



Nutrition News

Feeding the world with knowledge



September 2015

Back-to-School Bananas

Potassium Linked to Lower Blood Pressure in Adolescents



Though it may seem as if the summer just started, September is here and it's time for kids to head back into the classroom. They have the folders, notebooks, binders and pens, but should you add bananas to that back-to-school shopping list? Maybe so for better health—a 2015 study published in *JAMA Pediatrics* suggests eating potassium-packed foods like bananas during adolescence may help keep blood pressure low later in life.

Researchers from Boston University School of Medicine and University of Colorado School of Medicine followed 2,185 girls initially aged nine to ten years for a period of ten years. Throughout the study, researchers annually measured the girls' blood pressures and assessed their diets. By the end of the study when the girls were 17 to 21 years old, the girls who had the most potassium in their diets ended up having blood pressures an average 1.2/1.2 mm Hg lower than the girls who got the least potassium. Interestingly, sodium intake had no significant effect on blood pressure, suggesting potassium may be the more important nutrient to watch, especially during adolescence.

Though the differences in blood pressures between groups were not huge, keeping a lower blood pressure early in life may help prevent hypertension, which increases risk of heart attack and stroke, down the line. Plus, adopting healthy eating habits at a young age, like including high-potassium fruits and vegetables with every meal, typically translates to better dietary choices throughout adulthood.

Fruits and vegetables provide some of the best sources of potassium you can eat. Bananas (12% daily value for one medium banana), baked potatoes with skin (26% DV for one medium potato), cooked spinach (12% DV for ½ cup), acorn squash (13% DV for ½ cup) and kiwi (16% DV for one cup) are all top choices that kids and teens will enjoy. Bake potato "fries" in the oven, add spinach to pasta, sneak mashed squash into muffins and enjoy kiwi with yogurt. Our [Crunchy Banana Roll](#) makes a quick and tasty breakfast and an easy way to get 19% of your daily potassium.

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BONUS: Potassium is important during all stages of life. A study published by the American Heart Association found postmenopausal women who got the most potassium in their diets had up to 30% lower risk of stroke compared with women who got the least potassium.

Pack an A+ Lunch Box

Tips for Packing Nutritious and Tasty School Lunches



Back-to-school means back to packing lunch boxes. About 41% of elementary students bring lunch to school on any given day, but research from Tufts University and The University of Texas at Austin has found most packed lunches are of low dietary quality, containing processed snack foods, sugary drinks and empty calories while lacking in vegetables and whole grains. We have previously reported that eating more fruits and vegetables may be linked to better performance in the classroom. Here are our tips for packing a safe, nutritious and delicious school lunch box.

Keep it Cool: When it comes to packed lunches, food safety is first. Nix old-fashioned brown paper bags and invest in an insulated lunch tote—some come with a built-in cooling compartment. Keep perishable foods like yogurt, turkey and hummus cold by adding an ice pack or better yet, a frozen water bottle—by lunchtime it will be thawed and ready to drink. If you are packing a hot lunch such as **Chili** or **Vegetable Lasagna**, first pour boiling water into a thermos and let sit for ten minutes. Then pour out the water, add the hot food to the thermos and close the lid tightly to seal in the heat.

Think Outside the Sandwich: PB&J again? Prevent lunch boredom before it begins. Our **Hoot Owl** recipe kicks lunch up a notch with a creative design of healthful ingredients that will entice your child to dig in. Lunches don't have to come in sandwich form. Prepare larger batches at dinner of your child's favorite meals so there will be leftovers to pack the next day. Grain salads made with whole-wheat pasta or quinoa tossed with veggies like cherry tomatoes or chopped spinach are also kid-friendly options. Another way to switch things up is to skip the entrée concept all together and provide a sampling of healthy foods for your child to mix and match. Whole grain crackers, bean dip, peanut butter, veggie sticks and apple slices makes a balanced and fun combination for kids.

Jazz Up the Veggies: It's no surprise that some kids don't love eating vegetables, but a few simple tricks can help make veggies more appealing and fun. Choose colorful vegetables like red bell peppers, carrots and cucumbers and use small cookie cutters to create fun shapes. Don't let the veggies go bare—a 2013 Penn State study found kids are more likely to eat and enjoy vegetables when paired with dip. Hummus, low-fat Ranch, or yogurt-herb dip are options kids may like.

“De-junk” Dessert: Every child loves a sweet treat with lunch, but traditional packaged snacks like cupcakes and cookies can be laden with refined sugar and saturated fat. Utilize the natural sweetness of fruit to create healthful happy endings for lunch. Pack bite-sized cubes of pineapple, mango or cantaloupe along with vanilla yogurt dip for a nutrient-packed dessert that's fun to eat. Chocolate-dipped strawberries or bananas are also sure to please a child's sweet tooth while offering the nutritional benefits of fruit.

Want more ideas for back-to-school meals? Check out our new recipes on <http://www.dole.com!>

Build Boys' Bones

Screen-Based Activities Linked to Lower Bone Mineral Density in Boys



After-school activities may be jamming your family's schedule full, but research suggests those baseball, basketball or lacrosse practices may be improving more than just your child's speed on the field. Time spent playing sports not only provides exercise, it takes away from time spent watching TV, a habit that may be harmful to bone health in boys, according to a 2015 study published in *BMJ Open*.

Researchers from Norway and New Zealand analyzed 688 Norwegian students aged 15 to 18 years. Participants answered questions about how many hours per day they spent doing sedentary screen-based activities like watching TV or using a computer and how often they did different physical activities like sports. Researchers also measured their bone mineral densities. Two years later, the teens were assessed again.

Analysis found boys spent more time sitting in front of a screen than girls, which was linked to lower bone mineral densities. Weekends racked up the most screen-based activity time, with boys averaging five hours a day glued to a screen. Researchers explain that physical activity is a strong predictor of bone mass, and spending your spare time in front of a screen takes away from time for sports and active play.

Encourage your child to participate in extracurricular sports activities in addition to music, art or theater. On weekends, get the whole family up and active by visiting a local YMCA, enrolling in local sports leagues (there are leagues for adults, too!), playing in the yard or doing other engaging hobbies. Limit screen-based activities like watching TV or using the computer to just one or two hours per day, as recommended by the American Academy of Pediatrics, and keep "screen-free" zones in the kitchen, dining room and bedrooms.

BONUS: In June we challenged families to turn off the TV and get outside for the summer. Keep up with the challenge this fall and aim to keep TV watching to just an hour per day.

Whole Food Nutrition

Greatest Benefits Come from Food, Not Supplements



For over a decade, *Dole Nutrition News* has been bringing you the latest in nutrition and health research, and has been advocating that nutrition is best served up from food, not pills. Though supplements comprise a multibillion dollar global industry, experts agree that health benefits are best derived when whole foods are the focus, not individual nutrients in capsules or powders. However, popular opinion may still need some persuasion.

Two researchers from Cornell University and Pomona College recently tested how the link between nutrition and risk of disease is perceived among 114 university students. Participants were divided into two groups and asked to read a short description of a male character and judge how healthy they thought he was. The first two paragraphs were identical, but the final paragraphs describing the man's diet focused on either nutrients or whole foods containing these nutrients.

One group read that the man ate bananas, fish, oranges, milk and spinach. The other group found out the man ate potassium, omega-3 fatty acids, vitamin C, calcium and iron. When asked to estimate the man's risk of chronic disease, the nutrient-focused group rated the man an average 15% less likely to develop heart disease, diabetes, stroke and cancer than the whole food-focused group.

Nutrient-centrism may be the more common viewpoint across the general population, but you simply cannot package health in a pill. "Whole foods offer benefits that isolated nutrients cannot provide," explains Jenn LaVardera, Registered Dietitian at the Dole Nutrition Institute. "A cup of pineapple not only offers vitamin C, manganese and vitamin B6, it packs in two grams of fiber, the enzyme bromelain and an assortment of phytonutrients. Everything in whole food works synergistically, which best promotes health."

Supplements are not only a waste of money for most*, they could pose serious health risks. Nutrients in whole foods are buffered by fiber and water, which is not the case in pills, making it easier to consume too much of one nutrient. Another issue to consider is overly processed foods. A box of sugary cereal may boast fortified antioxidant and micronutrient content, but this can't compete with the benefits of naturally healthy produce and brings the added risks of refined sugars and artificial ingredients.

The message is clear: Eat a variety of fruits and vegetables balanced by lean proteins, whole grains and healthy fats and you can reap the nutritional benefits from food for a fraction of the price of isolated nutrients. Looking for a nutrient-packed meal idea? Our [Vegetarian Rainbow Hero](#) is an excellent source of fiber and 14 vitamins and minerals and also packs in proteins and healthy fats—nutrition that simply tastes great!

**Certain health conditions may require use of a supplement. Speak with your health care provider for more information.*

Apples vs. Arthritis

Apples May Delay Development of Arthritis



Apples have long been the traditional gift of teacher appreciation in the classroom, a gift that comes with a plethora of benefits. Along with fiber and vitamin C, apples are packed with polyphenols, healthful phytonutrients including epicatechin, catechin, quercetin and condensed tannins (also known as procyanidins), a type of flavonoid that may make apples a suitable snack to reduce risk and help treat symptoms of rheumatoid arthritis.

In a 2015 study published in *Molecular Nutrition & Food Research*, Japanese researchers fed one group of mice Fuji apples, packed with condensed tannins, with their normal diet. The other group ate only normal food. After two weeks of eating the apples, mice were exposed to a simulation of human rheumatoid arthritis. While the group who did not eat the apples developed the condition rapidly, the apple-fed mice saw a less severe, delayed disease progression with fewer symptoms of swelling and inflammation.

Rheumatoid arthritis is a chronic inflammatory autoimmune disorder in which the body mistakenly attacks its own tissues, causing painful swelling, stiffness, swollen joints and potential for joint deformity and bone erosion. The condition may also increase risk of carpal tunnel syndrome and heart and lung complications. Eating apples regularly

may be a way to reduce risk of this painful condition.

The possibilities for eating apples are nearly endless. Apples make a satisfying snack when paired with peanut or almond butter and add great taste and texture to chicken salad, slaws or wraps. They also taste great baked, stewed or even sautéed with onions. For a crunchy mix of sweet and savory, try our [Romaine, Fennel and Apple Salad](#).

BONUS: Australian researchers found that those with the highest fruit and vitamin C intakes were least likely to develop the kind of bone abnormalities that indicate incipient arthritis of the knees. Eat more fruit today to help prevent pain later in life!

Diet Soda Dangers

Diet Soda Linked with Abdominal Obesity



Not all diet foods are good for your health, and diet soda may top the list. Though the beverage may sound waistline-friendly with its zero-calorie label, you may want to think twice before cracking open your next can. A 2015 study from the University of Texas has linked diet soda consumption to greater abdominal obesity, which may put you at risk for heart disease and diabetes.

Researchers examined about 750 older adults living near San Antonio, Texas. They took measurements on height, weight and waist circumference, and asked questions on how often participants drank different types of soft drinks. Nearly ten years later, they followed up with participants to see how much their waistlines grew. Compared with people who abstained from diet soda, people who occasionally drank diet soda had a 228% greater increase in waist size, and those who drank diet soda daily saw a whopping 395% greater increase in waist size. By contrast, drinking regular soda was in no way related to increase in waistline.

Having a bigger waistline has bigger consequences than just pants size alone. Abdominal obesity is linked to several adverse health conditions, including heart disease, COPD, and restless leg syndrome and having greater abdominal fat typically means having greater visceral fat—the dangerous, deep fat that surrounds your organs—especially in older adults.

Diet soda is not just a threat to the aging population. Research out of the University of Michigan has uncovered a possible reason that drinking diet soda leads to fat gain. Scientists deprived fruit flies of food for several hours and then gave them a choice between real and artificial (like those used in diet sodas) sugars. When flies tasted the real deal, neurons released a digestion-fueling hormone in the gut and brain. Artificial sugars did not have this effect, explaining why drinking diet soda may leave you unsatisfied and craving more food.

Regular soda has its dangers too. Excess sugar from sweetened beverages can lead to weight gain, and the phosphorus in soda has been linked to increased risk of death from all causes. A 2015 study published in *BMJ* found that a serving of sugary soda every day for a decade was linked to an 18% increase in risk of type 2 diabetes, even in people of normal weight. Research also shows drinking lots of soda can lead to potassium depletion, which can increase risk of hypertension, kidney stones, osteoporosis, stroke and muscle loss.

When it comes to quenching thirst, H₂O is the way to go. Add flavor with fresh fruits and vegetables: Berries, citrus

fruits, cucumbers and watermelon all make tasty additions to water. Herbs like mint or basil can also add unique flavor. If it's the caffeine kick you crave, coffee and tea are your best options, as both have been linked to several health benefits. Check out our [Smoothies and Drinks board on Pinterest](#) for other sweet alternatives.

FEATURED RECIPE

Crunchy Banana Roll

Ingredients:

- 1 cup low-fat granola
- 1 tablespoon toasted flaxseed
- 4 tablespoons unsalted almond butter
- 2 teaspoons honey
- 4 DOLE® Bananas, peeled
- 4 tablespoons fat-free Greek yogurt
- ½ cup DOLE Blueberries
- ¼ cup DOLE Raspberries
- ¼ cup DOLE Blackberries
- 4 mint sprigs



Serves: 4 Servings

Prep Time: 20 minutes

Directions:

1. Toss granola with flaxseed on a plate and set aside. Combine almond butter with honey, mixing until creamy.
2. Spread bananas with almond butter mixture and roll in granola mixture. Arrange on serving plates with a dollop of yogurt, berries and mint.

EDITORIAL TEAM

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