



## Nutrition for the brain

We often hear about how food affects the heart, weight or risk of developing chronic disease. But food also supplies the ‘building blocks’ for your brain to function properly – just like every other organ in your body!

Nutrition can influence the structure and function of the brain in multiple ways:

- Nutrients from food are needed to make neurotransmitters (the chemicals which send signals in your brain). For example, tryptophan – an amino acid found in protein foods – is needed to produce serotonin (aka the ‘happy hormone’)
- Foods can influence neuroinflammation, which impacts mood and brain function
- Certain foods can stimulate neurogenesis, the process of creating new neurons in the brain.
- Food influences the gut microbiome, which affects the gut-brain axis. This is the communication network that connects your gut and your brain, and research increasingly links it to mental health
- What we eat impacts our blood sugar levels and subsequent mood, focus and cognition

### The Mediterranean diet

Food trends come and go. The trick is to find those that are backed by science, rather than hype. When it comes to brain health, one stand-out is the Mediterranean diet.

The Mediterranean diet is the traditional way of eating in areas around the Mediterranean Sea, including Italy, Spain and Greece. Sardinia in Italy is a Blue Zone, a region where the typical lifestyle (including diet) translates to longer and healthier lives compared to Western countries.

### Benefits of the Mediterranean diet

A 2020 paper in *Critical Reviews in Food Science and Nutrition* found that following a Mediterranean dietary pattern in mid-life was linked to a 36-46% improved likelihood of healthy ageing.

Other key findings showing the benefits of the Mediterranean Diet:

- Better memory, thinking skills and mood
- Reduces dementia risk as we age
- Reduces inflammation in the brain, which protects brain cells
- Improves mood and lowers risk of depression
- Supports good gut health (with growing acceptance of this correlating with mental health)

Of course, it's not just our brain and mental health that benefits. The Mediterranean diet is also shown to reduce the risk of developing heart disease, stroke and type 2 diabetes.

## What's good for the heart is good for the brain

The brain is a highly vascular organ, filled with more than 643 kilometres of blood vessels. Many of these blood vessels are fine and can be vulnerable to damage.

This is one of the reasons why heart disease is a risk factor for dementia. High blood pressure, plaque and atherosclerosis (thickening or hardening of the arteries) can cause damage to tiny capillaries and surrounding tissue in the brain.

The good news is that the reverse is also true: A healthy cardiovascular system can mean a healthier brain! The Mediterranean dietary pattern is shown to support this. A reason for this is it contains less foods that increase 'bad' cholesterol (LDLs), and more foods that increase 'good' cholesterol (HDLs).

### Putting it into practice

Although it contains the word 'diet', the Mediterranean diet is not restrictive or a weight loss diet. It's a lifestyle around generally eating more vegetables and fruit, and less red meat and processed foods.

Here's a snapshot of the Mediterranean diet:

- Plenty and varied vegetables (half your plate), fruit, and legumes (such as baked beans, hummus, pulse pasta and split peas)
- Minimally processed and freshly prepared meals where possible
- Extra virgin olive oil (3 tablespoons a day! The evidence is it's safe to cook with)
- Moderate intake of low-fat dairy foods
- Low intake of red meat
- A focus on wholegrain carbohydrates (eg switching to wholemeal or pulse pasta).
- Fish at least twice per week
- Mindful eating – savouring and enjoying the experience of food
- Eating socially
- Home cooked meals using basic ingredients.

If all this sounds like a lot, remember that you don't need to do everything at once. Try identifying just one or two things you could do differently this week. Small changes can make a big difference over time. Your brain and body will be better for it.

Some ideas for moving toward a Mediterranean style of eating:

- Choose extra virgin olive oil as your go-to in everyday cooking
- Incorporate vegetables into your snacks
- Reduce red meat in favour of other proteins, like legumes, seafood, eggs or chicken breast
- Swap white bread for seeded bread
- Swap white rice for basmati brown rice, quinoa or barley
- Try a new vegetable or fruit to increase variety
- Use avocado instead of butter to spread on salad sandwiches
- Add an extra colour to your plate (eg purple cabbage as well as white cabbage in coleslaw)
- Turn off the TV during mealtimes, so you can eat more mindfully
- Join the 'fake-out' trend of learning to cook your favourite take-out meal

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