

# BIOHACKING



# biohacking

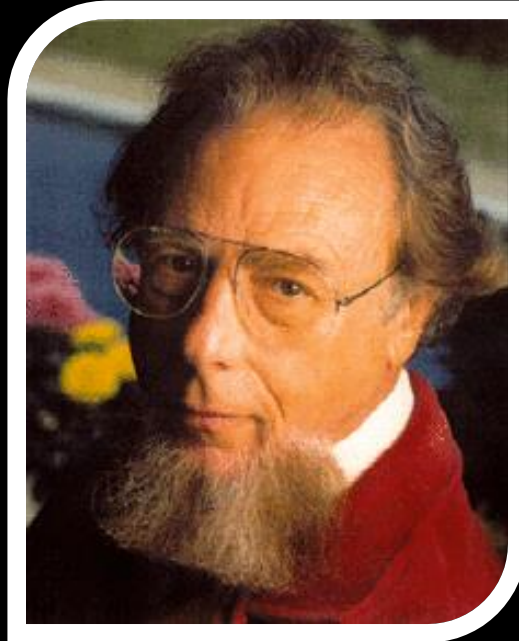
[bio·hack·ing] | noun

*"the art and science of changing the environment around you and inside you, so you have more control over your own biology"*

-Dave Asprey

## WHO INVENTED THE BIOHACKING?

By 1960, scientist and inventor Manfred Clynes suggested drugs and mechanical enhancements as a way to make life in space possible. Together with co-author Nathan Kline, he coined the term cyborg, a portmanteau of "cybernetic organism".

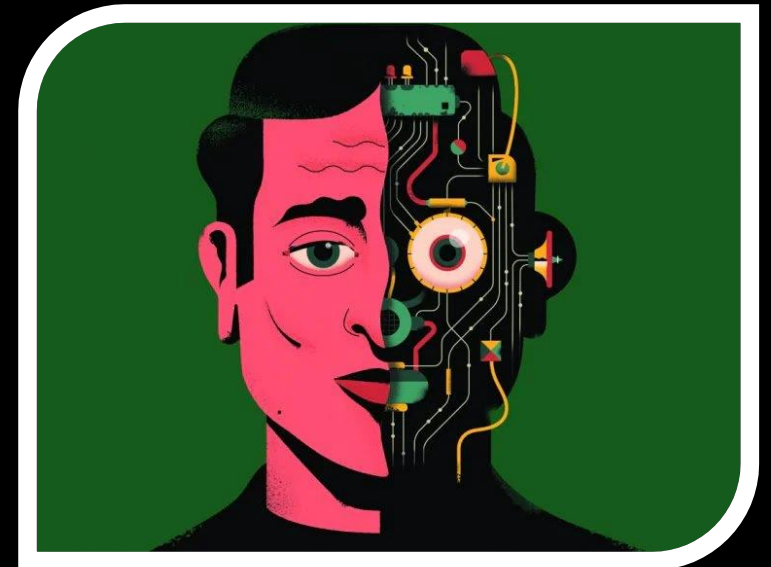


# INTRODUCTION

Also known as 'DIY biology', biohacking is a cross between science and social movement. Much of the focus is on improving human capabilities (think: magnets in fingers and third eyes), and it can be done as a hobby, for the advancement of science, or even as a business.

Biohacking comes in many forms. The three most popular types are:

- Nutrigenomics
- DIY biology
- Grinder



# NUTRIGENOMICS

Nutrigenomics focuses on how the food you eat interacts with your genes.

This popular, although controversial, type of biohacking is founded on the idea that your body's total genetic expression can be mapped out and optimized by testing how different nutrients affect your health.



# DIY BIOLOGY

DIY biology (or DIY bio) is a type of biohacking spearheaded by people with education and experience in scientific fields.

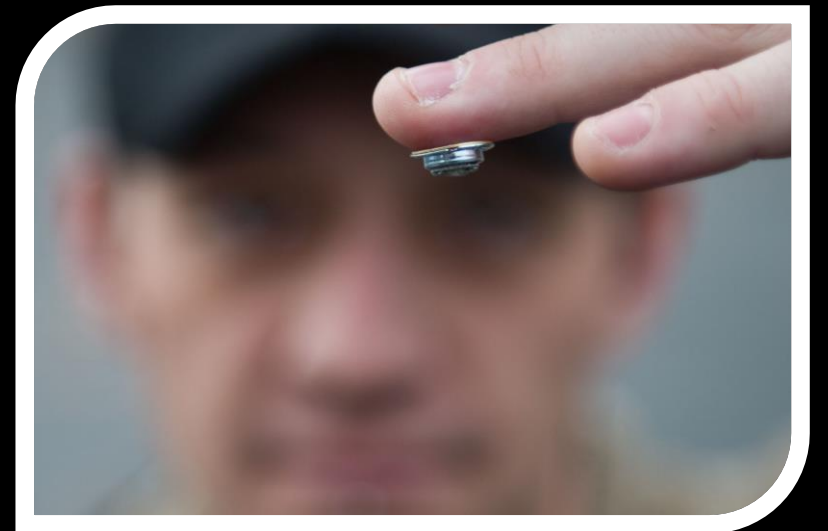
These biohackers share tips and techniques to help non-experts conduct structured experiments on themselves outside of a controlled experimental environment, like labs or medical offices.



# GRINDER

Grinder is a biohacking subculture that sees every part of the human body as hack-able.

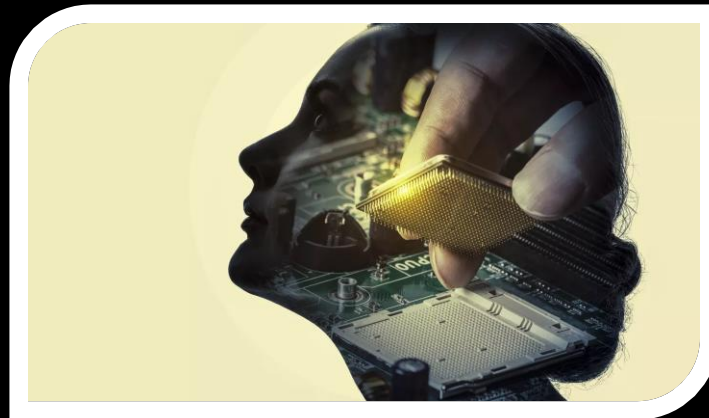
In general, grinders seek to become “cyborgs” by optimizing their bodies with a combination of gadgets, chemical injections, implants, and anything else they can put into their body to make it work the way they want it to.



## WHY ARE PEOPLE DOING THIS?

On a really basic level, biohacking comes down to something we can all relate to: the desire to feel better — and to see just how far we can push the human body.

Some people just want to not be sick anymore. Others want to become as smart and strong as they possibly can. An even more ambitious crowd wants to be as smart and strong as possible for as long as possible — in other words, they want to radically extend their life span.





# BENEFITS OF BIOHACKING

For those who struggle with mental health disabilities, research suggests that biohacking can have a great impact on treatment.

Biohacking can increase long term memory and productivity, and is said to have positive effects for both the mind and body.

Many biohackers focus on cognitive health, balance of neurotransmitters in the brain, a positive productive mindset, and quick results.

The first and most obvious “benefit” to biohacking is that you lose weight usually, if done right, a lot of it. It’s not necessarily the healthiest way to lose weight, but it does happen, and people do report seeing success with these types of programs

# DISADVANTAGES OF BIOHACKING

Implanting foreign objects into your body can expose you to inflammatory reactions that can cause chronic infections. It may also increase your risk of developing cancer.

Gene therapies pose another complexity, they aim to introduce new genetic material into our DNA, essentially rewriting our biological instructions. Edit the wrong part of DNA and you run the risk of seriously interfering with your body such as inducing a tumour.

*Love it or hate it, the research mounting in favor of  
“biohacking” is only getting more definitive.*