



Nutrition News

Feeding the world with knowledge

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Sensational Strawberries

Strawberries May Improve Insulin Sensitivity



Nothing against May flowers, but what we're really looking forward to are the strawberries. Bursting with flavor and nutrition, strawberries provide an excellent source of vitamin C and manganese plus three grams of fiber per cup. A new reason to stock up on these juicy red berries: They may help in the fight against diabetes. A 2016 study sponsored by the California Strawberry Commission and

published in the *Molecular Nutrition & Food Research* explained why.

Researchers from the Illinois Institute of Technology recruited 21 obese adults with insulin resistance—a major risk factor for type 2 diabetes—to eat a high fat, high carbohydrate breakfast along with one of four beverages. Three of the drinks were made with freeze-dried strawberries (containing the equivalent of 0.7, 1.5, or 3 cups of strawberries) and one drink was strawberry-free. For six hours following breakfast researchers monitored the participants' blood.

Compared with other drinks, the drink with the most strawberries reduced post-meal insulin concentrations by about 12%, an effect that could help lower risk of diabetes and other metabolic disorders. Researchers controlled for fiber in analysis, suggesting strawberry polyphenols, especially anthocyanins, are the compounds effecting insulin signaling.

Looking for ways to incorporate more strawberries in your diet? Sliced strawberries over yogurt makes a tried and true favorite, but we're kicking things up a notch at Dole and using strawberries in unexpected ways. Our [Green Toast with Strawberries](#) becomes the star of any party, combining savory and sweet by pairing strawberries and banana with avocado and a little feta cheese.

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Diet Spring Cleaning

Ultra-Processed Foods Can Add Excess Sugar and Pounds



On a spring cleaning roll? Don't stop with just household dust and grime. A 2016 study published in *BMJ Open* finds the foods in your daily diet could use a good cleanup too!

Researchers looked at the diets of 9,317 Americans ages one year and older and classified the foods that they ate into four categories: unprocessed (such as fruits and vegetables), processed culinary ingredients (such as plant oils), processed foods (such as cheese), and ultra-processed foods. Ultra-processed foods were foods that require formulation beyond what you would typically make in your own kitchen, like packaged breads, cookies and snacks made with added colors, sweeteners, or preservatives.

On average, participants ate 2,069.5 calories per day (remember, that average included young toddlers and children who eat less than adults) of which 57.9% were calories from ultra-processed foods. Added sugars provided an average 292.2 calories daily, of which 90% were from ultra-processed foods. Fruit, including freshly squeezed juice, provided just 5.2% of average daily calories (97.5 calories), while vegetables came in at just 0.7%—a measly 13.5 calories per day.

Added sugars in the diet are harmful to health and contribute to increased risk of obesity, diabetes and heart disease. Slash added sugars by cutting back on ultra-processed foods, and replace those items with more healthful, minimally processed or unprocessed foods such as fruits and vegetables. Remember, natural sugar from whole fruit doesn't come with the same risks as added sugar. Plus, plant foods tend to be lower in calories and packed with vitamins, minerals, and phytochemicals. Bland? Boring? Not at all! Check out how tasty a no-added-sugar day can be with this delicious menu!

Breakfast: Low-fat plain Greek yogurt topped with sliced banana, berries and chopped nuts

Lunch: Spring mix salad with salmon and your favorite vegetables, dressed with olive oil and balsamic vinegar

Snack: Carrots and celery with homemade guacamole or hummus

Dinner: **Barley Risotto with Mushrooms**—this creamy comfort dish pairs well with roasted broccoli and lemon

Dessert: No-added-sugar dessert? You bet! Turn frozen bananas into one-ingredient “ice cream” with Yonanas® (for those without a Yonanas machine, simply pulse frozen banana slices in a food processor). Top with fresh berries or diced pineapple for a naturally sweet sundae.

Don't Forget About Fish

Eating Seafood May Lower Risk of Alzheimer's Disease



Though mercury content may be keeping seafood off the table, eating fish isn't fishy at all. A 2016 study out of Rush University suggests when it comes to brain health the benefits of eating fish may outweigh the risks.

Researchers examined brain autopsies of 286 individuals who were part of an aging study, assessing signs of Alzheimer's disease progression and brain mercury levels. They noted anyone who carried the gene ApoE4, a genetic risk factor for Alzheimer's and they also analyzed dietary information to determine how often they ate fish.

Though dining on fish more often was linked with higher mercury levels in the brain, brain mercury content appeared to be harmless. Further, among those with the ApoE4 gene, eating seafood at least once a week was linked with lesser Alzheimer disease neuropathology. Fish oil supplements did not have a beneficial effect.

This is excellent news for all the seafood lovers out there. Seafood, including salmon, sardines, and rainbow trout, provides protein, omega-3 fatty acids, and plenty of vitamins and minerals (these fish also have low mercury content). Choose grilled, baked or broiled fish and avoid anything that is breaded or fried. Keep portion sizes to six ounces or less—about the size of a checkbook. For extra flavor add a light drizzle of lemon juice and your favorite herbs and spices.

Do your brain some good and remember to serve up some fish this week! Try our [Grilled Miso Glazed Salmon and Pineapple Ginger Peach Chutney](#).

BONUS: Take advantage of spring asparagus—eating folate-rich foods may also help lower risk of cognitive impairment and Alzheimer's disease.

Broccoli: Cancer Enemy

Broccoli Linked to Decreased Progression of Liver Cancer



At only 50 calories per serving, broccoli is packed with fiber, folate and vitamins A, C, and K. Still not convinced to pile broccoli onto your plate? Two recent studies point to this green vegetable as a potential defense against cancer.

In a 2015 study published in *The Journal of Nutrition*, researchers from the University of Illinois fed mice one of four diets: a control diet or a Western diet (high in fat and sugar), with or without broccoli. Six months later, they analyzed the mice's livers for fat buildup and tumor development, finding the mice that ate broccoli had lower liver triglycerides, less liver damage and slower progression of tumor development.

A different 2015 study out of Oregon looked at the effects of sulforaphane, a compound derived from broccoli, on breast cancer progression. Fifty-four women with abnormal mammograms received either broccoli seed extract containing sulforaphane (equating to about one cup of broccoli sprouts per day) or a placebo for eight weeks. Those

who received the broccoli supplement showed slower cancer cell growth and reduced activity of HDAC enzymes, an effect that helps suppress tumors.

Fitting broccoli into your daily diet is easier than you think. Broccoli can be eaten raw, steamed, sautéed, grilled, roasted or blanched. Enjoy it as a side dish with grilled fish, eat as a snack dipped in hummus, or toss it with whole-grain pasta and pesto. For a fun and festive side dish, try our [Broccoli and Fruit Slaw](#) made with strawberries, bananas, grapes and celery.

BONUS: Broccoli may also protect blood vessels from oxidative damage caused by free radicals, according to British researchers..

Coconut Craze

Is Coconut Oil Actually Healthy?



Everyone is going coo-coo for coconut. Coconut oil is one of the trendiest ingredients in the kitchen right now, and not just in baked goods and stir-fries. Health enthusiasts nationwide are adding coconut oil to coffee, blending it into smoothies, and even eating it by the tablespoon. But is coconut oil, which is 92% saturated fat, actually healthy?

A 2016 meta-analysis published in *Nutrition Reviews* finds when it comes to heart health, the answer is “NO”. Researchers from New Zealand reviewed 21 studies that looked at the effect of coconut oil on cardiovascular risk. Generally, coconut oil was found to raise total and LDL cholesterol substantially more than unsaturated plant oils (though not as much as butter). Researchers conclude there is no evidence that coconut oil should be viewed differently from other foods high in saturated fat.

Coconut oil’s health halo came from recent publicity on medium-chain fatty acids (MCFA)—the claim is that these fats behave differently than harmful long-chain saturated fatty acids in the body. MCFA are absorbed more quickly and sent directly to the liver where they are used for energy. The primary fatty acid in coconut oil is lauric acid, and although it can be classified as either medium- or long-chain, it sides with long-chain in terms of metabolism. It turns out only about 4% of the fats in coconut oil can be classified as medium-chain, making it inaccurate to consider coconut oil to contain predominantly medium-chain fatty acids.

The bottom line is, a little coconut oil eaten along with a diet rich in fruits and vegetables likely won’t harm your health, but you’re better off keeping olive oil as the go-to in your kitchen. “I use a small amount of olive oil in many of my recipes as I see this as a true health benefit compared to most fats” explains Chef Mark Allison, Director of Culinary Nutrition at Dole.

And by no means should you be downing tablespoons of coconut oil as a supplement. Says Mark: “I’m a great believer in moderation in all things, especially where food is concerned.” Keep saturated fat intake to less than 7% of your calories a day, and choose mainly unsaturated fats like olive oil and others listed in our [handy guide to oils](#).

Crunch into Weight Loss

Hearing Food Sounds May Help You Eat Less



Call it annoying, call it a pet peeve, call it what you will—the chewing, chomping, slurping, and crunching of eating may actually hold some benefit. Food sounds can be considered a “forgotten” flavor sense and may even be linked to how much we consume. Two American researchers recently tested this idea in three different mini-studies, published in *Food Quality and Preference*.

For the first trial, 181 students were given a bowl of cookies and were asked to eat the snack loudly, quietly or normally. They were told to try at least one cookie and were welcome to eat as many as they liked. Participants told to focus on their eating noises ate 22% fewer cookies than those who just ate normally.

In a second trial, 67 students ate pretzels while listening to white noise at different volumes. Those who heard quiet ambient sounds, meaning they could better hear their eating sounds, ate about 33% fewer pretzels. In a third trial, 156 students were given pita chips along with one of two descriptions: one focusing on crunch, the other focusing on flavor. Those who read the “crunchy” description ate about 18% fewer pita chips.

Sound, along with smell, sight, touch, and of course taste, comprise the external sensory experience of eating and can affect how we respond to internal hunger cues. When it comes to weight management, portion control is king, and mindful eating—that is, paying attention to and appreciating all aspects of your food, including sound—can increase meal satisfaction and keep portion sizes in check.

Looking for something new to crunch into? Our [Brussels Sprouts & Grilled Pineapple Salad](#) is made with crisp produce and crunchy almonds. Savor every bite!

FEATURED RECIPE

Broccoli and Fruit Slaw

Ingredients:

- 1 lb. DOLE® Broccoli
- ½ cup DOLE Premium Celery Hearts, thinly sliced
- 1 DOLE Banana, peeled and cut into ¼-inch slices
- ¾ cup DOLE Strawberries, hulled and sliced
- ¼ cup DOLE Grapes, quartered
- ¼ cup walnut pieces
- ⅓ cup bottled coleslaw or poppy seed dressing

Directions:

- CUT** broccoli into florets, leaving 1-inch of the stem attached. Cut florets into ¼-inch slices. Cut large slices in half, as necessary.
- COMBINE** broccoli, celery, banana, strawberries, grapes, and walnuts in a large bowl. Pour dressing over salad and toss gently to coat evenly.



Makes: 6 Servings

Total: 20 minutes

EDITORIAL TEAM

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