



## Dole Diet Center

### Take These Foods to Heart

For American Heart Month, Enjoy These Heart-Healthy Foods



February is American Heart Month, so we're sending Valentines to some of the friendliest foods for the heart. Support your cardiovascular health by adding these five foods to your diet this February and all year round. Your heart will love you for it.

**Beets:** Looks like a heart, works for your heart. Beets pack tons of nitrates that help expand veins and arteries when converted to nitric oxide in the body, letting blood and oxygen flow more easily. In one study, middle-agers with hypertension saw an 8% to 11% drop in blood pressure from drinking one cup beet juice compared to others drinking water. Beets also contain betalains, phytochemicals that may help tame LDL (bad) cholesterol.

**Tomatoes:** You say tomato, we say let's eat! Tomatoes are a wonderful source of lycopene, potassium, flavonoids, and vitamin C— all nutrients that may help keep your ticker ticking. A study from Tufts University found people who got the most lycopene in their diets, primarily from tomato sauce and fresh or canned tomatoes, saw a 26% reduction in coronary heart disease risk and 17% reduced risk of cardiovascular disease. Try our recipe for **Shakshuka**, a spicy tomato sauce with poached egg whites, which uses tomato paste, possibly the most bioavailable source of lycopene in the diet.

**Apples:** Could an apple a day really keep the doctor away? British researchers say maybe. According to their study, prescribing an apple a day to everyone over age 50 is likely to reduce the annual number of heart-related deaths just as well as if everyone were prescribed statins, medication that can lower cholesterol (and apples are much tastier!). Apples contain health-promoting nutrients such as quercetin, which has been shown in studies to help lower blood pressure, and other phytochemicals linked to reduced risk of cardiovascular disease.

**Cocoa:** No wonder Valentine's Day and chocolate go hand in hand. Cocoa is packed with heart-healthy antioxidants like catechin and epicatechin and also contains a little fiber. According to research presented at a meeting of the American Chemical Society in 2014, the real chocolate power comes from good bacteria in the gut: friendly microbes such as lactic acid bacteria also snack on cocoa and ferment it, producing anti-inflammatory compounds that may lessen inflammation and reduce risk of stroke. Choose dark chocolate varieties with at least 70% cocoa to treat your heart decadently right.

**Strawberries:** In a study from the University of Toronto, patients at risk for heart disease saw a 13% drop in LDL (bad) cholesterol after adding three cups of strawberries to their diets. Strawberries are loaded with vitamin C and manganese, both nutrients that can help fight free radicals, which can be damaging to the heart. **Dark chocolate covered strawberries**, anyone?

### Hot News



BANANAS AND RAISINS AND BEANS, OH MY!

### In this Issue

#### Dole Diet Center

- TAKE THESE FOODS TO HEART
- BE MINE, VALENTINE
- NOT SO SWEET HEART

#### Nutrition News Desk

- BANANAS AND RAISINS AND BEANS, OH MY!
- WORK HARD, PLAY HARD
- SAY NAY TO BPA

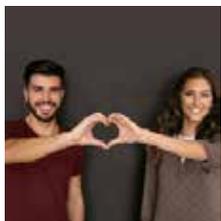
### Featured Recipe



SHAKSHUKA: SPICY TOMATO SAUCE WITH POACHED EGG WHITES

## Be Mine, Valentine

### Marital Quality Could Be Linked to Heart Health



If you were considering skipping out on a Valentine's Day celebration with your special someone this year, you might want to think again. Several studies have linked human relationships to both health and happiness, but research now suggests an unhappy marriage could be breaking your heart in more than one way. In a study, sociology researchers discovered marriage quality might be linked to cardiovascular risk and heart health.

Using information from a national study of health and relationships, researchers analyzed responses from over 1,200 men and women ages 57 to 85 years. They looked at four different measures of cardiovascular health: hypertension; rapid heart rate; C-reactive protein (a marker of inflammation and predictor of cardiovascular disease); and general cardiovascular events including heart attack, heart failure, or stroke. Marital quality was determined using a nine item scale that ultimately quantified the positive and negative elements of participants' marriages. Participants were asked questions like how close they felt with their spouses, how happy they were in their relationships, and if they prefer spending free time with their spouses.

Results point to strong links between marital quality and heart health, especially in older women. All women saw an increase in hypertension with increased negative marital quality. However, among women ages 75 to 85, for each one unit increase in negative marital quality, risk of hypertension increased nearly 14 times. Odds of cardiovascular events shot up over 9 times. Conversely, a one unit increase in positive marital quality was matched by a 67% to 74% decrease in risk of hypertension and 52.29% fewer odds of cardiovascular events.

This study suggests both positive and negative aspects of marriage can have an impact on heart health. Even though associations were strongest in older women, this could be because it takes years to develop chronic disease, and because age can weaken immune function, which increases vulnerability to disease. Younger women may be experiencing the same marital stress, but may not see the same harmful results for years to come.

Experts suggest a few tips for strengthening spousal relationships and marriage, which might also help strengthen your heart:

- Share your thoughts of happiness and concern with your spouse, and encourage your spouse to share his or her feelings with you. This can help develop feelings of closeness and trust.
- Collaborate with your spouse rather than compromise. Discuss issues to find an agreeable solution that satisfies you both.
- Express your love and your frustrations. Both parties will be more satisfied when there is confidence in feelings.
- Have a positive outlook on life and the relationship! Engage in activities or programs that promote marital quality and that you both enjoy.

## Not So Sweet Heart

Added Sugars May Be More Harmful than Salt for Heart Health



Though candy hearts and chocolate boxes are traditional gifts of love, these Valentine's goodies aren't as sweet as they taste. In addition to memory problems, obesity, and addiction, research now shows eating excess sugar may wreak havoc on your heart. A recent paper in the journal *Open Heart* found added sugar (the kind found in processed foods, desserts, and packaged snacks) could be even more harmful for heart health than salt.

Heart disease is the top cause of death in the United States and a health concern worldwide. Hypertension (high blood pressure) has long been named the number one suspect in heart-related illness, and salt reduction has generally been the primary concern for disease prevention. The majority of salt in the diet comes from packaged foods like bread, frozen pizza, and snack foods – foods that tend to pack in added sugars, too. Americans eat anywhere from 77 to 152 pounds of sugar per year, and 13% of the country is getting at least 25% of their total caloric intake as added sugar.

Researchers now believe the added sugar in food has more to do with heart disease than the salt. Studies using rats found sugar stimulates the sympathetic nervous system, which ultimately results in increased blood pressure. Excess sugar can also lead to insulin resistance, which may increase risk of hypertension. High sugar intake can significantly increase levels of total cholesterol, triglycerides, LDL (bad) cholesterol, body weight, and fat mass, all factors that contribute to increased risk of heart disease. Consuming 10% to 25% of calories from added sugar daily can increase risk of death from cardiovascular disease by 30% – eating more than that can increase risk threefold. The biggest culprit might be high fructose corn syrup, a common sweetener used in candy, sodas, and processed foods.

Importantly, researchers note *added* sugar is the real culprit, not the natural sugar found in fruit. That's because natural sugar in fruit is less concentrated and is buffered by water, fiber, and other components of the whole fruit. Whole fruits contain lots of important nutrients for health like vitamins, minerals, and antioxidants. In fact, eating fruit every day could cut risk of cardiovascular disease by 40% and risk of death by 32%.

Researchers suggest adding in whole fruits in place of sweetened snacks as the best solution for eliminating added sugars from the diet while keeping your sweet tooth pleased. Instead of your typical afternoon cookie, elevate the flavor of whole fruits to get your fix. Kick fresh pineapple up a notch with a dash of cayenne pepper, or sprinkle cinnamon on apple slices to spice up your snack. A piece of dark chocolate on Valentine's Day is a special treat, but sticking with fruit year round will show your heart you care.

## Nutrition News Desk

### Bananas and Raisins and Beans, Oh My!

High Potassium Intake Associated with Lower Risk of Stroke in Older Women



What do bananas, raisins, and white beans have in common? More than just great taste; they're all packed with potassium and eating them daily might help cut risk of stroke. A study published by the American Heart Association has linked high potassium intake to lower risk of stroke and death in postmenopausal women.

Using data from the Women's Health Initiative Observational Study, an 11-year study of postmenopausal women, researchers analyzed over 90,000 women ages 50 to 79 years who had no history of stroke at the beginning of the study. Researchers monitored for development of stroke or death from any cause for the 11-year period. They determined potassium intake by using food frequency questionnaires and evaluating nutrient content of commonly eaten foods.

Results showed women who got the most potassium in their diets (above 3,193 mg) had 12% lower risk of stroke compared with women who got the least potassium (below 1,925 mg). In women with normal blood pressure, stroke risk reduction increased to 21%. And in women of normal weight, risk of stroke lowered by 30% between the low and high potassium groups. Researchers suggest these differences are due to potassium's ability to improve blood flow by promoting release of nitric oxide, a gas that widens blood vessels.

The USDA recommends women eat at least 4,700 mg of potassium per day, yet in this study only 2.8% of women were getting this amount. Nationwide, potassium intake has declined over the past 20 years, which could be putting women at greater risk for stroke. This is partially due to the nation's food supply, which is laden with processed foods that often lack this important nutrient.

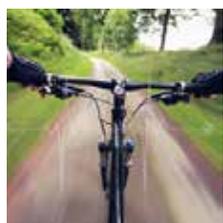
How can you increase your potassium intake? Load up on fruits and vegetables, which tend to be all-star sources of this mineral. Bananas, white and sweet potatoes, raisins, prunes, and spinach are all packed with this heart healthy nutrient. Getting 4,700 mg potassium per day may seem like a lot, but here's how it can be simply and deliciously done.

- Include a large banana and 1 cup orange juice with your breakfast (983 mg).
- Snack on ¼ cup raisins and ¼ cup almonds mid-morning (534 mg).
- Top a large spinach salad with ½ cup white beans at lunch (1,097 mg).
- Serve 6 ounces tuna with 1 cup broccoli and a baked sweet potato for dinner (1,663 mg).
- Enjoy 1 ½ cups cantaloupe for dessert (710 mg).

Want to get creative in the kitchen? Try our [Adobo Potato Slaw](#), offering 557 mg potassium, or our [Butternut Squash & Barley Casserole with Turkey](#), which packs nearly a quarter of your daily potassium in just one serving.

## Work Hard, Play Hard

Physical Activity Related to Lower Risk of Heart Failure



Get a hobby, and an active one at that. Regular physical activity is essential for managing weight and has been shown to strengthen your brain, mind, bones, and genes. But the health benefits don't stop there. Making physical activity a regular part of your day could help delay onset of chronic disease and might help prevent heart disease and heart failure.

In a study from a national Swedish survey on health, researchers analyzed medical history, lifestyle factors (like smoking or alcohol habits), and physical activity patterns of nearly 40,000 participants. Physical activity included both leisure time activities, such as walking, swimming, jogging, or biking, as well as total physical

activity, which encapsulated energy expended during an entire 24-hour day. For medical history, researchers focused on heart-related conditions and heart failure.

About 13 years after initial responses, 3.9% of participants had experienced heart failure. Significantly, results showed as levels of leisure time physical activity increased, rate of heart failure fell. The effect was greatest as activity increased from 0-3 METh/day (metabolic energy turnover per hour, a scientific measurement of energy expenditure), which corresponds well with the CDC's recommendation of 150 minutes of moderate activity per week (about 1.1-2.1 METh/day). Little additional benefit was seen above this amount. Total daily activity also affected heart failure rate, but to a smaller extent.

Researchers believe regular physical activity not only helped lower risk of several conditions that lead to heart failure such as hypertension, diabetes, obesity, and heart disease, but that physical activity itself may have directly affected risk of heart failure. Endurance-type activities were likely most influential because they help get the heart pumping which can improve blood flow.

So what does this mean for you? Get up and get moving to keep your heart pumping strong! Aim for at least 150 minutes of moderate exercise per week – think a 30-minute power walk five days per week. Hitting the treadmill can be great for your heart, but there are plenty of other ways to keep active if the gym just isn't your thing. Go for a bike ride, hit the ski slopes, play outside with your children, take a dance class, or organize a game of basketball – whatever sounds fun to you. Staying active throughout life is essential for heart health, and the key is finding activities that you enjoy and will stick to.

## SAY NAY TO BPA

Eating from Cans Lined with BPA May Raise Blood Pressure



These days it can be tough to keep track of all the buzzwords and acronyms in the health world, know what they mean, and understand how they might affect your health. Chances are you've heard of BPA, but what do these three letters mean for your heart?

Bisphenol A (BPA) is a chemical used to make certain plastics and epoxy resins, materials used in a variety of plastic bottles, food containers, and the inner lining of some cans. Though BPA is meant

to act as a protective lining to prevent the food from touching the metal of the can, research now shows it may be posing other health risks, including asthma, early puberty, and anxiety.

South Korean researchers decided to test if BPA also has an effect on blood pressure. For the study, the researchers gave 60 participants all 60 years of age or older soy milk on three different occasions. At each visit, participants drank two 195 mL servings of soy milk in one of three combinations: two BPA-lined cans, two glass bottles, or one BPA-lined can and one glass bottle. Over the course of three visits, everyone was given each combination once. Researchers measured both urinary BPA concentration and blood pressure before and after soy milk consumption at each visit.

Participants' BPA concentrations were 1,600% higher after drinking soy milk from cans compared with after drinking soy milk from the glass containers. Systolic blood pressure was also 5.0 mmHg higher in participants after drinking from cans compared with after drinking from glass, which may be enough to pose health threats including heart and arterial disease. (An increase of 20 mmHg can double risk of cardiovascular disease.)

Researchers suggest this happens because BPA can mimic estrogen in the body and will bind to certain estrogen receptors that could be responsible for controlling blood pressure. BPA may also disrupt the thyroid hormone, which could lead to elevated blood pressure. Importantly, researchers in this study only noted short term increases in blood pressure immediately after consumption of the soy milk, which might not necessarily lead to long term high blood pressure. However, repetitive short term increases in blood pressure could have negative health consequences.

Significantly, the cans used in this study did contain BPA, but there are many canned food options that are BPA free, including all DOLE products. Canned foods do have a place in the diet and offer convenient access to fruits, vegetables, beans, fish, and other nutritious foods at an affordable cost. When choosing canned foods, check to make sure the product is labeled “BPA free.” If you are unsure, call the product consumer center and ask or visit the company website. Eating canned foods can be a healthy option, you just have to choose the right ones.

## Featured Recipe

### Shakshuka: Spicy Tomato Sauce with Poached Egg Whites



#### Ingredients:

- 2 tablespoons olive oil
- 1 cup diced red bell pepper
- 1 cup chopped onion
- 4 cloves garlic, minced
- 2 tablespoons tomato paste
- 1 tablespoon harissa seasoning or  
1 tablespoon chopped jalapeno
- 5 cups diced tomatoes or  
1 can (28 oz.) whole tomatoes, crushed
- 1 teaspoon ground cumin
- 1 teaspoon caraway seeds
- Salt, to taste
- 1 pkg. (4.5 oz.) DOLE® Power Up Greens™ Baby Kale
- 8 egg whites
- ¼ cup fat-free sour cream

**Serves:** 4

**Prep Time:** 40 min.

#### Directions

1. **HEAT** olive oil in large skillet over medium heat. Add bell pepper, onion, garlic, harissa and tomato paste; cook 3 minutes. Add tomatoes, cumin, caraway seeds and salt. Simmer 20 minutes.
2. **STIR** in DOLE Power Up Greens™ Baby Kale and make four impressions in the sauce. Gently slip two egg whites into each impression. Gently poach whites, 10 minutes or until firm. Cover the skillet if necessary.
3. **SERVE** the shakshuka from the skillet. Serve with a spoonful of sour cream.

**TIP:** Want to serve shakshuka for a party? Make it easy on yourself by preparing the tomato sauce ahead of time and either freeze or refrigerate it. On the day of the party, just heat the sauce in the skillet and then poach the egg whites.

## **EDITORIAL TEAM**

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