened almond milk
- 1 teaspoon honey
- ½ teaspoon ground cinnamon

Directions

ADD oats to blender. Cover; blend until a powder consistency.

ADD banana and blueberries, blend until smooth. Pour in almond milk, honey and cinnamon, continue blending until smooth. Serve.



Serves: 4

Prep Time: 10 min.

EDITORIAL TEAM

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