

These Midlife Heart Markers Predict Who Lives to 90 (and Enjoys Their 80s)

5 MIN READ

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In a new study, strong midlife heart health was linked to less frailty and greater well-being later in life.Â

Living longer is only half the longevity equation. Just as important is staying healthy for as many of those years as possible. New research published in the ***European Journal of Preventive Cardiology*** suggests that heart health may be key to making those added years happier and healthier. Specifically, achieving five key heart health markers in midlife was linked to living longer and spending more of those years free from chronic disease.

In the study, men who maintained this handful of habits in their early 40s were six times more likely to live to age 90 and lived an average of 11 years longer than men with none of these heart health markers. Whatâ??s more, they were healthier, less frail, and enjoyed better psychological well-being and quality of life as they approached their 80s and beyond.

â??Traditionally, cardiovascular prevention has been mainly interested in preventing disease events like infarcts and cardiovascular deaths,â?• says study author Timo E. Strandberg, MD, PhD, professor of geriatric medicine at the University of Helsinki, Finland. â??Aspects related to quality of life and frailty are a relatively new area in cardiovascular medicine, but increasingly important in aging societies.â?•

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5 Markers, Decades of Benefits

In the new study, researchers analyzed health metrics from 2,690 men born between 1919 and 1934. It's worth noticing that none of these targets are extreme. Several are actually looser than current clinical guidelines, which makes the finding more encouraging: hitting all five reasonable benchmarks in midlife, rather than chasing perfect numbers, was linked to living longer and staying healthier. At an average age of 42, these five midlife markers were linked to benefits decades later:

- ■ **Not smoking:** This is the only marker with no sliding scale. It's the single biggest modifiable risk factor for heart disease, and quitting at any age lowers risk, with benefits building over the years after the last cigarette.
- ■ **Body mass index (BMI) below 25 kg/m²:** BMI is weight in kilograms divided by height in meters squared, and 18.5 to 24.9 is considered the "healthy" range. For reference, a 5'10" man would need to weigh under about 174 pounds. BMI is a blunt tool, since it doesn't distinguish muscle from fat or account for where fat is stored, but in large population studies it still tracks closely with cardiovascular risk.
- ■ **Systolic blood pressure (the top number) under 140 mmHg:** Systolic pressure is the top number in a reading, and it measures the force on artery walls as the heart pumps. This cutoff is more lenient than today's U.S. guidelines, which define normal as under 120 and flag 130 or higher as high blood pressure. In other words, the study's bar is achievable for many people, and the men who cleared it still saw a large payoff.
- ■ **Total cholesterol less than 6 mmol/L (about 232 mg/dL):** Total cholesterol combines LDL ("bad"), HDL ("good"), and a portion of triglycerides. U.S. guidelines consider under 200 mg/dL desirable and 240 or higher high, so 232 falls in the borderline zone. Today, doctors generally focus more on LDL specifically, but total cholesterol is still a useful snapshot.
- ■ **Healthy blood sugar, as measured by a glucose challenge test one-hour post-load, with results under 9 mmol/L (about 162 mg/dL):** For this test, a person drinks a sugar solution and their blood sugar is measured an hour later. It shows how efficiently the body clears glucose from the blood, which can reveal problems years before fasting

blood sugar rises. **Standard diabetes screening** usually checks the two-hour mark, where under 140 mg/dL is normal, but research increasingly treats a one-hour reading above about 155 mg/dL as an early warning sign for diabetes and heart disease. The study's cutoff of 162 lands right around that threshold.

About 42% of men with all five markers lived to 90, compared to just 7% of those with none. And at age 79, the guys with stronger midlife heart health were in much better shape, scoring higher on measures of physical function, vitality, perceived pain, social function, and general health.

Frailty, a state marked by exhaustion, low activity, slowness, weakness, and unintentional weight loss, was a key outcome in the study. Increasingly, it's emerging as an important indicator of biological age, the expert notes: "Frailty predisposes to disability, need of nursing care and is a strong risk indicator of death," says Strandberg.

At age 79, men who hit all five heart health targets at 42 had nearly five times the odds of being alive and robust, the opposite of frail, as the men who checked zero boxes.

Men with better heart health markers also had higher psychological wellbeing: "Health and happiness often go together, and reducing cardiovascular risk promotes health," explains Strandberg. "But of course, happiness is a subjective feeling; not all healthy people are happy and vice-versa."

Admittedly, the study had some important limitations. The participants were all white men of a relatively high socioeconomic status, so it's unclear whether the results would apply to other populations. But the research confirms what we already knew: that taking care of your heart takes care of the rest of your body, too.

And, the benefits appear to stretch past 90. Strandberg's team is still analyzing data from the study participants, including a small percentage who are still alive and well today. So far, it appears that the five metrics of heart health might also help predict

who reaches ages 95 to 100, Strandberg says.

How to Hit All Five Health and Longevity Markers

Quit smoking. If you smoke, this is the most important habit to address, Strandberg says. A [study review](#) of smoking cessation interventions suggests that a combination of behavioral strategies and medication to reduce cravings works best. Consult with your doctor about the best strategies for you, and visit this [free resource](#) from the National Cancer Institute's Tobacco Control Research Branch for science-backed tools and support. Since quitting smoking can sometimes promote weight gain, you'll need to pay close attention to weight during the transition, Strandberg notes.

Maintain a healthy weight. The new research suggests that developing obesity before age 50 is more harmful to your health than gaining weight later in life, Strandberg says, though keeping your weight in the normal range is your best bet over the life course. His [previous research](#) shows that losing excess weight in your 30s and 40s can reduce your risk of dying over the four decades that follow.

The question, of course, is how do you do it? "Theoretically, lifestyle is all you need for weight control, but as a physician I know the reality, and of course new obesity drugs are very effective but not cheap," Strandberg acknowledges. Talk with your doctor about the best plan for you.

Keep blood pressure in check. The cutoff in this study was systolic blood pressure under 140 mmHg, but the latest blood pressure guidelines define a normal systolic BP as less than 120. [Diet and exercise](#) changes, such as eating more legumes and adopting isometric exercises, can help. If your BP is already high, talk to your doctor about medication to help you bring it down.

Maintain low cholesterol. The latest [cholesterol guidelines](#) suggest it's

important to know your numbers, and not just total cholesterol. Track your LDL (bad) cholesterol and screen for non-HDL cholesterol at least every five years, and more often if you have certain cardiovascular risk factors. Based on your results, optimize your lifestyle, add medication if needed, and keep checking your progress over time.Â

Stabilize blood sugar. The glucose challenge test used in the study isnâ??t a routine diabetes screening for most adults. Youâ??re more likely to receive a quick fasting blood glucose or hemoglobin A1C test, recommended at age 35 and at least every three years if results are normal. These tests can help you spot early signs of insulin resistance and type 2 diabetes. You can boost your **glucose sensitivity** with lifestyle changes, such as strength training, cardio, post-meal walking, eating protein and fiber first, consuming more polyphenol-rich foods, sleeping seven to nine hours per night, and managing stress through practices like breathwork and mindfulness. Talk to your doctor about adding medication if needed.Â

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