# Is age really just a number? Wearables pioneer Polar reveals how to hack your biological clock



If you feel 10 years younger than your date of birth would suggest, your epigenetics might be the reason. Here's what Nordic fitness experts Polar Electro say you can do to slow down your biological clock.

Ageing – and if we can stop it - remains a dominant wellness topic in our youth-obsessed culture. The anti-ageing market is a <u>multi-billion-dollar</u> behemoth, and it seems that more of us are willing to splash out the cash in our efforts to stay younger, fitter, and healthier for longer.

While we can't stop the calendar pages from turning, Polar wants you to know that it is possible to influence how you age and its pace. For this, you don't need fancy creams or high-priced injections. According to the Nordic wearables pioneer, all you need is the knowledge and support to make lifestyle changes that can dramatically slow your biological clock.

This can all be achieved by understanding your "epigenetic" age, and how this is a more reliable indicator than the number of candles on your birthday cake.

### Epigenetic age is your "real" age

Epigenetics is an emerging field of research that investigates changes to our DNA over time that are driven by behavioral and environmental factors. Experts in the field, like Jyvaskyla University's **Elina Sillanpää**, say that you can now identify specific biological markers that allow you to map out an individual's precise "epigenetic clock", which tells you how old they really are on the inside.

This means that, although a person might "officially" be 30 according to their passport, their epigenetic clock could indicate that they have the body of a 25-year-old.

"Two genetically similar people born on the same day share the same calendar age, but one might live to 55 and another to 110" explains Sillanpää. "Epigenetics can explain some of this individuality, as it tells us how the cumulative burden of a person's lifestyle choices influences how they age".



What Sillanpää and her colleagues' research has shown is that while genetic factors are fixed, *epi*genetic ones are not. Rather, your epigenetic age is largely influenced by your lifestyle, with some behaviors and habits speeding up the ageing process, and others slowing it down.

While some of the most significant impacts on your epigenetic – or biological – age are obvious, such as not smoking and maintaining a healthy weight, others might come as a surprise, according to Sillanpää.

"We all know that an active lifestyle is essential for health, but maintaining a younger biological age depends on *how* you exercise, not how hard you exercise".

# Exercise can age you, or it can keep you young

Researchers point to a so-called "U-shaped" curve for exercise, where both too little and too much can accelerate your epigenetic age. Studies <a href="https://example.com/have also found">have also found</a> that those who get a lot of exercise as part of their jobs, such as manual laborers, age faster than those who exercise for leisure.

So, what is the right amount of physical activity for keeping young and healthy? According to the experts, the enjoyment factor is key, as is ensuring that your body has adequate rest in between sessions, which is precisely why leisurely exercise is so beneficial.

"A lot of this comes down to stress. Stress on your body accelerates ageing. Emotional and mental stress severely speeds up ageing. Not getting enough high-quality sleep increases stress levels, which again accelerates ageing".

So, what can you do today to help slow your epigenetic clock and live longer, healthier, and younger?

## Experts in personal guidance weigh-in

Finnish wearables brand Polar Electro has been perfecting the art of personal guidance for close to 50 years, and they believe they have gleaned the insights to empower people to change their habits and slow down their biological clock. For Polar's Director of Science Collaborations **Raija Laukkanen**, rest, recovery, and recreation are essential.

"Making exercise a natural part of everyday life reduces the stress burden and maximizes its benefits. Using an activity monitor can help you to build motivation and find those light, everyday movements that feel easy and can dramatically cut the risk of age-related lifestyle diseases", Laukkanen explains.

Adequate rest and recovery are also essential to reaping the anti-ageing benefits of exercise. This is where the dedicated Nightly Recharge and Training Load features in Polar watches can come in handy. These inform you if you are training too hard and whether your body is getting the right amount of rest between sets, sessions, and sleeps, all based on your heartrate data.



Consistently getting a good night's sleep has also been identified as a great way to stay young on the inside. While this is easier said than done, Laukkanen believes that Polar's dedicated SleepWise ™ features − which give you detailed feedback on your sleep and alertness so that you can curate the perfect sleep schedule − can help those looking to extend their youth.

"Sleep is the core of recovery and alertness. By understanding how you sleep, you can learn how to change your habits to ensure better sleep throughout your life", she says.

Epigenetic researchers have also identified stress as one of the key factors that accelerate biological ageing. That's why epigenetic expert Elina Sillanpää thinks that heartrate tracking can be an essential tool for managing stress in a way that empowers better ageing.

"Heartrate variability is pretty much the only reliable way to measure stress. Heartrate trackers are thus effective at helping people understand which situations trigger stress so that they can mitigate this and avoid some of the stress-related impact on biological age" she added.

Of course, there is no single thing that you can do to slow down your biological clock and stay 25 forever. As Sillanpää and her fellow scientists have pointed out, people with unhealthy lifestyles rarely only have one bad habit. If you already have one habit associated with accelerated ageing, you're likely to have several.

Likewise, if you have a young biological age, this is likely to be because of multiple things you do in your everyday life that keep you young.

### Polar's top five tips for slowing your epigenetic clock and staying younger for longer:

- 1. Integrate enjoyable exercise into your daily routine.
- 2. Balance training intensity with proper rest.
- 3. Prioritize high-quality sleep.
- 4. Manage stress triggers effectively.
- 5. Avoid age-accelerating habits like smoking and excessive alcohol consumption.

#### **ABOUT POLAR**

Since launching the wearables industry almost 50 years ago, Polar has provided guidance for health, sports, and fitness with the world's best measurement technology and data-driven user insight to help people - from first timers to professional athletes - succeed in their pursuit of a happier and healthier life. Renowned for an unparalleled dedication to science and deep understanding of sports, wellness, and technology, Polar has cemented itself globally within the industry as the go-to partner for anyone looking to discover their true potential. Our award-winning product range includes pioneering sports wearables that work elegantly with Polar training apps and cloud services.

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