

# HEART HEALTHY HABITS

Essentials for preventing—even reversing—heart disease. By Amy Paturel, Illustration by Andrew Baker

**800,000** Americans die every year from cardiovascular disease. Genetics certainly plays a role, but it's thought that more than 80 percent of cases are tied to poor diet, lack of exercise and other lifestyle risk factors. If that's true, eight out of 10 people could avoid a heart disease–related death if they implemented a few simple changes.

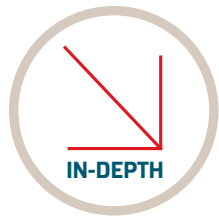
If there was an inexpensive drug that virtually eliminated the chances of dying from heart disease, chances are we'd all call our doctors for a prescription. Yet, as David Katz, director of Yale University's Prevention Research Center, points out, you'd hardly know by the way most Americans live their lives that there are easy ways of preventing heart disease that don't require drugs. "There's no reason why our arteries need to get gummed up over the course of

a lifetime," Katz says. "You may feel you don't have time to fit in diet and exercise, but the reality is you don't have time not to fit them in. When you're in an ambulance, no one will ask you if you have time for the coronary unit."

## **Eat Your Way to a Healthy Heart**

Our bodies are like engines. The higher octane the fuel, the better they run. A Mediterranean-style diet of fruits, vegetables, whole grains, nuts, fish, olive oil and a daily glass of red wine is the highest octane fuel you can get. Study after study has shown the benefits of a Mediterranean-type diet, including its striking success in reducing the risk of heart disease.

Here's where it gets murky. "There is no one 'Mediterranean diet,'" says nutritionist, weight-loss coach and author Jonny Bowden. "There are hun-



dreds of little towns all along the Mediterranean and they all have different staple ingredients. It almost seems as though a Mediterranean diet has become shorthand for eating a lot of olive oil.”

Many popular diets—from Atkins to Ornish—fit into a so-called Mediterranean plan. Vegetarian, vegan, high carb/low-fat, they can all be heart healthy. What do they have in common?

“They’re all lower in sugar than the typical American diet,” says Bowden. “And sugar is toxic.”

Put too much sugar in the bloodstream, and it gloms onto proteins and makes them sticky. This process is called “glycation” and it is akin to putting cotton candy in your gas tank. Sugar also raises insulin levels, which starts a cascade of events that lead to fat storage. Not only do you gain fat, but also high insulin levels lock fat cells into place, making it difficult to lose weight. Those fat cells don’t just sit on your hips, they’re active hormone factories releasing inflammatory proteins into the bloodstream.

Inflammation and oxidation are two root causes of heart disease. When the body is traumatized by infection, injury or a poor diet, inflammation results.

Oxidation, a rusting of cells and tissues, occurs as the body responds to pollutants, chemicals, stress and certain foods.

The body gets its antioxidant, anti-inflammatory fuel from fruits and vegetables. Each additional daily serving above two per day has been shown to lower the risk of death from heart disease by 4 percent, according to a study published last year in the journal *Circulation*. Three out of four adults don’t get half their recommended nine to 13 daily servings, even though fruits and vegetables have the added benefit of being low in calories and high in fiber, which makes them more filling than less healthy choices.

The science is also in on the health benefits of fish. Packed with important vitamins and minerals, fish contains none of the artery-clogging fats found in meat and plenty of the heart-healthy omega-3 fats that lower blood pressure, prevent blood clots and reduce inflammation in the arterial walls. Consuming only one or two servings of fatty fish (salmon, mackerel, lake trout, herring, sardines) each week

**Did You Know?**  
After only one smoke-free year, a smoker’s risk of heart disease is reduced by 50 percent.



## Experts We Consulted



**Jonny Bowden**

**How You Know Him:** Nutrition expert and author of several books, including *The Great Cholesterol Myth*.

**What I Eat:** Bowl of blueberries, dark cherries, full-fat yogurt, coconut flakes, flaxseed and almonds and pomegranate juice for breakfast. I eat a lot of grass-fed meat, wild salmon and free-range eggs. And I try to eat a lot of veggies.

**My Workout:** Tennis one to two hours daily and circuit training twice a week for 30 minutes.

**Travel Tip:** Take the hotel stairs. Between the staircase, pushups, jumping jacks and tricep dips between chairs, you can work every major muscle in the body.

**Counterintuitive Advice:** I’m completely oblivious to the amount of saturated fat in my diet. I cook in butter and coconut oil, and I’m not the least bit concerned about cholesterol.



**Gretchen Reynolds**

**How You Know Her:** *New York Times* “Phys Ed” columnist and author of *The First 20 Minutes: Surprising Science Reveals How We Can Exercise Better, Train Smarter, Live Longer*.

**What I Eat:** Lots of pasta. My dad used to call me Spaghetti Gretty. Beyond that, my diet is unremarkable. I have cereal or oatmeal and coffee for breakfast. I often have a sandwich or leftover pasta for lunch. We typically cook dinner at home—a big salad or grilled vegetables alongside chicken, fish, even the occasional cheeseburger.

**My Workout:** Run three to four miles four to five times a week, strength training exercises such as squats and pushups and the occasional yoga class.

**Travel Tip:** Take the hotel stairs.

**Counterintuitive Advice:** Don’t stretch. You don’t need it and if you do it before a workout, it’s counterproductive.



**Dr. David Katz**

**How You Know Him:** Founding director of Yale University’s Prevention Research Center and author of *The Flavor Point Diet: The Delicious, Breakthrough Plan to Turn Off Your Hunger and Lose the Weight for Good*.

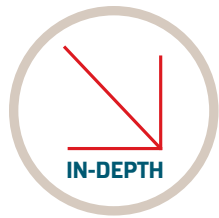
**What I Eat:** A late-morning breakfast of coffee, fresh berries, fat-free Greek yogurt with whole-grain cereal or oatmeal mixed in. I snack on fresh fruits, dried fruits, vegetables, nuts and seeds. Dinner is usually a Mediterranean-inspired dish like grilled fish over whole grain pasta, and it always includes a big salad and cooked vegetables.

**My Workout:** Forty minutes on the elliptical, 5K on a rower, plus chin-ups, pull-ups and a short weight routine.

**Travel Tip:** Pack an insulated snack pack.

**Counterintuitive Advice:** Don’t worry about portion control. I’ve never counted calories.

PHOTO: SHUTTERSTOCK.COM (NO SMOKING)



has been shown to reduce the risk of dying from heart disease by 36 percent.

**Eat This:** Fruits, vegetables, garlic, fish, nuts, red wine and dark chocolate. A study published in the British Medical Journal indicated that eating these seven foods every day, in the appropriate amounts, could reduce heart disease risk by 75 percent and add an average of six years to your life.

### Move More, A Lot More

Never underestimate the importance of exercise. In countless studies, it has been shown to lower blood pressure, reduce insulin resistance and dramatically improve heart health.

“The science is really persuasive that the human body has to be moving,” says Gretchen Reynolds, a columnist for *The New York Times* and author of the new book *The First 20 Minutes: Surprising Science Reveals How We Can Exercise Better, Train Smarter, Live Longer*.

Our Paleolithic ancestors walked 12 miles a day in search of food. Our bodies haven’t changed much since then, but our habits certainly have. Scientists still don’t understand all of the ways exercise impacts the heart, but they do know it can instantly reduce the risk of heart disease, no matter one’s genetic predisposition.

In research published in the journal *Hypertension*, study subjects who had a parent with high blood pressure but who were themselves highly fit had a 34 percent lower risk of developing high blood pressure compared to those with low fitness levels and the

same parental history. Even a moderate amount of exercise—brisk walking for about 30 minutes a day—has huge benefits, particularly for those genetically predisposed to hypertension.

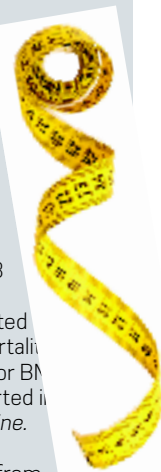
Most Americans, however, spend much of their day sitting. “Active couch potatoes”—people who work out 30 minutes daily, but sit for seven to eight hours—actually can have as much risk of heart disease as those who don’t exercise at all but who move around throughout the course of the



## Gut Check //

Waist-to-hip ratio is the new BMI.

For years, doctors relied on body mass index to assess heart disease risk. Now we know that waist circumference may be the more important measurement. A high waist circumference (43.3 inches for women, 47.2 inches for men) is associated with a two-fold higher mortality risk, regardless of weight or BMI, according to a study reported in *Archives of Internal Medicine*.



“BMI doesn’t separate fat from muscle,” says Francisco Lopez-Jimenez, a cardiologist at Minnesota’s Mayo Clinic. “Some people are labeled as overweight when they have a lot of muscle mass but not a lot of fat. Even more concerning are people who have a normal BMI but have a significant amount of belly fat.”

Visceral fat, the fat between the gut and organs, is more metabolically active than subcutaneous fat (fat you can grab), so it releases inflammatory chemicals into the blood, promoting clots and raising blood pressure. Subcutaneous fat in the thighs and rear may actually be protective. “That’s where waist-to-hip ratio comes in,” says Lopez-Jimenez. “A ratio higher than .9, specifically higher than 1, represents an increased risk of heart disease and diabetes.”

Unlike BMI, waist-to-hip ratio separates the increased risk of a thick waist from the protective fat in the hips and rear. It also helps identify skinny people with thick middles who are at higher risk of heart disease than those who are obese, even those who are obese who have a 1-1 waist-to-hip ratio. “People at a normal weight with a large waist-to-hip ratio have limited muscle mass, excessive abdominal fat and little protective fat,” says Lopez-Jimenez.

Not sure where your waist ends and hips begin? Encircle your waist with a soft tape measure at the level of your belly button so the tape measure is perpendicular to your legs. It should be snug but not tight. (Don’t hold your breath!) Then encircle the widest point on your hips. If the first figure is higher than the second, you’re at greater risk of heart disease. —A. P.

## What Will Be Tomorrow’s Heart Breakthroughs?

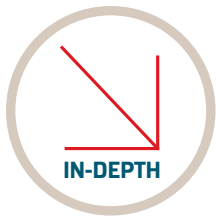
“Ten years from now I suspect that many patients with heart failure will be treated with a small implantable device the size of a flashlight battery or two. A good portion of the heart valve interventions we do will be catheter-based. And I would be surprised if we don’t have a better handle on how to prevent the progression of atherosclerosis.”

—Dr. Alan Markowitz, Harrington Heart & Vascular Institute, University Hospitals Case Medical Center, Cleveland, Ohio

“As the engineering of catheter devices improves, they will be used more and more to treat heart valve disease. Using catheters to treat advanced cardiovascular disease started with coronary work, but it is moving to other cardiovascular illnesses. I think that is going to be the major trend over the next five to 10 years.”

—Dr. Eric Powers, The Heart and Vascular Center of The Medical University of South Carolina

PHOTOS: SHUTTERSTOCK.COM



day. "Sitting causes changes that are particularly bad for the heart and it happens quickly," Reynolds says. "Just being inactive for a couple of days also reduces your body's ability to break up fat in the bloodstream and a certain amount of that fat goes to the heart."

You don't need to become a triathlete, either. "Any movement that increases your heart rate is fine aerobic exercise," Reynolds says. "Someone who has been sedentary but who gets up and walks around the room may increase their heart rate into a zone that counts as vigorous."

Strength training is also important. "Strength training ensures that you maintain muscle mass," she says, "and muscle mass uses glucose, so it helps maintain blood sugar levels."

**Do This:** *Stand up for two minutes every 20 minutes. "Muscle contractions that hold you upright change the physiology in the body in ways that lessen circulating fat and can reduce heart disease risk," Reynolds says.*

#### Eliminate Stressors

Our bodies are remarkably adept at bouncing back from short bouts of stress, but the long-term impact of tense muscles and spikes in blood pressure seri-

ously hurts the heart. "Stress releases a whole host of hormones, particularly cortisol, that are damaging to cells in general, including in the heart," says

Reynolds. Stress, Katz adds, also makes it harder to stay committed to healthy habits. "If you're stressed, you're not going to eat well and you're not going to have time to exercise," he says.

Daily meditation can reduce stress and create a surge in mood-stabilizing chemicals and hormones such as serotonin. What if you can't sit still long enough for a 15-minute mantra?

"Focus on taking slow, deep, cleansing breaths," Bowden says. "Close your eyes, breathe in for a count of four, hold your breath for another count of four and then breathe out for a count of seven."

As little as five minutes of deep breathing is enough to lower blood pressure, ease muscle tension and boost immunity. More good news: Sleep, laughter, sex, even bubble baths can also unleash feel-good endorphins. //

**Ask This:** *What nurtures you? What makes you happy? Then find a way to do more of these things.*



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