# BRAIN EALT H

HOW TO NURTURE AND NOURISH YOUR BRAIN FOR TOP PERFORMANCE

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# Brain Health Resource Sheet: The Ultimate Supplements and Nutrition Guide

Are you looking to enhance your brain power? To become more focussed and more alert, while enhancing your mood, your sleep and even your physical dexterity?

One option is to fuel your brain with the right nutrients and supplements, many of which can cause a significant upgrade in terms of mental performance. Use this resource sheet to help plan your ultimate nootropic stack and brain-boosting diet... Likewise, when creating a regular diet, you can check back on this sheet as a way to know which choices are likely to help enhance your brain health and which are likely to negatively impact on it...

## Nutrition

## Carbs

Carbs are a large and unavoidable part of many diets but despite popular opinion, they are not 'bad' for you. In fact, some studies suggest that those eating low carb diets might actually see a decrease in their brainpower and IQ. The reason for this is that carbohydrates provide the brain with immediately available energy in the form of glucose. When you deny the brain of this glucose, you prevent it from getting its primary energy source, which in turn can leave it tired and listless – resulting in brain fog.

The best type of carbohydrates though are those that don't release energy *too* quickly, potentially resulting in a sudden increase in energy, followed by an immediate drop off afterward. Complex carbs are your friends – carbs that are combined with fats and fibers to make them slower to digest. A great example of a complex carb is oats and having these for breakfast can set the brain up for top performance.

Neurotransmitter Precursors: Amino Acids, Minerals and Vitamins

There are countless roles of different amino acids and vitamins in the diet that can do wonders for your brain power. Essentially, amino acids are the building blocks of proteins and their importance comes from their use in creating a large number of neurotransmitters. Neurotransmitters are chemicals in the brain that can trigger and increase various brain states – such as alertness or relaxation. They help regulate our mood, improve our memory and more. Various vitamins and minerals are *also* responsible for a number of these roles.

Some key amino acids and vitamins/minerals that help to enhance the production of neurotransmitters include:



- L-tyrosine
- Tryptophan
- Magnesium
- Vitamin B6
- Vitamin C

Generally, getting any good source of protein in your diet – such as eggs – along with a morning smoothie or multivitamin/mineral, will be enough to ensure that your body has an ample supply of all the raw materials it needs.

# Choline

Eggs are also great due to their high choline content. Choline is a substance that provides the building block for another neurotransmitter called acetylcholine – which happens to be one of the most important excitatory neurotransmitters out there. Eggs are also high in vitamin D, magnesium, B6 and B12... so eat them!

# Vasodilators

Vasodilators are elements of the diet that dilate the blood vessels (veins and arteries). This means that they get wider, thereby allowing for increase bloodflow and circulation. In turn, this means that more oxygen and more nutrients make it to the brain, where they are able to enhance brain function considerably.

A great natural form of vasodilator is garlic. Another good one is beetroot juice – and in fact some athletes are known to use beetroot juice for this very reason! Vitamin B12 is also a vasodilator – one more reason to eat eggs!

# **Cognitive Metabolic Enhancers**

This is a very fancy term for any nutrient that helps to increase cell function. Good examples include resveratrol, lutein and l-carnitine – all available from the diet.

All these nutrients help the cells to increase the function of mitochondria – which are the small 'energy factories' that help us to get useable energy from ATP and from glucose. This in turn gives you more energy for thinking and helps make you more alert and more attentive.

What to Avoid: Processed Foods



What you should absolutely avoid though is processed food. This will cause inflammation in the brain due to the high omega 6 content, it will give you sudden spikes and troughs in sugar and it will fill you up without providing any of the useful nutrients that your body needs in order to thrive (these are 'empty calories'). Avoid sugary snacks like cakes, chocolates and crisps and certainly avoid ready meals!

### Supplements

#### Vinpocetine

Vinpocetine is a vasodilator, meaning that it works very similarly to the beetroot and the garlic that we mentioned earlier. By widening blood vessels, this enhances bloodflow. But the key difference with vinpocetine is that it acts primarily on the frontal cortex, meaning that the effects are mainly felt in the most useful parts of the brain!

## Omega 3 Fatty Acid

Omega 3 fatty acid enhances 'cell membrane permeability'. This means that the cell walls become slightly more flexible, which not only helps to avoid damage from free radicals and other agents but also improves the ability for nutrients and electrical signals to pass through. This ultimately enhances the health of your brain cells and also improves the speed that signals can move through the brain while you're thinking!

### Creatine

Creatine allows the cells to recycle ATP. ATP is the most basic form of energy that the cells create from glucose and thus, by being able to use it more than once, you are improving your body's energy efficiency. The long and short of it is that you can concentrate a little harder, a little longer; and studies show that it can actually increase IQ scores.

# Caffeine

Caffeine is the nootropic that most people already use every day to become more alert and to enhance their memory. Caffeine works by undoing the effects of tiredness (caused by adenosine) and can cause an instant improvement in mental faculties. It is a little addictive but studies also show that it can be neuroprotective – protecting against Alzheimer's – when used in the long term.

L-Theanine



If you find that caffeine makes you too jittery, then I-theanine is the perfect combination to help calm the nerves. It's naturally occurring alongside caffeine in many green teas!

