Antioxidants can help your whole body beat the clock. These compounds destroy rogue chemicals called free radicals, which over time are thought to attack and eventually wear out cells – including brain cells. Antioxidants protect the mitochondria, the tiny furnaces inside your cells that generate the energy needed for life.

So as well as enjoying a healthy diet in general, which types of foods and supplements can you use to boost your brain health?

**Our guide to eight of the best brain boosters**

1. **Low GI carbs**
   A low-carb diet can throw you into mood swings because eliminating carbohydrates affects your body’s ability to regulate the feel-good neurotransmitter, serotonin. So, go ahead and cut out the white carbs from your diet. But don’t miss out on the nutrition that heavy, whole grains can provide. They contain iron (needed for brain and body health) plus a whole host of B vitamins to help boost your mood – and provide long-lasting energy.

   **USANA TIP** – Snack on USANA Protein Snacks or the tasty Go nuts ‘N’ Berries™ bars. All are low GI to help keep mind and body fuelled for longer*.

2. **Don’t skip breakfast**
   There’s a reason why you might be feeling hungry and angry (AKA ‘hangry’) after skipping breakfast. While it may seem like a great way to save on calories, money and time, it certainly won’t save you from a bad mood and could even trigger weight problems. In
fact, one study found that adults who started their day with breakfast had a more positive mood than those who didn’t eat anything. Having some protein with carbohydrates is the ideal breakfast combo – the protein helps to keep you satisfied and wholegrain carbohydrates help to boost your blood glucose levels.

USANA TIP – Try a quick and easy Nutrimeal™ – whizz up with your favourite frozen berries for a fast and satisfying brekkie.

3. Omega-3 fats

Nerve fibres send messages in the same way as electric wires. So, to ensure that messages can flow freely, they need to be insulated. Your nerve cells are insulated by a fatty substance called myelin and omega-3 fats help to build and maintain this.

Unsaturated fats are vital components of neural cell membranes and are needed for the production and proper functioning of neurotransmitters, the chemical messengers these cells use to communicate.

Getting enough DHA regularly is important – even though it can be stored your body constantly uses and loses it. DHA also plays a key role in the anti-inflammatory process.

Oily fish contains high quantities of healthy omega-3 oils – the body needs these but can’t make them for itself. But, your body can make long chain omega-3 fats from short chain omega-3 fats (found in foods like walnuts and flaxseeds). But the conversion rate isn’t very efficient and gets less efficient with ageing.

To cut the risk of heart disease – which remains the number one killer in Australia and New Zealand – the Australian Heart Foundation urges us all to consume about 500 milligrams of omega-3 DHA and EPA combined (marine source) every day (twice this amount if you already have heart disease). So, opt for two to three serves (150 gram each) of oily fish every week whilst supplementing your diet with omega-3 enriched foods and fish oil supplements.

Consuming good quality fish oil like provide support to maintain healthy brain cells. One US study found that people with higher blood levels of omega-3 fatty acids may have larger brain volumes in old age. Scientists also found that those with higher levels of omega-3s also had a larger hippocampus area of the brain, which plays an important role in memory. In Alzheimer’s disease, the hippocampus begins to deteriorate even before symptoms appear.

USANA TIP: Choose BiOmega* every day – each capsule contains 550mg of marine omega-3 EPA and DHA. And, it’s ethically sourced and mercury -tested.

A very tasty veggie way to boost your plant-sourced omega-3s is to snack on Go Nuts ‘n Berries™ bars*. Each bar contains 500mg of vegetarian omega-3s – and just 150 Calories!

4. Antioxidants

Certain nutrients, such as vitamins E and C, are antioxidants with the ability to neutralise free radicals, thereby protecting cells and tissues against oxidative damage. For this reason, scientists have been studying a possible protective role for these vitamins in the brain and nervous system. Low levels of vitamin E have been found in the cerebrospinal fluid of Alzheimer patients, making this tissue vulnerable to oxidation.

Oxidative damage to brain cells is strongly linked with brain decline and it occurs as a result of metabolic reactions that release unstable molecules called free radicals. These free radicals attack the fats in cell membranes and other cell structures. Because your brain contains a large amount of unsaturated fat, it is vulnerable to oxidation.

USANA Tip: USANA’s Essentials™ and HealthPak™ provide a wide range of protective antioxidants (wide variety of antioxidants – vitamins and minerals plus plant pigments and extracts. The HealthPak™ provides the potent antioxidant boost (AO Booster).
5. B vitamins

The B group of vitamins, especially thiamine, niacin, folate, vitamin B6 and vitamin B12, are all important for brain health. In order for cells to burn fuel and release energy, brain cells need B vitamins.

Some B vitamins (folate, vitamins B6 and vitamin B12) are involved in the way your body controls the levels of an amino acid called homocysteine (this is formed when protein is broken down). High levels of homocysteine have been shown to be a risk factor for impaired cognitive (brain) abilities in the elderly and raised homocysteine levels have been associated with inadequate intake of vitamin B12, vitamin B6 or folate.

USANA TIP: Take your daily Essentials** or HealthPak**. These contain the complete mix of B vitamins in optimal levels for body and brain health.

6. Magnesium

Choosing too many processed foods, stress and alcohol can mean you don’t get enough magnesium which is involved in hundreds of functions in your body. Milling flour strips magnesium from wheat), and consuming too much sugar means your body has to use magnesium to process it.

And if you’re falling short of magnesium, you could be at risk of fatigue and irregular heartbeat and muscle tension (remember, your heart is a muscle and palpitations can make you feel stressed and uncomfortable). Your body can’t absorb calcium without magnesium. Wholegrains, green, leafy vegetables; almonds, walnuts, and pecans pumpkin, sunflower, sesame, and flax seeds all contain magnesium, so be sure to include these in your diet to ensure you don’t fall short.

USANA TIP: Take your daily Essentials* – it contains magnesium and calcium in chelated form for better absorption.

7. Ginkgo Biloba

The leaves from what is thought to be the oldest living tree species in the world and the only tree to survive the ice age, ginkgo leaf extracts have been used in Traditional Chinese Medicine for thousands of years.

One of the traditional uses for ginkgo is for brain health. That’s because ginkgo may help to improve blood flow. A healthy blood supply is vital to brain health because blood carries oxygen and nutrients to the cells.

USANA Tip: try Ginkgo-PS™* – it’s combined with Phosphatidylserine (PS) which is a component of all cell membranes and is essential for normal cell function (it is found in highest concentration in the cell membranes of brain tissue).
8. Coenzyme Q10

Called CoQ10 for short, Coenzyme Q10 is found in almost every cell in the body inside tiny organelles called mitochondria inside your cells. Mitochondria – think of them being a bit like your body’s batteries using oxygen to create energy. There are more mitochondria in brain cells than in any other tissue in your body. And, supporting your energy at the cell level may help to enhance the use of oxygen in your brain. Your ability to absorb and make CoQ10 decreases with age plus overall nutritional status and not getting enough key nutrients such as B vitamins, vitamin C, and selenium can also reduce body concentrations. On top of that, excessive exercise or environmental stresses such as illness and extreme weather may also lower CoQ10 levels in tissue.

**USANA Tip:** try CoQuinoneTM* or CoQuinoneTM 100* – it contains an optimal combination of coenzyme Q10 plus alpha lipoic acid. Alpha lipoic acid is also involved in mitochondrial energy metabolism and it recycles oxidized (used) CoQ10 plus it can also regenerate and recycle other antioxidants, including vitamins E and C and glutathione.

Ginkgo encourages better blood flow to all the body – including to the brain – there may be a connection between ginkgo and improved memory.

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*General statement for all nutritional products:

**Vitamin supplements should not replace a balanced diet. Use only as directed. Always read the label.**

For product specific statements, they can be at the end of each paragraph where the product name is mentioned, or referenced with "**" or etc and placed at the bottom of the page.

For Essentials and HealthPak:

**Do not take while on warfarin therapy without medical advice.**

This product contains selenium, which is toxic in high doses. A daily dose of 150μg for adults of selenium from dietary supplements should not be exceeded.

For CoQuinone and CoQuinone 100:

Do not take while on warfarin therapy without medical advice.


Smith PF, Maclennan K, Darlington CL. Source Department of Pharmacology, School of Medical Sciences, University of Otago Medical School, Dunedin, New Zealand. http://www.ncbi.nlm.nih.gov/pubmed/8691847

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