

TO PROTECT YOUR

Treating this critical yet vulnerable workhorse organ right isn't just about doing the same old stuff. Take advantage of new tech, new science, and new thinking today and help remove cardiovascular disease from that number-one-killer-of-men spot.

BODY

1.

TRAIN LIKE YOU'VE ALREADY HAD A HEART ATTACK

A new cardiac-rehab protocol reveals a smart strategy for anyone who wants a stronger ticker.

DOCTORS USED TO treat guys who had heart trouble—heart failure, a heart attack, or any type of coronary artery disease—with kid gloves, as if their hearts were extremely fragile and intense exercise could cause another blowout.

"We had the 'Take it slow, let's not push too hard' view of recovery," says Andrew Keech, Ph.D., an exercise physiologist at the University of New South Wales in Sydney, Australia. That meant a classic cardiac-rehab program was low-to moderate-intensity aerobic exercise, typically three times a week for eight weeks.

It was safe and reasonably effective for strengthening the heart and avoiding future problems like another heart attack. It was also so boring that guys in rehab didn't show up for their cardio workouts. (Sound familiar?) Norwegian cardiology researcher Ulrik Wisløff, Ph.D., had the notion to turn things up a notch. The maximum amount of oxygen your body can use during exercise—your peak aerobic capacity, or VO2 max—is the single best predictor of cardiac-related deaths (and deaths of all causes). So his team figured that exercise that raises VO2 max might be just what the doctor ordered.

And one of the smartest ways to raise that VO2 max is through high-intensity interval training. With HIIT, you make your heart beat hard, then back off and let it recover, then go hard again, reaching intensities that the start-low-and-go-slow approach could never match.

Wisløff's method worked. In a seminal 2007 study of adults in cardiac rehab, those who did a HIIT program three times per week—they spent four minutes at a tough 90 to 95 percent effort, recovered for three minutes, then did it again three more times—increased their VO2 max three times as much as those who walked for about 45 minutes at 70 to 75 percent effort. And their average age was 75. So if people in their 70s with heart disease can do it, so can you, says Keech. "Healthy, younger-aged gymgoers should be trying HIIT in their programs," he says. "It gets you more aerobically fit than the long, slow, continuous aerobic sessions."

The HIIT rehabbers remodeled their hearts in a way you can, too. Their left ventricle—the chamber that receives oxygen-rich blood from the lungs and pumps it to the body—transformed from stiff and ineffective to stronger and springier, meaning it can hold and squeeze out more blood with every beat. The moderate exercisers saw no remodeling improvement.

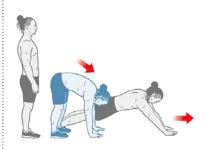
Keech's team published research in October 2019 that found that six weeks of cardiac-rehab HIIT also lowered other heart-disease risk factors: It dropped systolic blood pressure, and it reduced dangerous belly fat by 10 percent. And it was fun: People enjoyed the workouts and saw a boost in mood, which meant they were more likely to stick with it. And so are you. Do the workout at right to get your heart functioning more efficiently.

DO THIS HIIT WORKOUT



) PRISONER ERTICAL

Stand with your feet shoulderwidth apart, hands behind your head. Keep your back straight, brace your core, and sit into a half squat. Jump up, lower into a half squat, and jump again. Jump high or jump quickly, but always land softly.



B) INCHWORMS

Stand with soft knees. feet hip-width apart. Lean forward, reach down, and place both hands on the floor. Walk your hands as far past the plank position as possible without arching vour back. Hold a second. Walk your feet toward your hands and repeat.

D) LATERAL WALKING PUSHUPS





Get in a high plank position, feet wider than shoulder width. Place one hand on the edge of a platform or step and the other on the floor. Keeping your core braced and your body in a straight line from head to heels, do a pushup. As you come up, cross the hand that was on the floor over the hand on the platform. Move your weight over the platform and place the other hand on the floor. Keep alternating from side to side.

BEGINNERS 8 ROUNDS, 3 TIMES A WEEK

AT FIRST - AFTER 2 WEEKS -

→ AFTER 2 MORE WEEKS

15 SECONDS ON

20 SECONDS ON

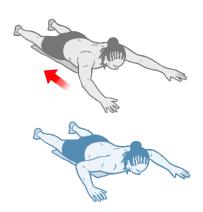
30 SECONDS ON

20 SECONDS OFF

15 SECONDS OFF

15 SECONDS OFF

The following HIIT workout, by Menachem Brodie, C.S.C.S., founder of Human Vortex Training, gets your heart reshaping itself in a healthy way (see #1) while also strengthening your muscles.



C) WALRUS PULLS

Lie facedown, torso on a towel, arms extended overhead, palms flat. Press into the floor with your hands and, keeping your forearms and elbows close to the floor, pull until your chin is at your hands. Reverse the move back to the start and repeat.





step back into a lunge, front knee bent at least 90 degrees, back knee hovering over the floor. Hold for the time specified below. Push back to the start: switch sides.

ADVANCED **8 TO 10 ROUNDS, 3 TIMES A WEEK**

AT FIRST - AFTER 3 WEEKS

30 SECONDS ON

40 SECONDS ON

15 SECONDS OFF

10 SECONDS OFF

3.-6.

ANALYZE YOUR SMARTWATCH DATA

Aaron Baggish, M.D., a cardiologist at Massachusetts General Hospital and team cardiologist for the New England Patriots, helps you understand the heart-related numbers from your wearable.

60

RESTING HEART RATE

WHAT IT IS: How many times your heart beats in a minute. The lower it is, the better your fitness—your heart doesn't have to work as hard to keep up with demand. The very fit have resting heart rates as low as 40 (60 to 100 is normal).

USE IT: A regular exercise plan naturally decreases it. If it's 15 to 20 beats higher than usual in the morning, that may mean you're getting sick or you're not recovering fully from workouts.

HEART RATE RECOVERY (HRR) WHAT IT IS: How much your

heart rate drops in the first minutes after exercise; it tells you how efficient your heart is. The more consistently you exercise, the faster your HRR will be.

USE IT: It helps prove that your workout is making you fit. A drop of 20 beats in the first two minutes is normal. Athletes can drop 30 to 50 beats per minute.

5.

SLEEP

WHAT IT IS: A number that's critical to your heart. The heart is the only organ that never really fully rests, but sleep is about the closest we can get.

USE IT: Aim for seven to nine hours a night. New research has found that people who regularly slept less than six hours were 27 percent more likely to have plaque-laden arteries than those who slept seven to eight.

25

150

ACTIVITY DATA/STEPS

6.

WHAT IT IS: How much you move around in a dayand it matters. When you don't move enough, your blood pressure goes up, your cholesterol heads in the wrong direction, and inflammation increases.

USE IT: If you have a desk job, stand up every 45 minutes and do something, like a pushup or a walk. Aim for 150 minutes of moderateintensity exercise per week.

7. NEWS UPDATE I

SHOULD I TAKE MEDS INSTEAD OF GETTING A STENT?

If you have confirmed narrowed coronary arteries that aren't causing symptoms, adding a bypass or stent to a healthy lifestyle and medications does not reduce the risk of death, per a new study in *The New England Journal of Medicine*. The right lifestyle habits and medications "can essentially freeze plaques in their tracks," says Peter Johnston, M.D., an interventional cardiologist at Johns Hopkins. Those meds include aspirin and statins, along with beta blockers, calcium channel blockers, and long-acting nitrates. Bottom line: Consider an Rx first.

8.-10. ASK YOURSELF THESE QUESTIONS

Harvard Medical School cardiologist Haider J. Warraich, M.D., treats patients, sees and studies disparities in heart care, and is the author of State of the Heart.

8. IS MY HEART-DISEASE RISK HIGHER THAN LTHINK?

Your risk can vary, and many risk factors can be modified with lifestyle changes, like eating more produce and cutting processed foods, moving more, and taking the medications vou're prescribed. However, one's race and ethnicity are also risk factors for heart disease. Black Americans have a 20 percent greater chance of dying of heart disease than non-Hispanic whites, a 50 percent greater chance of stroke, and a higher risk of a heart attack or heart failure than other racial or ethnic groups. And research has found that Black heart-attack patients were less likely to be treated with aggressive medical procedures or get standard medications after a heart attack than white patients were. While we used to think these differences were biological, a higher risk of heart disease is now mostly considered to be a result of social and environmental factors, such as lower income and less access to care. One good way

to figure out your risk of heart disease (and stroke) is with the online calculator created with research from the American College of Cardiology and the American Heart Association. You can find it at cvriskcalculator.com.

9. DO I CONNECT WITH MY DOCTOR?

A good doctor isn't iust someone who will order tests and prescribe medications. Your doctor has to be someone you can trust, who makes you feel heard, and with whom you feel comfortable making decisions about your health. A recent study showed that Black patients who saw Black doctors received 34 percent more preventive services, in part because the patients likely communicated with those doctors better and trusted them more. This to me suggests that finding a doctor you connect with should be a top priority.

Everyone needs to know they have the right to seek a different doctor—one they feel understood by—at any time.

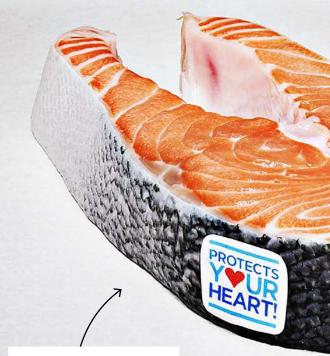
10. IS MY COMMUNITY SUPPORTIVE OF MY HEALTH?

Heart health is affected by so many things, in particular by your community. Many people who smoke, for example, have difficulty stopping when they are around others who smoke. On the other hand, those surrounded by a community focused on healthier habits may gain many more years of life.

If you aren't part of a community that understands and supports your health, you might need to find one that does. The gym can be one such place. At times, I refer patients to online groups where people with similar conditions share wins and losses, hopes and fears, as they provide companionship in what can be a solitary confinement with disease. I am impressed by both the moral support people receive and the helpful advice they get from others who live with the same illness and deal with the same issues. Often they talk comfortably about problems that few patients bring up in front of their doctors.

LL. MAKESALMONLESSBORING

Every time the subject of what to eat for a health heart comes up, salmon inevitably does, too, because it's a rich source of omega-3 fats—the ones that support heart health by reducing inflammation, maintaining healthy arteries, and keeping triglycerides in check. If your taste buds aren't as into salmon as your heart is, here's how to make this all-star taste better.



GO FOR STEAK

Overcooked salmon—dry, mealy, and tough—is probably why you hate salmon. Salmon steaks are harder to overdo than skinless fillets. Sear them like steak: on a hot, oiled grill, 2 to 3 minutes a side for medium rare.

12.

TRY 4 NEW WAYS TO EAT AN AVOCADO

Not only are avocados a great source of hearthealthy fats, but they're also loaded with fiber. (Half an avocado has seven grams.) And diets high in fiber have been linked to better heart health.



A) GRILL THEM

Pop pitted, peeled halves over direct high heat and sear until dark grill marks appear, 3 to 5 minutes. Remove, cube, and scatter over mixed greens, grilled shrimp tacos, or gazpacho.



enhance contact, until crispy,

3 to 4 minutes. Flip and kiss

with heat, about 1 minute.

13.

GUZZLE THE ULTIMATE HEART-HEALTHY SHAKI

YOUR HEART does best when it has fiber on board, plus vitamins, minerals, and phytochemicals from plants. It also prefers that you get all that without tons of extra calories. Which can mean chopping and

cooking. Or you can just zip together this smoothie by MH advisor Chris Mohr, Ph.D., day's produce, adds some healthy protein

1/2 CUP FROZEN BLUEBERRIES

Their phytonutrients and fiber can help lower your risk of heart disease.

R.D. It gets you about halfway through a and fiber, and tastes refreshing. 1 CUP DAIRY

(Or unsweetened dairy alternative.) The vitamin D is important for overall wellness

Its vitamin K may slow artery calcium deposits, and its

HANDFUL SPINACH

folate may reduce heart-disease risk.

1 SMALL HANDFUL WALNUTS

These provide more plant-based omega-3 fats than any other nut.

2 TBSP HEMP SEEDS

(Or flax or chia.) Their fiber helps keep cholesterol under control.

1 SLICE FRESH GINGER

It's optional, but it will add a burst of bite and flavor.

Add all ingredients to a blender and blend until smooth.

1/2 FROZEN BANANA

Your heart needs its potassium to trigger the contractions that move blood through your body.

1 SCOOP CHOCOLATE WHEY PROTEIN

This provides protein, important for overall health, and the amino acid leucine, important for lean muscle.

14. NEWS UPDATE II

SHOULD I CUT BACK ON SALT?

While sodium isn't inherently evil—it helps keep your muscles and heart going—large amounts may contribute to heart-related conditions. Stay in balance: Limit processed foods, and at home try using larger-crystal salt (like Maldon salt flakes) after cooking. It takes time to dissolve, so the flavor stays on your tongue longer and you may reach for less.

TRY GRAVLAX

This style of salmon is cured, meaning it "cooks" in a brine of salt and sugar. So it's not as fishy tasting as smoked salmon, but just as good on a bagel with cream cheese.

B) SMOOTHIE-FY THEM

Avocados' creaminess adds a texture to your drinkable meals similar to that of Greek yogurt. Their subtle nutty flavor teams up well with sweeter ingredients, like berries and bananas.

C) CEVICHE-IZE THEM

Mix 2 cubed avocados, a handful of halved cherry tomatoes, the juice of 1 lime, and minced cilantro and red onion. Let sit for 20 minutes. Add salt and pepper. Eat with tortilla chips—or a spoon.

D) DRESSING-IFY THEM

When blended, avocados create an extra-creamy salad dressing. Pour 1/2 cup vinegar-based bottled dressing into a blender, add half an avocado, and whir till smooth. Who needs ranch?

Rosati (illustrations)

15. Watch*breaking bad*

How cardiologist Sandeep Jauhar, the author of Heart: A History, learned to manage one of the most dangerous things for heart health: stress.

IT STARTED WITH shortness of breath. Sandeep Jauhar, M.D., Ph.D., the director of the Heart Failure Program at Long Island Jewish Medical Center, would be walking up the stairs to his fourth-floor office and find he needed to stop and rest. The cardiologist had just turned 45, and he followed the Mediterranean diet, played tennis regularly, and already took a statin for marginally high cholesterol. He went for a checkup that led to a CT angiogram. It revealed a 30 to 50 percent block at two places in the main artery feeding his heart. "I felt as if I were getting a glimpse of how I was probably going to die," says Dr. Jauhar.

Given his already healthy lifestyle, the hard-charging doctor, who admits he was "contemptuous of relaxation," realized something else was causing the problem: emotional factors. "Stress damages your heart in so many ways," he explains. "It inflames your arteries, causes the thickening of artery walls, increases blood pressure, raises cholesterol, it makes your platelets more sticky, and even changes the shape of your heart muscle [in an unhealthy way]."

Dr. Jauhar did a stress audit and set about treating his mental health more gently. First he dabbled in yoga and meditation but didn't find them relaxing. Instead he discovered something simple and efficient: a two-mile run every morning. Then he committed to not dragging any work home. "Paradoxically, this has made me focus better and be more productive at work," he says. "When I get home, I walk the dog and spend more engaged and quality time with my family." The most profound change was that he prioritized relaxation. Dr. Jauhar says that for years he'd wanted to watch *Breaking Bad* but always felt he should be doing something more productive instead. So he finally watched the series, all five seasons. "It sounds trivial, but I was very, very pleased with that decision and how it made me feel."

20.-25.

TRY THESE

CARDIOLOGISTS'

FAVORITE HEARTHEALTHY THINGS



20.

MY NOISE-CANCELING EARBUDS

"I pop these in to listen to midtempo classical music and practice mindfulness. Both have been shown to improve heart-disease risk factors."

—David Montgomery, M.D., Ph.D., PREventClinic, Sandy Springs, Georgia 21.

MY HERB GARDEN

"This garden means I can easily cook a flavorful meal and avoid the salt and calories of takeout. My mainstays—basil, rosemary, thyme, oregano, and sage—are good on everything."—Chris Kelly, M.D., UNC Health

—Chris Kelly, M.D., UNC Health Care, Raleigh 16.

PUT A STICKER ON YOUR PHONE

MIMI GUARNERI. M.D., an integrative cardiologist in San Diego, uses an oldschool trick to get her patients to do stress-reducing breathing exercises throughout the day to benefit the heart: She gives them a small green dot sticker to put on their phone. Every time they look at the phone, they're reminded to perform this simple nose-breathing exercise to calm their nervous system: Inhale on a four count through the nose; exhale on a seven count through the mouth.

17.

SAY THANK YOU. A LOT.

NEW RESEARCH SHOWS that when you're optimistic, it lowers your risk of heart disease by 35 percent, says Stephen Kopecky, M.D., a preventive cardiologist at Mayo Clinic. One way to become more optimistic is to think thoughts of gratitude, he explains. Lying in bed at night and thinking of three things you're grateful for at the end of the day is good. Writing them down in a journal is better. Sending a note or an email to a person expressing your gratitude is best. Dr. Kopecky adds that practicing random acts of kindness daily, whether it's letting a driver cut in front of you or buying a homeless person a meal, benefits your heart. "That kind of behavior tells your body's nervous system that everything is fine, which lowers your stress level, and that's good for your heart," he says.

19. NEWS UPDATE III

18. RATE HOW YOU'RE DOING

RESEARCH BY DEAN ORNISH, M.D., the president of the Preventive Medicine Research Institute, reveals that stress management and social support are important components in reversing heart disease, along with diet and exercise. Dr. Ornish's program—which has been proven to reverse cardiovascular disease and is used by hospitals in 18 states emphasizes an hour of yoga, meditation, or other relaxing activities every day and focuses on love. "The more connected you feel, the more you have a buffer against stress," he says. Dr. Ornish's patients rate their level of connectedness on a scale of one to ten once a week and aim to increase their score through greater interaction with family, friends, and social groups, such as sports teams, especially those that include different generations. It's crucial to maintain long-term relationships, he says, because there's a level of intimacy that's lost in modern culture, particularly on social media. "With intergenerational communities, there's a deeper connection. For instance, if you go to rehab or you lose your job, you know that they know, and they know that you know that they know, but they're still there for you."

SHOULD I GET A GENETIC TEST FOR STRESS SENSITIVITY?

Just as some people are caffeine sensitive, some people are stress sensitive and take longer to clear the body of stress hormones, says Dr. Guarneri. A genetic test that includes the genes associated with depression, stress, and anxiety-MAOA, COMT and MAOB, CBS and MTHFR-can help tell you if you're one. Knowing this can motivate you to be more rigorous with stress management, which is critical to any heart-healthy plan.









MY PET CHICKENS

"Spending a few minutes every morning caring for another living creature has a positive effect on stress. Also, knowing where your food comes from and that it's healthy and fresh is important to a hearthealthy lifestyle." - Daniel Jacoby, M.D., Yale Medicine

23.

MY COFFEE MAKER

"Drinking black coffee has been associated with a lower risk of dying of cardiovascular disease and developing type 2 diabetes. I make it with reusable pods so it's better for the earth." -Raj Khandwalla, M.D., Smidt Heart Institute at Cedars-Sinai, Los Angeles

24.

MY ADOBE LIGHTROOM APP

"Pictures from college keep me honest about staying fit. There's evidence that visceral fat is particularly deleterious to heart health, so these photos are motivation." - Jeremy Robbins, M.D., Beth Israel Deaconess Medical Center, Boston

MY WIFE'S **HOMEMADE DESSERT**

"My wife and daughter make fruit nut clusters with minced dates and almond butter, as well as coconut, cocoa, and dried raspberries. They're far healthier than store-bought dessert." -Peter Johnston, M.D., Johns Hopkins