Improve Your Memory Naturally and Boost Brain Power

Our brains are powerful organic machines. They control all thought, movement, and sensation while calculating and reacting with blistering speed. They store an immense amount of data as images, text, and concepts. Our brains also regulate thousands of complex functions, usually without bothering the conscious us with the exact details, such as with circadian rhythm, hormone balance, breathing, unconscious activity, and blood flow. This means the brain is constantly working, even when we sleep. This also makes our brain the most energy greedy organ in our bodies, weighing only 2% of our total body weight but consuming more than 20% of our caloric intake. Then half of that energy goes toward the bioelectrical messages our brains send spiralling through the neurons and throughout the body.

We know that how we eat can affect our bodies, but what we put in our mouths also affects our mood, the brain’s energy, our memory, and even our ability to handle stress, complex problems, or simple daily tasks. The brain is a picky eater too, demanding a constant supply of glucose and not much else to keep it running. Neurons don’t store this basic sugar like other cells, so they are always hungry and rather needy. We obtain this fuel from the carbohydrates we eat such as in fruits, vegetables, and grains.

The brain may run on sugars, but this doesn’t mean we can eat junk food. Refined sugars, like table sugar or high fructose corn syrup, aren’t safe options since overly high blood glucose levels, or sugar spikes do damage to cells throughout the body, including the brain, and can literally starve our hungry neurons. Insulin is a hormone that encourages cells to absorb and store glucose. As glucose enters the blood stream from digestion, the pancreas releases just the right amount of insulin to keep blood sugar under control. But, when we consume refined sugars, glucose levels rise too high too fast for the body to control it all in this usual fashion. This damages the liver and kidneys as the body tries desperately to rid itself of the sudden influx of excess glucose, and loose glucose can bind with protein to form very reactive free radicals that do damage everywhere they go. The pancreas also responds by releasing more insulin than normal and cells throughout the body respond by pulling in glucose as fast as possible. This soon pulls down the dangerous blood sugar levels, but often they fall too low when the body has been forced to react so drastically. This is why so many people experience a crash shortly after the rush that comes with sugar.

We flood our system with fuel and it feels good, but then our bodies have to do something with too much fuel and the levels drop well below normal. Since our neurons can’t store glucose like other cells, they starve during this crash. This forces the brain to rob glucose from nearby fluids and then it becomes sluggish as it runs low. Our memory and focus suffer during these low points and the repeated ups and downs continually damage our neurons. There are also other nutrients the brain uses, though not as fuel.

Our brains are made up of 60% fat and low levels of fats in food and the body can contribute to depression, Alzheimer’s, and dementia. You do have to choose good, healthy fats though, like those found in seeds, nuts, algae, coconut, and avocados. These contain the essential omega 3 and omega 6 fatty acids that we require for health, along with nonessential fatty acids that are also beneficial. Saturated fats should be used in moderation, but can still be a part of a healthy diet, especially coconut oil which has shown some promise in raising good cholesterol levels, weight loss, and combating brain disorders and degeneration. Trans fats found in hydrogenated vegetable oils are the ones to cut down on or avoid altogether. These raise cholesterol, damage the heart and the brain, and contribute to heart disease, obesity, and diabetes. Focus instead on adding good plant-based foods that augment brain function, mood, and memory.

* Avocados are a source of monounsaturated fats, omega 3, and omega 6 fatty acids. These increase blood flow to the brain, lower cholesterol, and aid in the absorption of antioxidants. Avocados also come with many antioxidants of their own, including vitamin E, which protect the body and the brain from free radical damage. They are also a good source of potassium and vitamin K—both protect the brain from the risk of stroke.
* Coconut oil contains medium chain triglycerides that the body uses for energy, leaving glucose for the brain. It also seems to have a beneficial effect on blood sugar, blood pressure, and cholesterol. Anything that benefits the heart and circulation also benefits the brain. Coconut oil acts as an anti-inflammatory as well and has been linked to helping prevent Alzheimer’s and dementia.
* Beans and legumes are excellent sources of complex carbohydrates. These complex carbohydrates are also mixed with fibre that slows absorption, giving us a steady supply of glucose for the brain without the risks of sugar spikes associated with many other sugar sources. Beans and legumes are also rich in folate—a B vitamin critical to brain function—and essential omega fatty acids.
* Blueberries – These berries are antioxidant powerhouses, protecting the brain from oxidative damage and stress that lead to premature aging, Alzheimer’s, and dementia. The flavonoids in blueberries also improve the communication between neurons, improving memory, learning, and all cognitive function, including reasoning, decision making, verbal comprehension, and numerical anility. Other dark berries are good for the brain too, like blackberry, açai, and goji berries.
* Broccoli is a super food for the whole body. It is rich in calcium, vitamin C, B vitamins, beta-carotene, iron, fibre, and vitamin K. These nutrients protect against free radicals, keep blood flowing well, and remove heavy metals that can damage the brain.
* Chia seeds are rich in omega 3 fatty acids and both soluble and insoluble fibre. These powerful little seeds help control blood glucose levels, are anti-inflammatory, aid in hydration, and also contain many antioxidants.
* Dark Chocolate – The flavonols in chocolate improve blood vessel function, which in turn improves cognitive function and memory. Chocolate also improves mood, can ease pain, and is full of antioxidants.
* Nuts – especially walnuts and almonds, are extremely good for the brain and nervous system. They are great sources of omega 3 and omega 6 fatty acids, vitamin B6, and vitamin E. Vitamin E has been shown to prevent many forms of dementia by protecting the brain from free radicals, and it improves brain power. Nuts contain some anti-nutrients, like phytic acid. Since we consume a relatively small amount of nuts, this isn’t a huge problem, but they are far healthier if you soak them overnight (about 8 hours) before eating them.
* Quinoa – Like beans, legumes, and whole grains, quinoa is an excellent source of complex carbohydrates and fibre to balance blood sugar while providing the essential glucose the brain craves. Quinoa is also a good source for iron to keep the blood oxygenated and B vitamins to balance mood and protect blood vessels. It is also gluten free for those with sensitivities to this protein. And, like most seeds, grains, and nuts, contains phytic acid. Quinoa also contains saponins; it should be soaked overnight before cooked.
* Red Cabbage – is full of polyphenols, a powerful antioxidant that benefits the brain and heart. Red cabbage also has glucosinolates, compounds that fight cancer.
* Rosemary – has been shown to improve memory and cognitive function with its scent alone. It improves blood flow to the brain, improves mood, and acts as an antioxidant. Rosemary is also a powerful detoxifier, fights cancer, boosts energy, and combats aging of the skin.
* Spinach – can prevent or delay dementia. The nutrients in spinach prevent damage to DNA, cancer cell growth, and tumour growth, but also slow the effects of aging on the brain. Spinach is also a good source of folate and vitamin E.
* Sunflower Seeds – and other seeds, like pumpkin, contain a rich mix of protein, omega fatty acids, and B vitamins. These seeds also contain tryptophan, which the brain converts into serotonin to boost mood and combat depression. Sprouts and microgreens of these seeds are even healthier.
* Tomatoes – contain lycopene, a very powerful antioxidant that combats dementia and may improve mood balance too. Whole Grains – Whole grains are rich in complex carbohydrates, fibre, and some omega 3 fatty acids that shield the heart and brain from damaging sugar spikes, cholesterol, blood clots, and more.
* Grains also contain B vitamins that have an effect on blood flow to the brain and mood. Whole grains should be soaked, fermented, sprouted, or grown as microgreens to unlock all their nutritional power and minimize any anti-nutrients.