

THE BIOHACKING MANIFESTO: A GUIDE TO A HEALTHY AND HAPPY LIFE



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We are constantly bombarded with information on how to live a healthy lifestyle. Eat this, exercise more, get eight hours of sleep - the list goes on. It can be tough to know what to do and where to start. However, there is one simple guide that can help you make all the right choices: The Biohacking Manifesto. The Biohacking Manifesto is all about taking control of your own health and happiness. It starts with understanding how your body works and what you need to do to keep it running efficiently. From there, you can start making simple changes that will have a big impact on your overall health. For example, eating more nutritious foods, getting regular exercise, and getting enough sleep are all important bio hacks that can improve your health and wellbeing. So if you're looking for a way to live a healthier and happier life, keep reading. You may just find The Biohacking Manifesto to be your new best friend.

So what is biohacking?

Biohacking is the practice of using science and technology to hack the human body in order to improve its performance. This can involve everything from changing your diet to implanted devices that monitor or alter your physiology. Some biohackers even choose to modify their DNA in order to give themselves superhuman abilities. While this may sound like something out of a science fiction novel, biohacking is a growing trend among people who want to take control of their own health and fitness.

By harnessing the power of technology, biohackers are pushing the boundaries of what it means to be human. Whether you're looking to lose weight, increase your strength, or just feel more energized, there's a bio hack out there for you.

Eat a healthy, whole food diet.

One of the first things a biohacker can do to lead a healthy life is to take a look at what they are eating. One of the best ways to do this is to eat a whole food diet. A whole food is a food that hasn't been processed and has no added chemicals or synthetic ingredients in it. In contrast, most of the foods that are consumed today are highly processed and often contain unhealthy ingredients. The over-processing of foods can strip them of important nutrients, making them less beneficial to our health. Furthermore, many processed foods contain

harmful additives that can potentially cause long-term health problems. For these reasons, it is generally recommended to eat more whole foods.

Whole foods are not only more nutritious than processed foods, but they are often more satisfying as well. When we eat whole foods, our bodies receive the fibre, vitamins, and minerals that they need in order to function optimally. As a result, we tend to feel more energetic and less sluggish. In addition, whole foods are digested more slowly than processed foods, meaning that we stay fuller for longer after eating them. This can help to prevent overeating and weight gain.

Overall, there are many good reasons to make sure that whole foods make up a large part of our diet. However, it can be challenging to stick to, especially if you're used to eating processed foods. Here are a few simple hacks that can help you eat a more whole food diet:

- Shop the perimeter of the grocery store. The outer edges of the store are typically where you'll find the freshest and most unprocessed foods.
- Make a list before you go shopping, and stick to it. This will help you avoid impulse purchases of unhealthy snacks and processed foods.
- Plan your meals in advance. This will make it easier to cook healthy meals at home rather than resort to takeout or fast food.
- Cook in bulk. Make larger portions of recipes so that you have leftovers for future meals. This will save you time and money, as well as mean that there is always something healthy to eat. Another way to stop you from buying takeout food.
- Incorporate more plant-based foods into your diet. Aim for at least half of your plate to be fruit and vegetables at every meal.

Following these simple tips can help you make the transition to a more whole food diet. It may take some time to get used to, but your body will thank you in the long run!

Diet is a huge part of biohacking, and there are many different approaches that you can take.

- The Paleo diet is based on the foods that our ancestors would have eaten, so think meat, fish, vegetables, fruits and nuts.
- The Ketogenic diet is a high-fat, low-carbohydrate diet that has been shown to help with weight loss and improve mental clarity.

- The Bulletproof coffee diet involves drinking coffee with grass-fed butter and coconut oil, which sounds weird, but apparently, it gives you loads of energy (1)!

Using apps to improve your diet.

There are many different tools and technologies that you can use to bio hack your diet. At the simplest level, you can use a simple food journal to help track what foods you are consuming, and when. This allows you to more accurately assess the nutritional value of your meals and identify areas where you might be able to improve your diet. In addition, there are many sophisticated health tracking apps that you can download onto your mobile phone (2). These can be used to provide detailed feedback on everything from calories burned to heart rate.

These apps can also help you to identify patterns in your food intake, making it easier to pinpoint any unhealthy habits that may be impacting your overall health.

One of the most effective tools you can use, is a digital food scale. This can help you to precisely measure portion size and some are even pre-programmed with thousands of foods so that they can identify the nutrients in your food. Additionally, some apps allow you to scan barcodes on foods, to get detailed information about their nutritional content. Other apps allow you to search for specific recipes based on your dietary needs, food preferences, or even what you have in your fridge and food cupboard.

Overall, there are many different ways that technology can help you optimize your diet and take control of your health. Whether you need to improve your nutrition or lose weight, using advanced tools and techniques will ensure that you achieve all of your goals. With regular monitoring and tracking, you can be sure that any changes to your lifestyle or diet will have meaningful results.

One of the bonuses of bio hacking is that you can take it one step further. There are a number of advanced technologies that you can use to bio hack your nutrition. One of the most popular methods is to use a DNA test to determine which nutrients will benefit your body, based on your genetic makeup. This is called nutrigenomics (3). There are also tests that identify foods that you may be intolerant to. This just involves sending a tiny pin prick of blood to the test centre (4). Food intolerances won't cause full-blown allergic reactions, but could cause pain, discomfort, or inflammation that is

hard to pinpoint without an intolerance test (5). Once you are armed with this information, you can then tailor your diet accordingly.

Ultimately, whether you want basic food tracking or more advanced methods for eating a nutritious diet that will benefit your health, there are plenty of powerful tools to bio hack your diet using technology.

Using supplements to improve your diet.

Unfortunately, due to the depletion of nutrients in soil that has been over-farmed, it is difficult to get all the nutrients needed for optimum health from food, no matter how healthy your diet is. Therefore, many biohackers use supplements to make sure they're getting all the nutrients they need to boost their health and help in the fight against many diseases. The three supplements that biohackers use most are:

Omega 3 fatty acids: These supplements are a must in the bio hacker's nutritional tool kit because they are beneficial for heart health (6), help lower blood pressure (7) and reduce inflammation (8). Omega 3s may also be beneficial for brain health, improving cognitive function (9) and reducing the risk of dementia (10).

Probiotics: The human gut is home to trillions of bacteria, many of which are essential for good health. These beneficial bacteria help to break down food, protect the body from harmful microbes (11), benefit brain health, and also play a part in the beginning of the production of some hormones and enzymes. They benefit mental health due to their involvement in the creation of the so-called "feel good" hormone, serotonin (12).

Probiotics are live bacteria typically found in fermented foods, such as yogurt, sauerkraut, and kimchi. However, probiotic supplements provide higher concentrations (in the billions) of these beneficial bacteria. For this reason, probiotic supplements are an excellent way of replenishing the good bacteria in the gut, especially after treatment with anti-biotics. Given the wide range of potential benefits, probiotic supplements are another essential bio hack for a healthy gut.

Vitamin D: This vitamin has many different health benefits. First and foremost, it regulates the body's absorption of calcium, which is important for maintaining strong bones and teeth (13). Adequate levels of vitamin D can also reduce the risk of cardiovascular disease (14), diabetes (15) and osteoporosis

(16). There is also a huge study involving thousands of men and women that is showing promising evidence that Vitamin D may protect against certain types of cancer (17). In addition, individuals with depression tend to have lower levels of this crucial vitamin.

Although it is possible to get vitamin D from certain foods, such as eggs and fatty fish, the body's main source of vitamin D is sunlight (18). When ultraviolet rays from the sun come into contact with the skin, they trigger the production of vitamin D. However, excessive exposure to sunlight can lead to skin damage and increase the risk of skin cancer. Therefore, only spend 10-15 minutes in direct sunlight each day.

Having said all that, if you don't like oily fish, have sensitive skin, are over 50 or have kidney disease, a vitamin D supplement is a great way to benefit from this beneficial nutrient (13).

Increase your activity levels.

Making small changes to your daily routine can have a big impact on your overall health. Here are some simple activity hacks that can help you get started:

- Take the stairs instead of the elevator/lift. Not only is this a great way to get some extra steps in, but it can also help to boost your energy levels. While we are talking about steps, many biohackers wear step trackers. At least 10,000 steps (which is approximately 3 miles) is what you should be aiming for every day.
- Park a little further away from your destination. This may seem like a small thing, but those extra steps can add up over time. Or if you use the bus, get off a stop earlier and walk the last bit of your journey.
- If you have to work at a desk all day, try to use a standing desk or a laptop stand. If you work from home, you can even use an ironing board! This will help to improve your posture and reduce your risk of developing back pain. You have to engage your core too.
- If you can't use a standing desk, get up and move every 20 to 30 minutes. Whether it's taking a quick walk around the block or just

stretching at your desk, getting some movement into your day will help to increase your energy levels and reduce stress.

- When you are on the phone, walk around instead of sitting still. A good tip is to call family and friends when you are on a walk. If you find going for a walk a chore, it makes the time go by quicker.

The dedicated biohacker focuses on efficient, effective exercise. This means working out smarter, not harder. High-Intensity Interval Training (HIIT) is a great way to get your heart rate up and burn some serious calories in a short amount of time. If you don't have time for the gym, there are plenty of bodyweight exercises that you can do at home with no equipment.

If you are new to exercise, start slow and build up gradually. A good goal to aim for is 30 minutes of moderate-intensity exercise most days of the week. Make sure you warm up before you start exercising and cool down afterwards with some stretches. This will help to prevent injuries.

There are lots of apps, free and paid, that can support exercise (19). These can be downloaded onto your phone and will remind you each day to exercise. Biohackers often use these apps to keep on top of their exercise regime, which is what sets them apart from more casual users.

Get quality sleep.

Most people know that getting a good night's sleep is important for both physical and mental health, but many don't realize just how much of an impact poor sleep can have. Lack of sleep can lead to weight gain, irritability, and even depression. It can also make it difficult to concentrate and focus during the day. Luckily, there are a few simple steps you can take to transform your sleep and improve your overall health. One of the most important things you can do is create a bedtime routine and stick to it as much as possible. This means going to bed and waking up at the same time each day, even on weekends. This can even involve taking a relaxing bath or reading a book before bed. Establishing a regular sleep schedule will help ensure that you get the minimum amount of sleep you need each night.

Make sure that your bedroom is dark, quiet, and cool. This will create an environment that is conducive to sleep (20).

Avoid caffeine and alcohol before bed. These substances can disrupt your sleep cycle. Caffeine can make it more difficult to fall asleep (21), and alcohol may lull you into sleep but it is an alcohol-induced sleep, which is not restorative (22). It is also a good idea to not eat within two hours, preferably three, of going to bed. Eating foods rich in omega 3 fatty acids, such as oily fish or taking a supplement, can also help to improve sleep (23). However, if you are already taking omega 3 supplements for the benefits mentioned in the diet section of this manifesto, do not take more than the recommended dose overall. This is because an overdose of omega 3 fatty acids can cause other health issues, undoing all your beneficial biohacking work (24).

Limit your exposure to screens before bed. The blue light emitted by electronic devices can interfere with your body's natural sleep cycle and with melatonin, the sleep hormone. In addition to this, you can wear blue light-blocking glasses when watching television or looking at screens. There are also apps that you can download onto phones and laptops that block the blue light. New research has now found that green light emitted from these devices damages the sleep/wake cycle (25). So have a look online for blue and green light blocking glasses to wear for the last hour before bedtime if you are using a screen. Make sure that they are wrapped around your eyes to ensure no damaging light reaches them. Alternatively, turn off the television, grab a book and use a red light bulb, as red doesn't impact your body clock (circadian rhythm) (26).

Finally, use an app to track your sleep so you can identify if you are getting good quality sleep or not. As with nutrition, diet and exercise apps, there are quite a few to choose from, so make sure to read the reviews carefully, or try free ones first (27).

By following these simple tips, you can improve your sleep, and feel more rested and alert during the day.

Upgrade and enhance.

Once the basics are embedded into the lives of bio hackers, they then home in on optimising how their bodies function. From there, they can upgrade and enhance their physical and mental abilities. This could be as simple as becoming more efficient at running or lifting weights, or as complex as taking drugs that optimise their nutrition and brain function.

Taking Nootropics

Supplements were discussed briefly in the diet section of this manifesto. However, biohackers wishing to enhance their performance further should take nootropics. These are substances that improve cognitive function, including memory, creativity and motivation. Nootropics are a class of cognitive enhancing drugs that are said to improve memory, focus, and overall cognitive function. They are often used by students, professionals, and biohackers who want to gain an edge in their fields. Some of the most popular nootropics include modafinil, adrafinil, and Piracetam. Each nootropic has its own unique benefits and drawbacks, so it's important to do your research before choosing one to use.

Modafinil is a stimulant prescription medication that is used to treat narcolepsy. However, it is also widely used as a nootropic due to its ability to increase wakefulness, and alertness (28). Modafinil is believed to work by increasing levels of dopamine in the brain (29).

Dopamine is a neurotransmitter that plays an important role in regulating mood, motivation, and even sex drive. It can also help us get better sleep. Generally speaking, high levels of dopamine are associated with feelings of euphoria (30). Dopamine plays an essential role in virtually all aspects of our health and wellbeing, which is one of the main reasons modafinil is taken.

Adrafinil is a prodrug for modafinil, meaning it is converted into modafinil in the body. It is said to have similar effects as modafinil, but it may be slightly less effective (31).

Piracetam is a popular nootropic that has many potential benefits, including improved cognitive function, enhanced focus and attention, and better memory retention. Additionally, Piracetam may help to improve brain health by increasing synaptic activity in the brain, protecting neurons (nerve cells) from damage, and boosting neuroplasticity (32). Furthermore, these neuroprotective properties can help to prevent age-related decline and protect against dementia and Alzheimer's disease. Overall, there is a lot of evidence suggesting that Piracetam can be a powerful tool for promoting peak mental performance.

Noopept is a synthetic nootropic that is said to be much more potent than Piracetam. Noopept is thought to improve memory, learning, and cognitive function. It is also said to have neuroprotective properties (33).

Phenylpiracetam is a synthetic nootropic that is said to be more potent, and hence more effective, than Piracetam. Phenylpiracetam is believed to improve memory, mood, learning, and all-round brain function (34). It is also said to protect the brain and has anti-inflammatory properties (35).

When it comes to purchasing nootropics, there are a few things you should keep in mind. First and foremost, be sure to only buy from reputable sources. There are many unscrupulous dealers out there who are selling fake or dangerous products. Be sure to read the reviews and do your research before purchasing any nootropics. There are many different types of nootropics on the market, and not all of them are effective for everyone. It is important to be careful of potential side effects and interactions with other medications.

Nootropics should also be used in moderation, as they can cause dependency if taken in large doses. Start with lower doses and work your way up. Nootropics can have powerful effects, and it is important to find the right dose for you. When used properly, nootropics can be a safe and effective way to improve cognitive function. However, if in doubt, it is best to consult with a doctor before taking any nootropics.

Red light therapy

Red light therapy is a treatment that uses low-level wavelengths of light to treat skin conditions and other medical issues. It is also known as photobiology or biostimulation, and has been used for many years to treat a variety of conditions. When applied to the skin, exposure to red light causes a biological response in the cells that can improve their function.

Red light therapy can also help to reduce inflammation, improve circulation, promote healing, reduce wrinkles, and clear up acne (36). For these reasons, it is used by biohackers, especially with regard to anti-aging.

Overall, biohacking is a broad concept that encompasses many different aspects of health and well-being. Whether you are using supplements, physical techniques, or nutritional interventions to improve your brain power and overall health, the goal is to find what works best for you and your individual needs. If you are interested in biohacking, be sure to do your research and

consult with a qualified healthcare professional before making any changes to your lifestyle or diet.

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References

1. Should You Drink Coffee with Coconut Oil?
<https://www.healthline.com/nutrition/coconut-oil-in-coffee>
2. A Dietitian's Picks of the 10 Best Nutrition Apps to Download
<https://www.healthline.com/nutrition/top-iphone-android-apps>
3. Nutrigenomics: The Genome–Food Interface
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2137135/>
4. Premium Food Intolerance Test
<https://www.yorktest.com/products/food-drink-scan-test/>
5. Is it a food intolerance, allergy, or something else?
<https://www.health.harvard.edu/staying-healthy/is-it-a-food-intolerance-allergy-or-something-else>
6. Omega 3 fats <https://www.heartuk.org.uk/low-cholesterol-foods/omega-3-fats>
7. Effect of Omega-3 fatty acids on blood pressure and serum lipids in continuous ambulatory peritoneal dialysis patients
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4548432/>
8. Omega-3 fatty acids in inflammation and autoimmune diseases
<https://pubmed.ncbi.nlm.nih.gov/12480795/>
9. Long-chain omega-3 fatty acids and the brain: a review of the independent and shared effects of EPA, DPA and DHA
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4404917/>
10. Omega-3 and dementia <https://www.alzheimers.org.uk/about-dementia/risk-factors-and-prevention/omega-3-and-dementia>
11. Probiotic bacteria block harmful microbe <https://www.nih.gov/news-events/nih-research-matters/probiotic-bacteria-block-harmful-microbe>
12. Beneficial Properties of Probiotics
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5031164/>
13. How Much Vitamin D Do I Need?
<https://www.webmd.com/diet/supplement-guide-vitamin-d>

14. Vitamin D reduces risk of cardiovascular disease
<https://heart.bmj.com/content/vitamin-d-reduces-risk-cardiovascular-disease>
15. Vitamin D and Diabetes <https://www.diabetes.co.uk/food/vitamin-d.html>
16. The use of calcium and vitamin D in the management of osteoporosis
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2621390/>
17. Vitamin D and Omega-3 Trial
<https://clinicaltrials.gov/ct2/show/NCT01169259>
18. Vitamin D
<https://www.osteoporosis.foundation/patients/prevention/vitamin-d>
19. The best workout apps in 2022 <https://www.tomsguide.com/uk/best-picks/best-workout-apps>
20. The Best Temperature for Sleep
<https://www.sleepfoundation.org/bedroom-environment/best-temperature-for-sleep>
21. Caffeine: Sleep and daytime sleepiness
<http://w.umfcv.ro/files/c/a/Caffeine%20-%20Sleep%20and%20daytime%20sleepiness.pdf>
22. Can just one drink ruin sleep?
<https://www.sleepdunwoody.com/blog/2021/04/0A1/can-just-one-drink-ruin-your-sleep/>
23. Fatty acids and sleep in UK children: subjective and pilot objective sleep results from the DOLAB study – a randomized controlled trial
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4263155/>
24. 8 Little-Known Side Effects of Too Much Fish Oil
<https://www.healthline.com/nutrition/fish-oil-side-effects>
25. It's Not Just Blue: Green Light Also Disrupts Sleep
<https://medium.com/simplebulb/its-not-just-blue-green-light-also-disrupts-sleep-1cc2c65cbc26>
26. The Color of the Light Affects the Circadian Rhythms
<https://www.cdc.gov/niosh/emres/longhourstraining/color.html>
27. Best Sleep Apps <https://www.verywellmind.com/best-sleep-apps-5114724>
28. Modafinil <https://www.drugs.com/mtm/modafinil.html>

29. Effects of Modafinil on Dopamine and Dopamine Transporters in the Male Human Brain: Clinical Implications
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2696807/>
30. Dopamine <https://my.clevelandclinic.org/health/articles/22581-dopamine>
31. Adrafinil <https://go.drugbank.com/drugs/DB08925>
32. Improved Mitochondrial Function in Brain Aging and Alzheimer Disease – the New Mechanism of Action of the Old Metabolic Enhancer Piracetam
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2944646/>
33. Noopept
https://www.alzdiscovery.org/uploads/cognitive_vitality_media/Noopept-Cognitive-Vitality-For-Researchers.pdf
34. Phenylpiracetam
<https://www.braintropic.com/nootropics/phenylpiracetam/>
35. Neuroprotective and anti-inflammatory activity of DAT inhibitor R-phenylpiracetam in experimental models of inflammation in male mice
<https://pubmed.ncbi.nlm.nih.gov/32279140/>
36. Red Light Therapy <https://my.clevelandclinic.org/health/articles/22114-red-light-therapy>