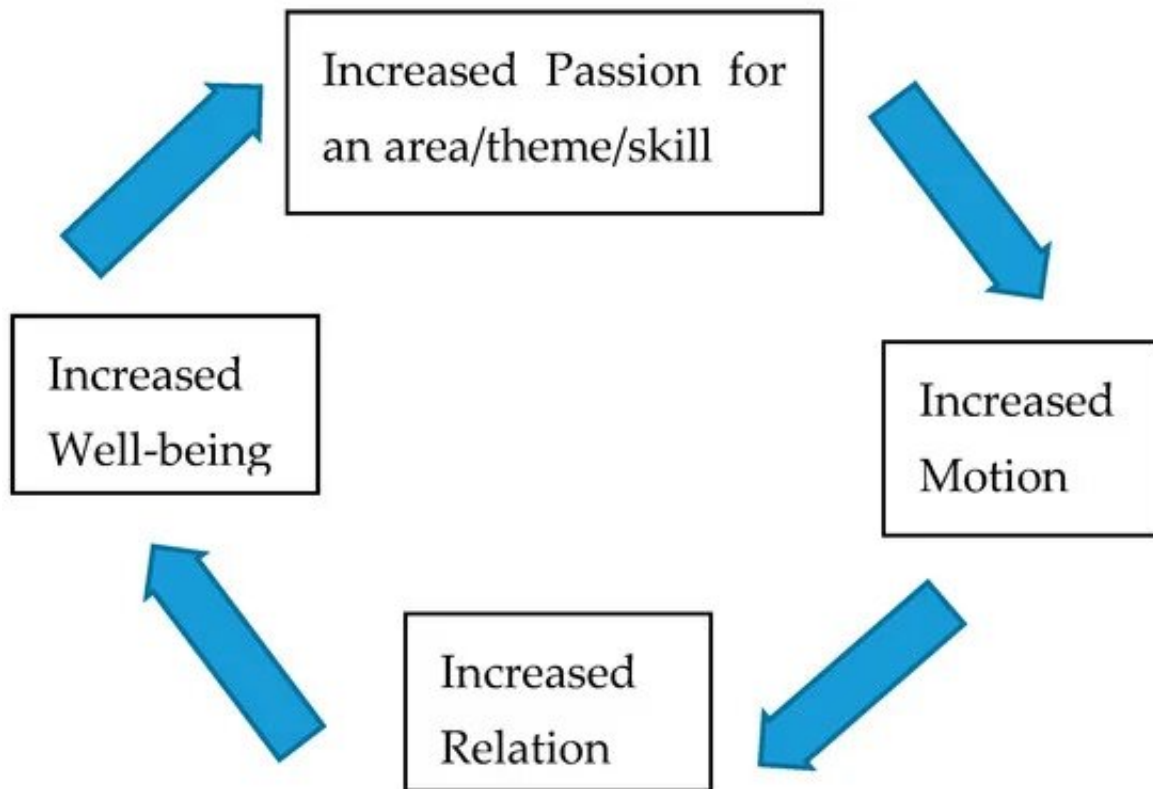


# Keys to keeping your brain healthy

September 22 2022, by Steinar Brandslet

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Credit: *Brain Sciences* (2022). DOI: 10.3390/brainsci12091122

Your brain is pretty fabulous. Around 100 billion nerve cells work together to keep you nimble and quick in your thinking.

But just like the rest of the body, your [brain](#) may not be quite as vigorous when you get a little older. Maybe you find yourself having to write things down, or you forget appointments, or can't quite follow the

conversation or action on TV without straining.

Luckily, it's possible to exercise your brain too.

"The keys to our [nervous system](#) are the gray and [white matter](#)," says Hermundur Sigmundsson, a professor at NTNU's Department of Psychology.

Roughly speaking, the gray matter consists of the [nerve cells](#)—or neurons—and dendrites, while the white matter provides the contacts between the cells (myelinated axons) and contributes to the transmission speed and distribution of the signals.

## Three factors contribute to good brain health

A recent article in the journal *Brain Sciences* brings together a lot of what we know from previous research in the field of brain health. The researchers went to great lengths to be thorough in their theoretical perspective paper and offer 101 references to articles on how to keep our gray and white matter in shape.

"Three factors stand out if you want to keep your brain at its best," says Sigmundsson.

These factors are:

1. Physical exercise.
2. Being social.
3. Having strong interests. Learn new things and don't hold back from new challenges.

## 1. Motion

This is probably the biggest challenge for many of us. Your body gets lazy if you sit on your bum too much. Unfortunately, the same is true for the brain too.

"An [active lifestyle](#) helps to develop the central nervous system and to counteract the aging of the brain," according to Sigmundsson and his colleagues.

So it's important not to get stuck in your chair. This requires effort, and there's no way around it. If you have a sedentary job, go to school or when you're done work, you need to activate yourself, including physically.

## 2. Relations

Some of us are happiest alone or with just a few people, and we know that "hell is other people"—if we transcribe writer-philosopher Jean Paul Sartre's phrase a little loosely. (Although his version was admittedly somewhat more involved.) But in this regard, you have to steel yourself.

"Relations with other people, and interacting with them, contribute to a number of complex biological factors that can prevent the brain from slowing down," says Sigmundsson.

Being with other people, such as through conversation or [physical contact](#), supports good brain function.

## 3. Passion

This last point may have something to do with your personality, but if you've read this far, chances are good that you already have the necessary foundation and are probably willing to learn.

"Passion, or having a strong interest in something, can be the decisive, driving factor that leads us to learn new things. Over time, this impacts the development and maintenance of our neural networks," Sigmundsson says.

Stay curious. Don't give up and just let everything run its course the same way all the time. You're never too old to do something you've never done before. Maybe now is the time to learn to play a new musical instrument.

## Use it or lose it

Sigmundsson collaborated with master's student Benjamin H. Dybendal and associate professor Simone Grassini at the University of Stavanger on the comprehensive paper.

Their research thus presents a similar picture for the brain as for the body. You have to exercise your brain so that it doesn't decay. "Use it or lose it," as the saying goes.

"Brain development is closely linked to lifestyle. Physical exercise, relationships and passion help to develop and maintain the basic structures of our brain as we get older," says Sigmundsson.

These three factors thus offer some of the keys to maintaining a good quality of life—and hopefully—aging well.

**More information:** Hermundur Sigmundsson et al, Motion, Relation, and Passion in Brain Physiological and Cognitive Aging, *Brain Sciences* (2022). [DOI: 10.3390/brainsci12091122](https://doi.org/10.3390/brainsci12091122)

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