



Nutrition News

Feeding the world with knowledge



January 2016

Happier New Year with Fruits and Vegetables

Eating More Fruits and Vegetables May Help Prevent Depression



Wish your loved ones a “Happy New Year” by sending them a bouquet of produce! As we know, eating more fruits and vegetables may help you lose weight, a popular theme during the month of New Year’s resolutions, but a 2015 study published in *BMC Medicine* reveals eating more fruits and vegetables may also be the key to greater happiness in the New Year.

Researchers from Spain assessed the diets of more than 15,000 Spanish adults over a ten year period. They specifically looked at how well participants adhered to a Mediterranean diet, a pro-vegetarian diet, or the Alternative Health Eating Index—all diets that are centered on eating plenty of fruits and vegetables. Researchers also noted how many people developed depression during the ten years.

Results suggest following one of these produce-based diets could help lower risk of depression. Even slight adherence to a Mediterranean diet lowered relative risk of depression by 25-30%. Those who adhered closest to the pro-vegetarian diet, which nearly but not entirely eliminates meat from the diet, saw a 22% drop in the rate of developing depression compared with those who did not comply. Adhering to the Alternative Healthy Eating Index dropped rate of depression nearly in half for some.

Fruits and vegetables have been linked to happiness in the past. A study from the British Medical Journal found that people with the highest mental well-being were more likely to report eating more fruit and vegetables, and a study from the University of Queensland found eating fruits and vegetables was positively associated with life satisfaction and overall happiness.

Add more fruits and vegetables to your diet by eating them in place of less healthy foods. Try mushrooms in place of meat, sweet potatoes for butter, bananas for ice cream, or other creative kitchen swaps. Our [Whole Roasted Cauliflower](#) stars beautiful cauliflower as the center of the dish..

In this Issue:

- [Happier New Year with Fruits and Vegetables](#)
Eating More Fruits and Vegetables May Help Prevent Depression
- [Drink Up!](#)
Drinking Water Before Meals May Aid in Weight Loss
- [Benefits of Garlic](#)
Eating Garlic May Benefit Immunity and Cancer Prevention
- [Bananas Best for Bicyclists](#)
Bananas Improve Athletic Performance and Recovery in Cyclists
- [Naptime for Your Heart](#)
Midday Naps May Benefit People with Hypertension
- [Adventurous Eating Pays Off](#)
More Adventurous Eaters Have Lower BMIs

Featured Recipe



- [Whole Roasted Cauliflower](#)

Drink Up!

Drinking Water Before Meals May Aid in Weight Loss



Now that the holiday season is over, weight loss is the topic on most everyone's minds. Though we recommend strategic eating with fruits and vegetables throughout the holidays, January is a good time to get back on track if your healthy eating slipped. A 2015 study published in the journal *Obesity* finds keeping hydrated may be the place to start if you're looking to drop a few holiday pounds.

For the study, researchers from the University of Birmingham in the UK recruited 84 obese adults to participate in a weight-loss program. Half of the group was instructed to drink about 2 cups of water 30 minutes before eating their main meals—scientists call this preloading—and additional water throughout the day as they pleased. The other half was told to simply imagine feeling full before their meals. The rest of the program was the same between groups and included standard healthy lifestyle advice.

After three months, the group that drank water before meals lost an average 5.3 pounds, while the other group lost just an average 2.65 pounds. Participants that most closely followed the water preloading intervention lost near ten pounds in that time.

Researchers suspect filling up on water before meals increases satiety, which could lead to eating less food and fewer calories at meals, resulting in weight loss. Compared with expensive and complicated commercial weight loss plans, drinking water before meals is relatively affordable and easy to do.

Do results sound familiar? We reported a similar study in 2011 that offered the same 2-cup water strategy for weight loss, with the water-preloaders losing 44% more weight than those who simply cut calories alone. That study was conducted in a more homogeneous group of people; the current study suggests this weight-loss strategy may be applicable to the general population.

Stay on track by purchasing and carrying a reusable water bottle. Whether you are at home, at the office or out and about, a water bottle in hand serves as a reminder to stay hydrated and allows you to visually track the amount of water you drink in a day. Sip on water during the day and at meals, and if you are trying to lose weight, drink two cups of water thirty minutes before breakfast, lunch and dinner.

Benefits of Garlic

Eating Garlic May Benefit Immunity and Cancer Prevention



Grab a breath mint and go heavy on the garlic! Research out of the USDA finds garlic may benefit the immune system and could even be linked to cancer prevention.

In a randomized crossover study published in the *Journal of Nutrition*, 17 volunteers ate either a breakfast containing 5 grams of raw crushed garlic (about two cloves), or garlic-free control breakfast. Researchers analyzed participants'

blood before and three hours after breakfast. In those who ate garlic, seven genes related to immunity and cancer were upregulated—meaning the gene expression increased—after breakfast.

The affected genes have a variety of functions in the body, including cancer cell suicide, suppression of cancer formation, and immune cell development. Though gene expression is not entirely indicative of what plays out in the body, these results do suggest eating raw crushed garlic may assist in immunity and the suppression of cancer development.

Crush your own fresh garlic with just a few simple steps. Using the heel of your hand, press the flat of a knife into a garlic clove—this makes the clove easier to peel. Peel away the skin and finely chop the garlic to use in recipes.

Fresh garlic can be used in any meal of the day. Add garlic to egg-white scrambles at breakfast, to homemade soups at lunch, and to pasta sauces at dinner. Try our [Carribe Banana Curry Royale](#) made with DOLE® Bananas, DOLE Spinach, DOLE Cauliflower, and finely chopped garlic for an exotic and flavorful main dish.

Bananas Best for Bicyclists

Bananas Improve Athletic Performance and Recovery in Cyclists



Athletes, listen up! If you're preparing for your next long-distance race, you may want to throw a few bananas in your gym bag. Researchers at the North Carolina Research Campus, including Dole Nutrition Institute and Appalachian State University scientists, have provided even more evidence as to why bananas may be the ideal fuel for endurance athletes.

For the study published in the *Journal of Proteome Research*, 20 seasoned male cyclists participated in three 75-kilometer rides while consuming bananas and water, pears and water, or just water every 15 minutes. Blood samples were taken before and after each ride. Participants also rated their physical and mental states after each ride.

Compared to just drinking water, eating banana or pear while cycling improved trial times by 5% and 3.3%, respectively. Participants also reported enhanced energy, ability to focus, and overall well-being when eating fruit while riding.

Researchers used metabolomics, the study of metabolites, to investigate how eating fruit may have also improved the athletes' post-exercise recovery processes. Looking at these intermediary metabolic compounds gives a specific fingerprint as to what cellular processes have occurred.

Blood analyses showed that eating bananas helped calm inflammation and enhance antioxidant capacity post-exercise. These benefits derived from specific antioxidants and phenolic compounds in bananas. Eating bananas also reduced fat breakdown by providing carbohydrates to working muscles, a benefit to athletes in competition. Pears provided similar advantages but to lesser extents.

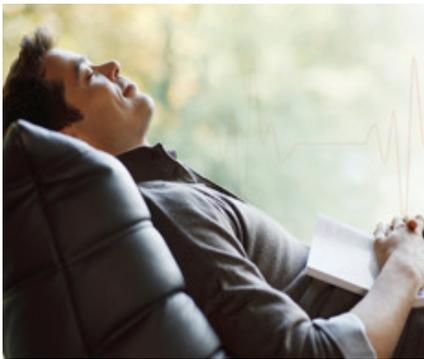
One medium banana provides 105 calories and 27 grams of carbohydrates. Bananas contain a 1:1 ratio of glucose to

fructose, a sugar profile our previous research has supported as ideal for athletic performance. Pears contain a much higher amount of fructose (about 1:2.5 ratio glucose to fructose) and have a different phenolic profile than bananas, a likely reason bananas were the more effective energy source during exercise.

Next time you participate in an endurance event such as cycling or running, choose fruit, specifically bananas, to potentially improve your race time and post-race recovery.

Naptime for Your Heart

Midday Naps May Benefit People with Hypertension



Still exhausted from the hustle and bustle of the holidays? Reset and recharge this month, and squeeze in a nap if you can! According to 2015 research, a midday nap may help lower blood pressure and be beneficial to your heart.

Researchers from Greece studied 386 patients with hypertension, recording their ambulatory systolic blood pressure levels over 24-hours (the gold standard of blood pressure monitoring), minutes of midday sleep time, EKG results, and other lifestyle habits. Compared with those who did not take a midday nap, people who napped had 5% lower average systolic blood pressures (6 mm Hg). Though this may seem small, Dr. Kalliastratos, the lead researcher on the team, points out that

“reductions as small as 2 mm Hg in systolic blood pressure can reduce the risk of cardiovascular events by up to 10%.”

Results also showed those who napped had healthier cardiovascular measures in their EKGs—11% lower velocity levels and 5% smaller left atrium diameter. Both of these markers note less heart damage from high blood pressure in the people who napped. Everyone who napped was better off than those who skipped out and the longer the nap, the greater the benefit.

Though you may not be able to schedule naptime on your calendar at work, use the weekends to channel your inner kindergartener and take a midday snooze. Be sure to set a regular bedtime too—sleep deprivation can lead to weight gain, fatigue and irritability, and has also been linked to increased risk of mortality. Time to rest!

Adventurous Eating Pays Off

More Adventurous Eaters Have Lower BMIs



Are you resolving to try new healthy foods in 2016? A study out of Cornell University suggests branching out with your eating patterns may be a way to help you shed a few pounds in the New Year.

Researchers asked 501 young women questions about different foods that they have tried, and then categorized the women as either “adventurous” or “non-adventurous” eaters. Some of the foods they were asked about included bean sprouts, polenta, and seitan, a meat alternative made from wheat. They also asked some questions

about women's cooking and eating habits and calculated their BMIs.

The more adventurous eaters had significantly lower BMIs than those who were hesitant to try new foods. The adventurous women were also more likely to cook, placed more value on the health and quality of food, and were more physically active than the non-adventurous eaters.

Explore your grocery store and get adventurous in the kitchen and the dining table—the exotic produce section is a great place to start. Pick out one piece of produce you have never tried and use it in a new and healthy recipe. Have you ever tried a plantain? [Plantain Crusted Salmon](#) combines this exotic fruit with familiar foods and flavors. You can also try using your usual favorite foods in new ways. Dole's Get Up and Grow is all about making fresh produce fun and delicious, and our site is filled with recipes that utilize fruits and vegetables in unique and creative ways. [Latin Lasagna](#) is an adventurous combination of bananas, onions, spinach and tomatoes with taste that is sure to surprise and satisfy.

FEATURED RECIPE

Whole Roasted Cauliflower

Ingredients:

- Ingredients 1 medium to large DOLE® Cauliflower, leaves discarded
- 2 tablespoons olive oil
- 1 teaspoon ground coriander
- ½ teaspoon sumac
- ½ teaspoon salt
- 6 cups DOLE Spring Mix
- Olive oil and vinegar dressing

Directions:

1. Preheat oven to 425°F. Fill large saucepot 2/3 full with salted water and bring to a boil. Submerge cauliflower into water, blanching 2 minutes. Drain and transfer the cauliflower to baking pan, lined with foil and pat dry.
2. Combine olive oil, coriander, sumac and salt in small bowl. Brush over surface of the cauliflower. Roast 50 minutes or until knife easily slides into the center of the cauliflower.
3. Transfer cauliflower to a serving platter surrounded by spring mix. Drizzle olive oil and vinegar dressing over the cauliflower and spring mix.



Serves: 6 Servings

Prep Time: 15 minutes

Total: 65 minutes

EDITORIAL TEAM

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