

BIOHACKING SUPPLEMENTS: THE TRUTH REVEALED





One might think that biohackers are a group of people who are interested in hacking their bodies in the same way that they might hack a computer system. However, the term "biohacking" simply refers to the use of science and technology to make improvements to the human body. This can include everything from using devices to monitor health data to using supplements to improve cognitive performance. In many cases, biohackers are simply people who are interested in optimizing their own health and well-being.

Supplements are one of the most popular tools used by biohackers. This is because they offer a unique way to improve various aspects of health, including cognitive function, energy levels, and immune function. Additionally, supplements can be used to address specific health concerns, such as anxiety or depression.

The most popular type of supplement used by biohackers is nootropics. Nootropics are substances that improve cognitive function, and they are often referred to as "smart drugs." There are a wide variety of nootropics available on the market, and they can be used to improve memory, focus, and creativity.

Can nootropics make you smarter?

According to some experts, the answer may be yes. Nootropics are a class of drugs that have cognitive-enhancing effects, and they are often used to treat conditions like Alzheimer's disease and dementia. Some nootropics act as reuptake inhibitors, which means they increase the level of neurotransmitters in the brain. Other nootropics help to protect the brain from damage or improve blood flow to the brain. Some research suggests that nootropics can improve memory and learning, and there is some evidence that they may be



helpful for treating attention deficit hyperactivity disorder (ADHD). However, more research is needed to confirm these effects.

While nootropics may not make you smarter overnight, they could potentially have long-term benefits for brain health. If you're considering taking nootropics, it's important to talk to your doctor first to discuss the risks and benefits.

The most frequently used nootropics are:

Piracetam, which helps improve understanding and memory (1). Some reported side effects of piracetam include tiredness, headaches, diarrhoea and even memory loss (2).

Aniracetam works by increasing levels of the neurotransmitter acetylcholine in the brain. This enables nerve cells to communicate more effectively. It is used to treat conditions like dementia, Alzheimer's, age-related memory loss and the after-effects of strokes (3). It is thought to work by modulating levels of the neurotransmitters dopamine and serotonin. As a result, Aniracetam may be an effective treatment for conditions like anxiety and depression (4). The most common side effects of Aniracetam are mild and include headaches, anxiety, and insomnia (5).

Oxiracetam is a cognitive enhancer that has been shown to improve memory and learning. While it is generally well-tolerated, there are some potential side effects associated with its use. The most common is mild headaches. Some people may also experience stomach upset, anxiety, or insomnia (6).



Modafinil is a medication used to treat sleep disorders such as narcolepsy and sleep apnea. It is also used to improve wakefulness. Side effects are considered mild and include headaches and dizziness (7). Modafinil is also used off-label for a variety of other conditions, such as attention deficit hyperactivity disorder (ADHD), depression, and fatigue. However, this use is unlicensed (8).

Which are the best supplements for biohacking sleep?

There are a number of ways to bio hack sleep, and one of the most popular methods is to use supplements. While there are many different types of supplements available on the market, not all of them are equally effective. Do not rely completely on supplements. A good sleep hygiene routine goes a long way to helping you get some quality shut eye. That being said, here are some of the best supplements to help you get a good night's sleep:

Melatonin is a hormone that is naturally produced by the body and it helps to regulate the sleep-wake cycle. Supplementing with melatonin can help to promote sleep and reduce insomnia (9).

Valerian Root is an herb that has been used for centuries to treat insomnia. It is thought to be effective in promoting sleep by increasing levels of gamma aminobutyric acid (GABA) in the brain (10).

Magnesium is a mineral involved in many biochemical reactions in the body, and it is also known to be a natural muscle relaxant. This mineral is involved in over 300 biochemical reactions in the body, and it plays a role in regulating



sleep by promoting relaxation and reducing stress (11). Magnesium supplements can be taken in the form of glycinate or threonate, both of which are well absorbed by the body.

Chamomile is another herb that has long been used as a natural remedy for insomnia and anxiety. Chamomile tea can be helpful in promoting sleep, and supplements are also available (12).

L-Theanine is an amino acid found in green tea. It is thought to promote relaxation and reduce stress levels. Supplementing with L-theanine, combined with the relaxing neurotransmitter GABA, is a supplement used by bio hackers to induce and extend the duration of restorative sleep (13).

What are the best anti-aging supplements?

The intention of most bio hackers is to obtain optimum health. However, another aspect is to increase longevity and slow down the effects of aging. Some of the best biohacking supplements for anti-aging include collagen peptides, omega-3 fatty acids, vitamin D, and CoQ10. Collagen peptides help to rebuild aging skin cells, while omega-3 fatty acids protect against cell damage. Vitamin D helps to promote cell regeneration, while CoQ10 is an antioxidant that helps to protect cells from damage. All of these are important components for a bio hacker wishing to hold back the effects of aging.

Resveratrol is another potent anti-aging supplement. It is also found in red wine. It has been shown to activate sirtuins (14), which are enzymes that play a role in longevity (15). In addition, resveratrol has powerful antioxidant and anti-inflammatory properties. Supplementing with resveratrol may help to protect cells and blood vessels from damage, and reduces inflammation (16).



NAD+ is a nucleotide that is also linked to sirtuins and plays an important role in energy production, cell repair, and DNA protection. As we age, our NAD+ levels decline, which can contribute to the development of age-related diseases (17). Supplements can help to replenish NAD+ levels and restore some of the benefits of youth.

What are the best bio hacking supplements to increase energy levels?

If you're interested in biohacking and want to boost your energy levels, there are a few key supplements you should consider taking.

Caffeine: One of the most important supplements for energy is caffeine, which increases alertness and cognitive function, and it can also help improve physical performance. Drinking good quality, organic coffee is a great source of caffeine.

Creatine: This nutrient helps supply energy to cells, and also enhances exercise performance (18). It is stored naturally in the muscles, but for an energetic boost, taking a creatine supplement is a great bio hack, especially when exercising (19).

B complex vitamin supplement: If you're looking for a more natural way to boost your energy levels, consider taking a B-complex vitamin supplement. B vitamins are essential for converting the food we eat into energy and can help to reduce fatigue (20). In addition, make sure that you eat plenty of food that is rich in B vitamins. These include



Nicotinamide Riboside: B vitamins help boost energy as they are involved in the production of NAD+, the nucleotide referred to in the anti-aging section. NAD+ plays a vital role in energy production (21). A supplement that addresses this specifically is Nicotinamide Riboside (22). This supplement not only increases energy, but reduces fatigue and improves mental clarity.

What are the best biohacking supplements for optimal nutrition?

When it comes to biohacking, there are a few key nutrients that can make a big difference in your overall health and well-being. Supplements can be a helpful way to ensure you're getting optimal levels. These include: Omega-3 fatty acids, which are essential for brain function and cellular health.

Probiotics are essential for gut health, and play a part in boosting immunity, reducing inflammation and improving mental health.

Vitamin D is essential for strong bones and has also been linked to a reduced risk of cancer and heart disease.

Essential amino acids are necessary for growth and repair. They are needed to make the thousands of proteins needed by the body. They are also necessary for neurotransmitters, like serotonin, which boost mental health and feelings of well-being (23). You can get amino acids from diet and the body can make some too. However, to guarantee intake of the full spectrum of amino acids, it is helpful to take them in supplement form.

Berberine is an herbal supplement that is a powerful tool for supporting good health. It can help regulate blood sugar, improve digestion, fight inflammation,



improve heart health, boost cognitive function and protect against age-related mental decline. It may also help treat certain types of cancer (24). While supplements can be beneficial when taken as directed, do not be drawn into the trap that says more equates with better. It is possible to overdose on them. Overdosing on some supplements can lead to a number of adverse effects, including liver and kidney damage. In some cases, overdosing on supplements can also cause gastrointestinal issues, heart arrhythmias, and seizures (25). The best way to avoid overdosing on supplements is to always follow the manufacturer's recommendations and check that they don't interact with any medication you are taking. If in doubt, always check with a health professional.

Biohacking supplements are a great way to improve your health and well-being. They can help you reach optimal levels of nutrition, which are important in supporting good general health. While there are many more available, the ones discussed provide a good starting point.

References

1. Modulation Effects of Piracetam and Ginkgo biloba on the Cognitive and Working Memory Functions: Psychometric Study
https://www.researchgate.net/profile/Hayder-Al-Kuraishy/publication/282030375_Alkuraishy_CPSP/links/5601b27908aecb0ce881adec/Alkuraishy-CPS P.pdf
2. Probable Nootropicinduced Psychiatric Adverse Effects: A Series of Four Cases <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4756795/>

3. Aniracetam: Its Novel Therapeutic Potential in Cerebral Dysfunctional Disorders Based on Recent Pharmacological Discoveries

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6741661/pdf/CNS-8-70.pdf>

4. Aniracetam enhances cortical dopamine and serotonin release via cholinergic and glutamatergic mechanisms in SHRSP

<https://www.sciencedirect.com/science/article/abs/pii/S0006899301029390>

5. Aniracetam Side Effects https://nootropicsexpert.com/aniracetam/#_edn4

6. Oxiracetam: Review of Effects, Dosage & Where to Buy

<https://wholisticresearch.com/oxiracetam/>

7. Modafinil - Uses, Side Effects, and More

<https://www.webmd.com/drugs/2/drug-16962/modafinil-oral/details>

8. Adderall vs. Modafinil: How Do They Compare?

<https://americanaddictioncenters.org/adderall/vs-modafinil>

9. Melatonin: What You Need To Know

<https://www.nccih.nih.gov/health/melatonin-what-you-need-to-know>

10. Valerian <https://ods.od.nih.gov/factsheets/Valerian-HealthProfessional/>

11. Magnesium: 24 Amazing Health Benefits You Must Know

<https://outliyr.com/magnesium-health-facts>

12. Chamomile: A herbal medicine of the past with bright future

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2995283/>



13. GABA and L-theanine mixture decreases sleep latency and improves NREM sleep <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6366437/>

14. A Molecular Mechanism for Direct Sirtuin Activation by Resveratrol <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3504108/>

15. How These Little Known Proteins Impact Healthy Aging <https://www.thorne.com/take-5-daily/article/how-this-little-known-enzyme-impacts-healthy-aging>

16. Health Benefits of Resveratrol — And Should You Take It? <https://health.clevelandclinic.org/resveratrol-benefits/>

17. NAD+ and Sirtuins in Aging and Disease <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4112140/>

18. Creatine and Creatine Supplements <https://my.clevelandclinic.org/health/articles/17674-creatine-and-creatine-supplements>

19. The effects of four weeks of creatine supplementation and high-intensity interval training on cardiorespiratory fitness: a randomized controlled trial <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2780977/>

20. Vitamins and Minerals for Energy, Fatigue and Cognition: A Narrative Review of the Biochemical and Clinical Evidence <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7019700/>



21. What Is NAD+ And Why Is It Important?

<https://www.elysiumhealth.com/blogs/science101/what-is-nad-and-why-is-it-important>

22. B-vitamins and NAD metabolism, or when vitamin B3's bioavailability is not enough <https://gtr.ukri.org/projects?ref=BB%2FN001842%2F1>

23. Essential Amino Acids: Raw Ingredients To Optimize Health, Wellness, & Performance <https://outliyr.com/essential-amino-acids>

24. Berberine – A Powerful Supplement With Many Benefits

<https://www.healthline.com/nutrition/berberine-powerful-supplement>

25. Can You Overdose on Vitamins?

<https://www.healthline.com/nutrition/can-you-overdose-on-vitamins>