

BIOHACKING AND NOOTROPICS





Nootropics, sometimes referred to as “smart drugs,” are a class of supplements and medications that are designed to improve cognitive function. This includes things like memory, creativity, focus, motivation, and energy. Nootropics work by increasing the levels of certain neurotransmitters in the brain, or by protecting the brain from damage. Nootropics can also help to protect the brain from age-related decline and disease.

However, it’s important to be aware of the potential risks of taking nootropics as well. Some nootropics can interact with other medications, and some may cause side effects. It’s also important to choose the right nootropic for your individual needs, as not all nootropics will work for everyone.

Getting started with nootropics

If you’re interested in trying nootropics, there are a few things you should keep in mind. First of all, when choosing a nootropic, it is important to do your research and choose one that is right for you. Make sure the nootropic you choose has been proven safe and effective, preferably by peer-reviewed studies on humans, not animals. A great place to do your research is the Nootropics community on Reddit (1). Here you can ask questions and read about the experiences of others before taking the plunge.

Consider the cost. Nootropics do not work overnight. This is a long-term strategy, where the benefits compound over time. Think about how much you can afford before you buy, bearing in mind that this is an investment in your health. Also consider the provenance of the nootropics you buy. Cheaper nootropics may be less effective, untested and unsafe. As with anything, you get what you pay for.



Check the dose and stick to it. Taking more will not necessarily increase, or speed up, the benefit. In some cases, some nootropics are toxic if taken in excess.

What do nootropics do?

Nootropics are primarily taken for brain health and function. They can help improve memory, focus and cognition (2), mood, stress levels (3), and mind set and protect the brain against the effects of dementia and aging (4).

The majority of nootropics are synthesized chemicals that occur naturally in the brain or body. There are many substances that come under the nootropic umbrella (5). These include names you will be familiar with, such as caffeine, which can improve alertness and focus (6), CBD, omega 3 fatty acids, which are essential for proper brain development, boost cognitive function (7), and protect against age-related decline (8), and B vitamins (9). Vitamin B6, specifically, is necessary for the synthesis of serotonin, a neurotransmitter that plays a role in mood and emotion (10). You can get B vitamins as a supplement. Alternatively, foods packed with vitamin B6 are chickpeas, beef liver, tuna, salmon, poultry and fortified breakfast cereals (10). Oily fish is the best source of omega 3 fatty acids, especially sardines, herring, mackerel and salmon. However, as many people do not like fish, you can get the same benefits from a fish oil supplement.

Some nootropics are extracted from plants, herbs or fungi. These include Valerian, Ashwaganda (11), Rosemary, turmeric (12), and ginseng. For example, studies have shown that the herb ginkgo biloba can help to improve memory, and slow the onset of dementia (13). Each of these substances has



been shown to improve cognitive performance in some way. By providing the brain with the nutrients it needs to function optimally, these food-based nootropics can improve cognitive performance. Food-based nootropics are a good place to start for biohacking beginners.

While there is some evidence to suggest that nootropics can improve cognitive performance, it is important to note that the effects are typically mild and subtle. With that being said, not all nootropics are created equal; some are much more potent than others.

Piracetam: The Original Smart Drug

Piracetam is a supplement that has been used for decades to improve cognitive function. Unlike many other supplements, piracetam has been extensively studied in clinical trials and shown to be effective in treating a variety of conditions. For example, piracetam has been shown to improve memory and learning in healthy adults, as well as those with Alzheimer's disease and dementia. It has also been shown to be effective in treating attention deficit hyperactivity disorder (ADHD). In addition to its cognitive-enhancing effects, piracetam has also been shown to protect the brain from damage caused by strokes and other injuries (14).

Pramiracetam: A More Powerful Piracetam

Pramiracetam is a powerful nootropic that is closely related to piracetam. Both drugs belong to the racetam family and share many similar properties. However, pramiracetam is much more potent than piracetam, and it has a few additional benefits. Like other racetams, pramiracetam is thought to enhance



cognitive function by increasing levels of the neurotransmitter acetylcholine (15). Acetylcholine is essential for memory and learning (16), so this boost in function may help to improve these cognitive processes. Pramiracetam is also believed to increase blood flow to the brain (17), which can improve brain health and function.

Which nootropics are best for focus and concentration?

There are a variety of supplements that claim to improve focus and concentration. But with so many options on the market, it can be tough to know which ones are actually effective. Here are four of the best:

Caffeine: Caffeine is a powerful stimulant that can help to improve focus and concentration. It works by blocking the neurotransmitter adenosine, which promotes sleepiness. Studies have shown that it can also help to improve memory and cognitive function (6).

L-theanine: This amino acid is found in green tea and is known for its calming effects. It can help to reduce anxiety and increase focus (18).

Bacopa monnieri: This Indian herb has been used for centuries to improve long and short-term memory, cognitive function, and learning. It boosts blood flow in the brain and also supports the production of chemicals in the brain such as acetylcholine, serotonin and GABA (19).

Citicoline: This natural substance has also been shown to improve memory and learning. It has neuroprotective effects and can help protect the brain from damage. Citicoline is safe and well tolerated (20).

Conclusion

It is impossible to cover all the nootropics available within the confines of this article, so I strongly urge you to research the subject further. It is important to remember that while there is evidence to support the use of nootropics, these substances are not magic pills. They will not make you smarter or more creative overnight. Rather, they are tools that can be used to help you reach your cognitive potential. When used wisely, nootropics can be a valuable addition to your biohacking toolkit.

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