

BIOHACKING

Fountain of youth through supplements



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Chapter 1 – Introduction

My path to biohacking

My entire life, I've been fortunate enough to look younger than I actually was. This has often been an advantage—and an inspiration: If the body can naturally maintain its youthfulness, why shouldn't you be able to consciously support and enhance this effect? My actual journey into the world of biohacking began when I discovered **Jiaogulan**—also known as the "herb of immortality." This plant fascinated me so much that I delved deeper into the topic of aging, cell regeneration, and life extension. Step by step, I realized:

Aging is not a passive process – we can influence it.

Why supplements are key

Of course, there are many factors that influence our health and aging. But for me, supplements are the **most direct and effective lever** to intervene deeply in the body's biochemical processes. We can specifically boost energy production in cells, promote DNA repair, scavenge free radicals, and even eliminate aging cells. All of this doesn't happen by chance, but through precise substances that work precisely where aging begins: **in our cells.**

I therefore do not see supplements as a luxury, but as a tool – a tool that enables us to stay vital longer.

The approach of this book

This book is my personal guide. I developed it from scientific curiosity, practical testing, and years of interest in health and longevity. I want to show you:

- which supplements make a real difference,
- how to **sensibly combined**,
- and which protocols for **different budgets and goals** are suitable.

It's not about implementing everything at once, but rather finding your own path step by step. My goal is to provide you with a clear structure – from understanding cellular aging to a concrete plan that can be easily integrated into your daily routine.

Because in the end it's about a decision: **We can't stop the passage of time, but we can decide how we age.**

Chapter 2 – The Basics of Aging

Cell aging and mitochondria

Aging begins in the cells. Each of our approximately 30 trillion cells relies on generating energy in the form of ATP—and this happens precisely in the mitochondria, the powerhouses of the cells. However, with age, both the number and efficiency of mitochondria decrease. This means less energy, poorer regeneration, and slower repair of cellular damage. This process is a core aspect of aging. Therefore, if we want to stay young longer, we must protect the mitochondria while simultaneously increasing their activity. This is precisely where some of the most important supplements I'll introduce later come into play.

Oxidative stress and inflammation

Another factor is oxidative stress. This is an imbalance between free radicals and the body's own antioxidants. Free radicals are produced in every metabolic reaction but can damage our cell membranes, proteins, and even DNA. In parallel, chronic, silent inflammation ("inflammaging") plays a major role in aging. It is not noticeable like acute inflammation, but has a gradual effect and puts strain on all organs. Supplements with antioxidant and anti-inflammatory properties—such as astaxanthin, curcumin, or omega-3—are therefore essential to counteract these processes.

DNA damage and telomere shortening

Our DNA is the blueprint for life. But over time, DNA damage accumulates – caused by environmental factors, radiation, free radicals, or simply by errors during cell division. Another key lies in the telomeres. These are the protective caps at the ends of our chromosomes. With each cell division, they shorten – until at some point they are so short that the cell can no longer divide. This mechanism is one of the most important drivers of aging. Some substances,

such as resveratrol or astragalus extract, aim to slow these processes or even activate telomerase – an enzyme that can lengthen telomeres.

Senescent cells ("zombie cells")

When cells age and lose their function, they don't die immediately. Instead, they often remain in the tissue—they are called senescent cells or "zombie cells." The problem: These cells send out harmful signals that negatively affect surrounding, healthy cells. They promote inflammation, accelerate the aging process, and can even contribute to disease. This is where senolytics come into play—substances like fisetin that can specifically eliminate such senescent cells. By reducing the proportion of these "zombie cells," we can rejuvenate the cellular environment and improve tissue function.

Chapter 3 – The key supplements in detail

NMN & NR – The NAD⁺ Boost for Energy

Description:

NMN (nicotinamide mononucleotide) and NR (nicotinamide riboside) are precursors of NAD⁺, a vital coenzyme in all cells. NAD⁺ is necessary for energy production in the mitochondria and for the activation of repair enzymes.

Effect:

As we age, our NAD⁺ levels drop dramatically. This leads to less energy, weaker DNA repair, and accelerated aging. NMN or NR replenishes these stores and acts like "fuel" for our cellular power plants.

Dosage: 500–1000 mg per day.

Synergies: Particularly strong in combination with resveratrol and quercetin.

Special features: Best taken in the morning on an empty stomach.

Coenzyme Q10 – Power plants of the cells

Description:

CoQ10 (preferably in the active form **Ubiquinol**) is a cellular coenzyme that acts directly in the mitochondrial respiratory chain.

Effect:

It improves energy production (ATP) while protecting mitochondria from oxidative damage. CoQ10 levels decline, especially after age 40, and supplementation becomes crucial.

Dosage:100–200 mg per day.

Synergies:Works best with NAD⁺ boosters like NMN.

Special features:Fat-soluble – therefore take with a meal containing healthy fats.

Alpha-lipoic acid – protection and energy balance

Description:

Alpha lipoic acid (ALA), especially **R-form (R-ALA)**, is a powerful antioxidant and an important coenzyme in energy metabolism.

Effect:

ALA protects mitochondria, recycles other antioxidants such as vitamins C and E, and improves insulin sensitivity. It thus supports both energy production and metabolism.

Dosage:200–400 mg per day.

Synergies:Works particularly well with CoQ10 and Omega-3.

Special features:Best taken on an empty stomach.

Resveratrol – Activation of longevity genes

Description:

Resveratrol is a polyphenol that is mainly found in the skin of red grapes.

Effect:

It activates **Sirtuins**– Enzymes that regulate DNA repair and cell health. It also has strong antioxidant properties and protects against oxidative stress.

Dosage:200–500 mg per day.

Synergies:Particularly effective in combination with quercetin and NMN.

Special features:Take with fat (e.g. Omega-3) as it is fat-soluble.

Quercetin – synergy partner for resveratrol

Description:

Quercetin is a flavonoid found in apples, onions and berries.

Effect:

It reduces inflammation, stabilizes cells, and enhances the effects of resveratrol by improving its bioavailability. It also has a mild senolytic effect.

Dosage:500–1000 mg per day.

Synergies:Ideal with resveratrol, fisetin and NMN.

Special features:Take with some fat and piperine (black pepper).

Astaxanthin – protective shield for cells and skin

Description:

Astaxanthin is a powerful red carotenoid derived from algae that colors fish such as salmon.

Effect:

It is one of the most powerful antioxidants known. It protects the skin from UV damage, has anti-inflammatory properties, and supports cell membranes.

Dosage:4–12 mg per day.

Synergies:Combines well with Omega-3.

Special features:Fat-soluble – best taken with a meal.

Fisetin – The senolytic

Description:

Fisetin is a flavonoid found in strawberries, apples, and cucumbers.

Effect:

It acts as**Senolytic**: It can eliminate senescent "zombie cells," resulting in a "rejuvenation" effect on the cellular environment.

Dosage:500 mg –**not daily**, but cyclically once a week.

Synergies:Works complementarily with quercetin.

Special features:Be sure to take it cyclically, not permanently.

Curcumin – Master of Anti-Inflammation

Description:

Curcumin is the main active ingredient in turmeric.

Effect:

It is a very powerful anti-inflammatory and thus protects against chronic "silent inflammations." It also has antioxidant properties and supports the brain and joints.

Dosage:500–1000 mg per day, preferably with piperine for better absorption.

Synergies:With Omega-3 and Astaxanthin for maximum anti-inflammatory protection.

Special features:Always take with fat.

Berberine – Metabolic Optimizer

Description:

Berberine is an alkaloid from various plants.

Effect:

It improves insulin sensitivity and lowers blood sugar levels – similar to metformin, which is being researched as an anti-aging drug.

Dosage:500 mg, twice daily.

Synergies:Supports the effects of Omega-3 and ALA.

Special features:Not for daily use – better to use in cycles.

Omega-3 fatty acids – cell membrane & inflammation protection

Description:

Omega-3 fatty acids (EPA & DHA) come mainly from fish oil and algae.

Effect:

They stabilize cell membranes, have a strong anti-inflammatory effect, and protect the heart, brain, and joints.

Dosage:2000 mg per day (EPA + DHA combined).

Synergies:Enhanced with curcumin, astaxanthin and CoQ10.

Special features:Choose high-quality products from sustainable sources.

Astragalus extract (TA-65) – Telomerase activation

Description:

Astragalus is a traditional medicinal plant in Chinese medicine. A special extract from it, **TA-65**, is considered a possible telomerase activator.

Effect:

Telomerase can lengthen telomeres and thus potentially extend cell lifespan. The data is still controversial, but it represents an exciting option in the anti-aging field.

Dosage:10–25 mg per day.

Synergies:Complementary to DNA repair supplements such as resveratrol.

Special features:Very cost-intensive – more for the “ultimate protocol”.

Chapter 4 – Advanced Biohacking Favorites

Jiaogulan – The “Herb of Immortality”

Description:

Jiaogulan (*Gynostemma pentaphyllum*) is a plant native to Asia that has been known in China for centuries as the "herb of immortality." In regions where Jiaogulan is traditionally consumed regularly, people have been shown to live longer and healthier lives.

Effect:

Jiaogulan activates **AMPK**, a cellular enzyme often referred to as the "master regulator" of energy metabolism. AMPK promotes energy production, reduces fat deposits, improves blood sugar metabolism, and supports cellular repair and cleansing processes. Thus, Jiaogulan has a rejuvenating effect on multiple levels simultaneously.

Dosage: 2 capsules per day (depending on the preparation usually 300–500 mg).

Synergies: Very good in combination with NMN/NR and berberine, as they also influence the AMPK signaling pathway.

Special features: Personally, I see Jiaogulan as one of the key supplements that first got me excited about anti-aging and biohacking.

Methylene blue – mitochondria and cognitive power

Description:

Methylene blue is originally a dye that has been used medicinally for over 100 years. However, in very low doses, it acts as **strong modulator of mitochondrial function**.

Effect:

Methylene blue can "bridge" electrons in the mitochondrial respiratory chain, thus stabilizing energy production. It improves cellular efficiency, protects the brain from oxidative stress, and promotes cognitive clarity. Many users report increased concentration, improved memory, and increased energy.

Dosage: 1 capsule daily (depending on the preparation usually 0.5–2 mg/kg body weight).

Synergies: Particularly interesting in combination with CoQ10 and NMN, as together they strengthen mitochondrial energy production.

Special features: Here, less is more. Methylene blue is toxic in high doses – the correct dosage is crucial.

Moringa – Plant-based superfood with anti-aging potential

Description:

Moringa oleifera, often called the "miracle tree," contains an impressive array of nutrients. Its leaves and seeds are used medicinally and as food in many cultures.

Effect:

Moringa provides an exceptional combination of vitamins, minerals, amino acids, and antioxidants. It has anti-inflammatory effects, protects cells from oxidative stress, and supports hormonal and metabolic balance. In the anti-

aging context, Moringa is primarily a **broad-acting nutrient booster**, which compensates for deficiencies and strengthens the basis for other supplements.

Dosage: 1 capsule daily (500–1000 mg).

Synergies: Universally combinable – strengthens the effect of many other supplements.

Special features: For me, Moringa is the perfect “basic supplement” – small, inconspicuous, but with broad effects.

C60 Fullerenes in Olive Oil – The Experimental Antioxidant

Description:

C60 (Buckminsterfullerenes) are spherical molecules composed of 60 carbon atoms. In combination with olive oil, they are used as an experimental antioxidant.

Effect:

Animal studies have shown that C60 can significantly extend life. It acts as an extremely powerful antioxidant, neutralizing free radicals and protecting cells from oxidative stress. Its effects in humans have not yet been conclusively proven, but C60 is considered one of the most exciting approaches to increasing longevity in biohacking circles.

Dosage: 1 pipette daily (dissolved in high-quality olive oil).

Synergies: Combines well with Omega-3, astaxanthin and curcumin to form a powerful antioxidant shield.

Special features: C60 is still experimental, but its potential as an antioxidant is fascinating. For me, it belongs in the "Ultimate Protocol."

Chapter 5 – My Supplement Plans

In the previous chapters, I explained the basics of aging and presented the most important supplements in detail. Now I'd like to show you my own protocols—the way I structured them for myself. There's no "one size fits all" solution, but these three plans give you clear guidance: from a minimalist-based entry-level diet to the ultimate high-end stack.

Minimalist & budget-friendly

If you don't want to get into the habit right away or your budget is limited, just a few carefully selected supplements are enough to noticeably influence the aging process.

My minimal stack:

- **Resveratrol (200-500 mg/day)**– Activation of longevity genes and DNA protection.
- **Coenzyme Q10 (100–200 mg/day)**– Energy production in the mitochondria.
- **Omega-3 (2000 mg/day)**– Anti-inflammatory and cell membrane protection.
- **Curcumin (500–1000 mg/day, with piperine)**– Strong anti-inflammatory agent.

➡ This plan is affordable, easy to implement, and lays the foundation for healthy cell function.

Serious & effective

If you are serious and want to see noticeable effects, then the next step is an advanced combination that addresses multiple aging mechanisms simultaneously.

My power stack:

- **NMN or NR (500–1000 mg/day)**– NAD⁺ boost for energy & cell repair.
- **Resveratrol + Quercetin (200-500 mg/day + 500-1000 mg/day)**– Synergy for DNA repair and cell protection.
- **Coenzyme Q10 (100–200 mg/day)**– Mitochondrial protection.
- **Omega-3 (2000 mg/day)**– Anti-inflammatory.
- **Fisetin (500 mg, once per week)**– Senolytic against zombie cells.

➡ This plan covers the most important anti-aging mechanisms: energy, DNA protection, senolysis, and inflammation control.

Ultimate protocol (high-end variant)

If money is no object and you **maximum effect** If you're aiming for this, you can take advantage of the full range of modern supplements. These address all known mechanisms—from mitochondria to DNA to telomeres.

My Ultimate Stack:

- **NMN (500–1000 mg/day) + CoQ10 (100–200 mg/day) + Alpha Lipoic Acid (200–400 mg/day)**– Mitochondria boost & energy optimization.
- **Resveratrol (200-500 mg/day) + Quercetin (500-1000 mg/day) + Astaxanthin (4-12 mg/day)**– DNA repair & antioxidant shield.
- **Fisetin (500 mg, once per week) + Curcumin (500-1000 mg/day, with piperine)**– Senolysis & anti-inflammatory.
- **Berberine (500 mg, twice daily) + Omega-3 (2000 mg/day)**– Metabolic regulation & cell membrane protection.
- **Astragalus extract (TA-65, 10-25 mg/day)**– Potential telomerase activator.
- **Jiaogulan (2 capsules/day)**– AMPK activation, energy & metabolism.
- **Methylene blue (very low dose, 1 capsule/day)**– Mitochondrial efficiency & cognitive power.
- **Moringa (1 capsule/day)**– Plant-based nutrient booster.
- **C60 in olive oil (1 pipette/day)**– Experimental antioxidant.

➡ This is my personal "fountain of youth stack." It combines all the building blocks: energy, protection, regeneration, anti-inflammatory, senolysis, and potentially even telomere lengthening.

Chapter 6 – Application & Practice

Times of administration and combinations

The correct time of intake often determines how well a supplement works. Some substances are fat-soluble, others work best on an empty stomach, and still others require synergistic effects like piperine for optimal absorption.

- **On an empty stomach in the morning:**
 - NMN / NR (NAD⁺ boost for energy)
 - Alpha lipoic acid (most effective without food)

- **With a meal (fat-soluble):**
 - Coenzyme Q10
 - Resveratrol + Quercetin
 - Curcumin (always with piperine)
 - Astaxanthin
 - Omega-3
 - C60 in olive oil
- **Flexible, depending on your needs:**
 - Moringa (can be taken in the morning or at noon)
 - Jiaogulan (possible in the morning or evening)
- **Special features:**
 - Methylene Blue: morning or midday for energy & cognitive clarity.
 - Fisetin: once a week, preferably in the morning with some fat.
 - Berberine: before meals to regulate blood sugar.

Cyclical supplements and rotations

Not every supplement should be taken daily on a long-term basis. Some work better when used in cycles to avoid tolerance development.

- **Fisetin:** High dose once a week, not daily.
- **Berberine:** ideally in phases (e.g. 8 weeks of intake, 2 weeks break).
- **Curcumin & Quercetin:** can be taken continuously, but also make sense in rotations.

This approach ensures that the effect remains strong and the body responds better to the substances.

Quality and purity of the products

Quality is key. Many cheap products contain fillers, artificial binders, or inferior raw materials. I recommend:

- **Capsules instead of pressed tablets**– fewer additives.
- **Trans-resveratrol instead of cheap resveratrol**– only the active form works.
- **Ubiquinol instead of ubiquinone for CoQ10**– better bioavailability.
- **Certified sources of Omega-3**– free of heavy metals.
- **Laboratory-tested suppliers for C60 & Methylene Blue**– absolute purity is crucial here.

It's better to invest a little more in quality – after all, it's your cells that are at stake.

Tips for step-by-step introduction

Many people make the mistake of starting everything at once. This can be overwhelming, and it's difficult to determine which supplement will have which effect. Therefore:

1. **Start with the basics**– e.g. Omega-3, Resveratrol, CoQ10.
2. **Expand after 2–3 weeks**– Add NMN/NR.
3. **Then add cyclical supplements**– Fisetin, Berberine.
4. **Build the protocol step by step**– up to the Ultimate Stack.

This way, you can keep track, observe effects, and ensure that you tolerate each supplement well.

Chapter 7 – Conclusion & Outlook

My personal conclusion

My journey into biohacking began with curiosity – and with a single herb: **Jiaogulan**. From then on, a world opened up for me in which I understood that aging isn't simply a matter of fate, but a process we can influence. It's clear to me: supplements are more than just little helpers. They are targeted tools with which we can increase energy production, protect DNA, eliminate senescent cells, and even influence our telomeres.

Of course, there's no "magic fountain of youth" that works overnight. But the right combination, implemented consistently, makes a noticeable difference – day after day, year after year.

The future of anti-aging research

We are just at the beginning of a revolution. While we optimize the basics with supplements today, scientists are already working on groundbreaking methods such as:

- **Senolytics as medications**— targeted removal of aging cells.
- **Telomerase therapies**— Telomere lengthening at the touch of a button.
- **Gene editing (CRISPR)**— direct repair of DNA damage.
- **Mitochondrial transplantation**— Replacing old power plants with new ones.

The vision is clear: In the coming decades, it will be possible to turn back the biological clock even more precisely. Until then, supplements are our most powerful tool for making time work for us—not against us.

Your individual fountain of youth

What I want to show you with this eBook:
Everyone can find their own “fountain of youth.”

There isn't one perfect plan for everyone. But there are principles everyone can apply:

- **Start with a base** from Omega-3, resveratrol and CoQ10.
- **Expand specifically** with NAD⁺ boosters, senolytics and antioxidants.
- **Adapt everything to yourself**— to your age, your metabolism and your goals.

My path is an example. Yours may be different—and that's a good thing.

The important thing is: take control of your aging process.

Because we cannot stop the passage of time, but we can decide **how we age**: vital, energetic and with the strength to enjoy our lives to the fullest.

imprint

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