

How **healthy food and water** helps your brain



Diets

Different diets are able to change our gut microbiota. Our gut microbiota then changes our mood and brain health. Eating a diet rich in nutrients can help to support your brain health.

The Mediterranean diet

The Mediterranean diet gets its name from foods that are common in places by the Mediterranean Sea. The Mediterranean diet is known to increase microbial diversity and is good for our brains.

Foods common in the Mediterranean diet include:

Fruits

Vegetables

Whole grains

Olive oil

Poultry

Fish

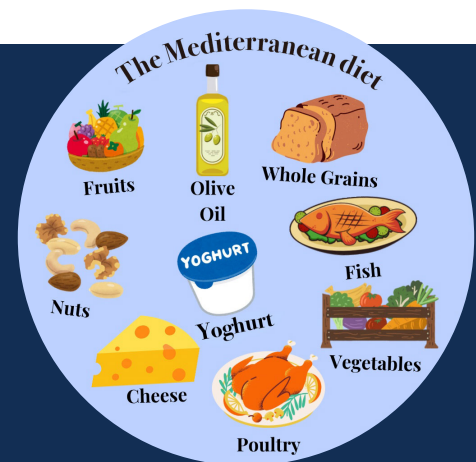
Cheese

Nuts

Yoghurt

Legumes

Low amounts of red meat, added sugars and alcohol



The plant-based diet

People who eat plant-based are sometimes vegetarians or vegans. On this diet, people get their nutrients only from plants. The plant-based diet increases microbial diversity and is good for our brains.

Foods common in the plant-based diet include:

Fruits

Vegetables

Plant oils

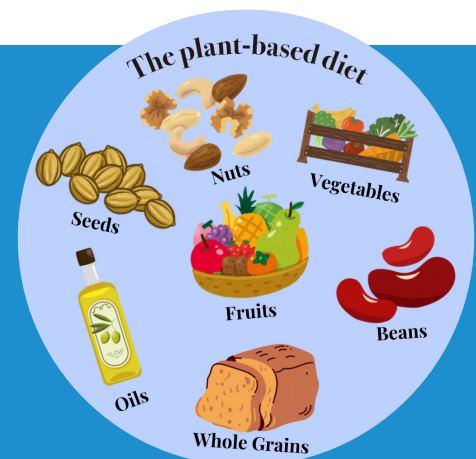
Nuts

Whole grains

Seeds

Beans

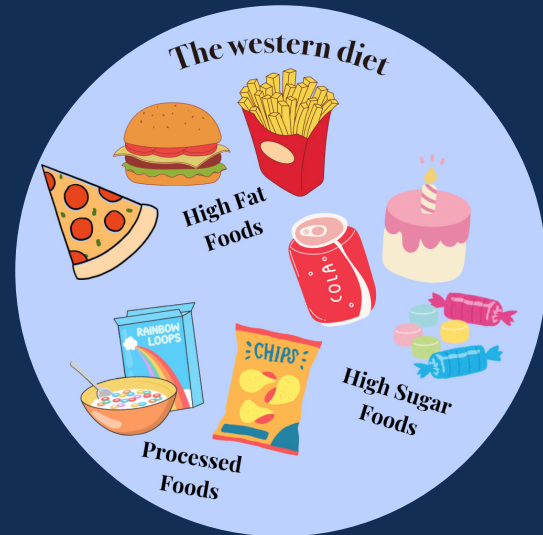
Legumes



The western diet

The western diet is what most people eat today. The western diet has lots of easy-to-make, prepackaged and processed foods.

The western diet decreases the amount of bacteria in the gut and decreases microbial diversity. It also increases inflammatory bacteria. This diet is not as good for our brains.



Foods common in the western diet include:

High-fat foods

Processed foods

High-sugar foods

Low-fibre foods



Vitamins

One reason why some diets or foods are better for our brains than others is the amount of vitamins and minerals they contain. Below are some vitamins and minerals that are good for our brains and what foods they are found in.

Vitamin B

There are eight B vitamins that support brain function, development, and growth, as well as many other bodily processes.

They can be found in:

Leafy greens

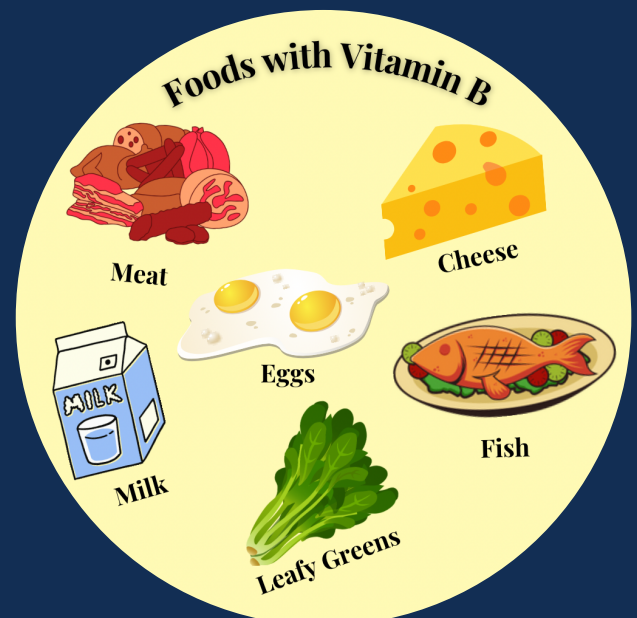
Eggs

Fish

Milk

Cheese

Meat



Vitamin D

Not getting enough vitamin D is associated with an increased risk of dementia and stroke.

Vitamin D can be found in:

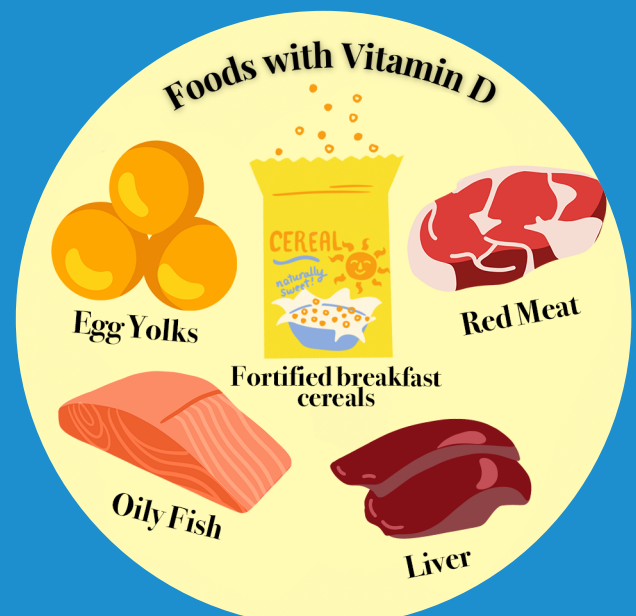
Egg yolks

Red meat

Fortified Breakfast
Cereals

Liver

Oily fish (salmon,
sardines, herring
and more)



Vitamin E

Vitamin E is an antioxidant, protects the neurons in our brain and is an anti-inflammatory.

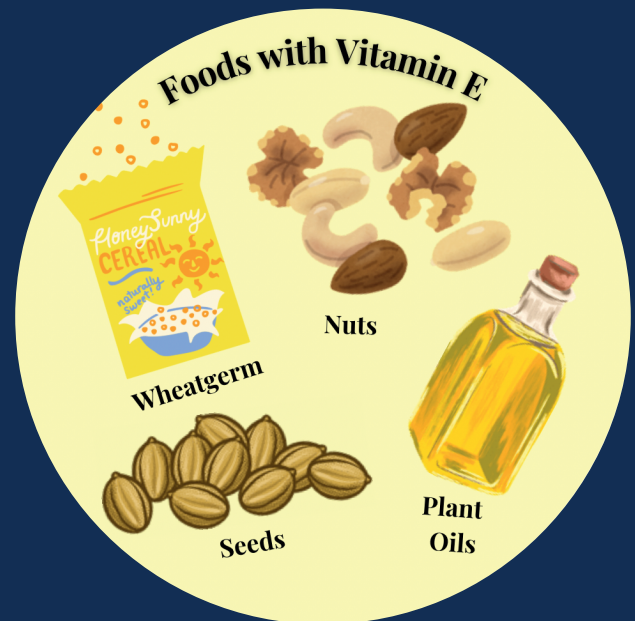
It can be found in:

Seeds

Plant oils like rapeseed, vegetable, sunflower and olive oil

Nuts

Wheatgerm (found in wholegrain cereals like Weetabix and Shredded Wheat)



Flavonoids

Flavonoids help to protect our brain's neurons from toxins and inflammation. They also help us with our learning, memory and cognitive function.

Flavonoids can be found in:

Berries

Grapes

Rocket

Artichokes

Black beans

Oregano

Citrus fruits

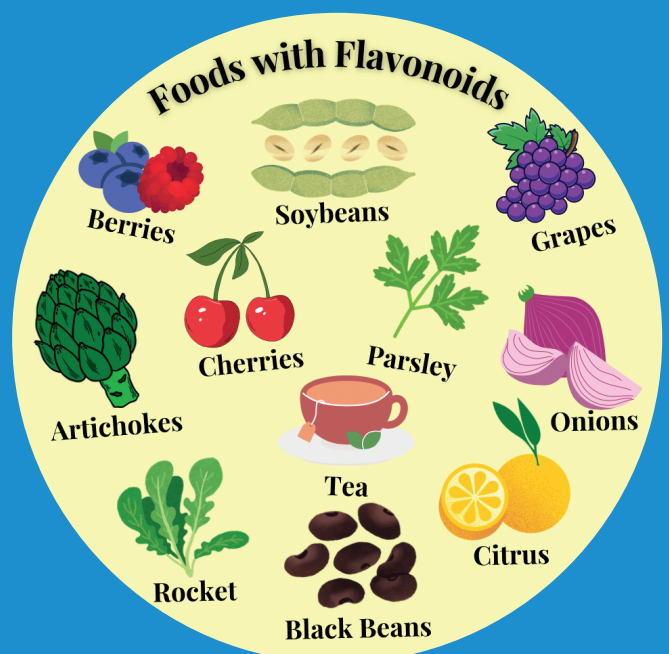
Cherries

Onions

Soybeans

Parsley

Tea



Choline

Choline is needed for normal brain development and growth. It is very important for the growth of the hippocampus, which is the memory centre of our brain.

Choline can be found in:

Meat

Fish

Eggs

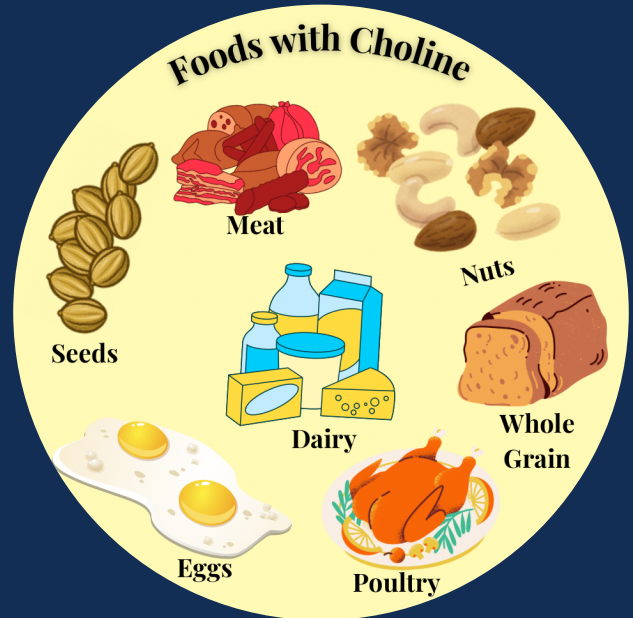
Seeds

Poultry

Dairy products

Nuts

Whole grains



Omega-3 fatty acids

Omega-3 fatty acids can help improve attention in children. They can also protect our brains from cognitive decline as we get older.

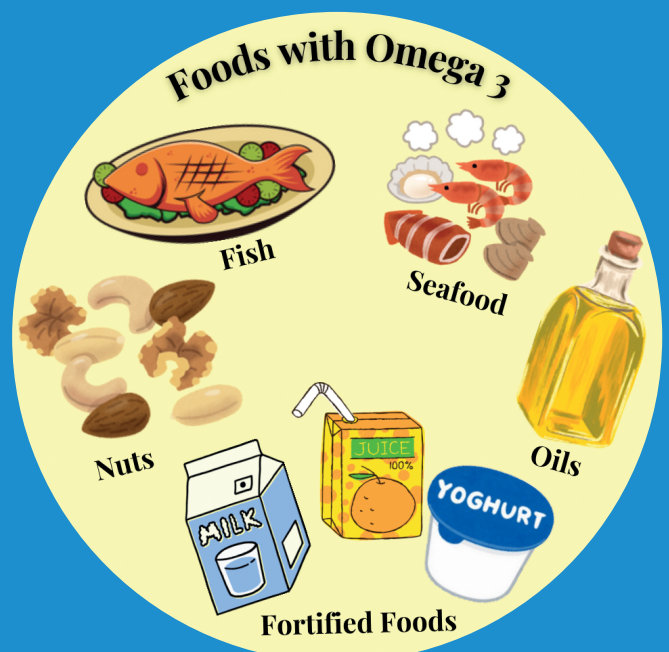
Omega-3 fatty acids can be found in:

Fish and seafood

Oils like flaxseed, soybean and rapeseed

Nuts

Fortified foods like yoghurt, juice and milk





Hydration

Hydration is important for our entire bodies, including our brains! Up to 75% of our body weight is water.

Water helps us to:



Keep our bodies at the right temperature



Keep our joints moving



Keep our heart pumping



Structure all the tiny cells in our body

Without water, our organs, including the brain, cannot function as well. Only a loss of 1%–2% of our overall body weight means we are dehydrated.

What dehydration does



Children

Children need water to function well, especially in school. Without enough water, children will not have as good attention, memory and executive function of their brain.

A lack of water can impact how well children do in memory tests as well.



Adolescents

Older children or adolescents are able to “hide” how much dehydration affects them a little better. Even while dehydrated, they are usually able to keep up their performance in things like school and sport. But a lack of water does still affect them. Dehydration in adolescents usually affects the structure and function of the brain itself.



Adults

Adults tend to get moody when they are without water. Adults will get tired, be in a bad mood, feel unwell, or they may have a headache and difficulty concentrating.

Adults can usually use their brains just as well while dehydrated, unless their environment is hot too.



Older adults

As we age, changes in the body and health can make it harder to stay hydrated. This can impact how well the brain works, leading to issues such as reduced focus or increased confusion.

Maintaining regular fluid intake is important for supporting both physical and cognitive well-being.

How much water should I drink a day?

Based upon each glass being 240ml.



1–2 years old
About 4 glasses



2–3 years old
About 4 glasses



4–8 years old
About 5 glasses



**9–13 years old
Girls**
About 6 glasses



**9–13 years old
Boys**
About 7 glasses



**14+ years old
Women**
About 6-8 glasses



**14+ years old
Men**
About 6-8 glasses

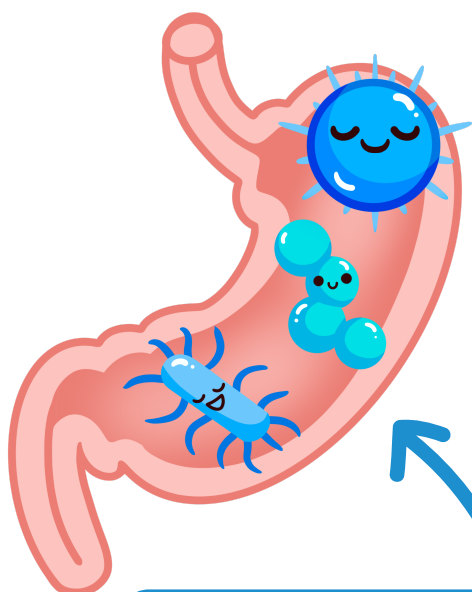


The gut microbiota

Our bodies are home to over a trillion bacteria!

These bacteria are called microbes. Not all microbes are bad – in fact, many are helpful.

Most of these microbes live in our stomach, and these are called the gut microbiota. Our gut microbiota can affect our health, even our brain!

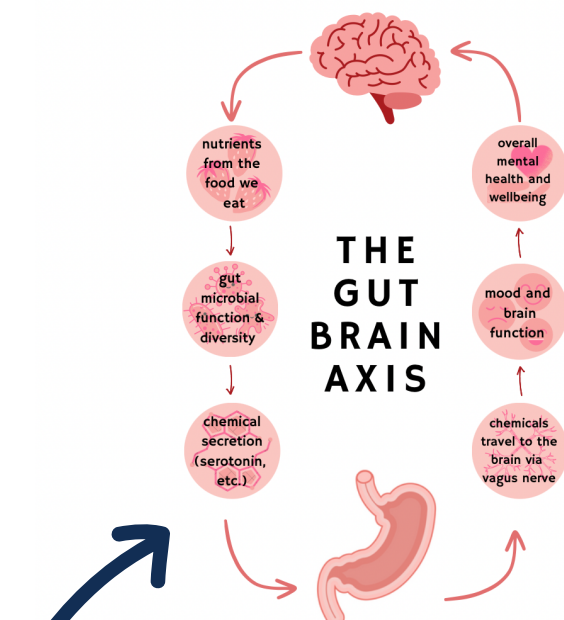


The bacteria in our stomachs

The gut–brain axis

Healthy foods play an important role in our brain health. One-way healthy food can impact our brains is via the gut–brain axis. This term is used to talk about how what we eat affects our mood and brain.

We are able to change our gut microbiota. One way we can is through what we eat. Scientists believe that gut microbial diversity (how many types of microbes we have) and microbial function (how good the microbes are at their job) impact our brain health. This means that what we eat can change our brain health!



How the gut–brain axis works

What we eat changes our gut microbial diversity and function. From there, feel-good chemicals like serotonin are secreted. Those chemicals travel to our brain and affect our mood and brain health.

Healthy Food & Water Sources

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