



Top 10 Supplements For

LONGEVITY & VITALITY

DISCLAIMER

The information provided in this guide is for educational and informational purposes only and is not intended as medical advice. The discussion of supplements and their potential effects on longevity is based on current research and expert opinion, which may evolve over time. These supplements are not intended to diagnose, treat, cure, or prevent any disease. Always consult with a qualified healthcare professional before starting any new supplement regimen, especially if you have any underlying health conditions, are pregnant or nursing, or are taking medications. The authors and publishers of this guide disclaim any liability for the decisions you make based on the information presented.

WELCOME

Hey! Thank you so much for getting my guide.

When people talk about longevity, they often mean living a long life. But there's a deeper, more important layer to that idea: healthspan—the number of years you live in good health, not just the total number of years you're alive.

It's the difference between simply adding years to life and adding life to those years.

Living to 90 or even 100 doesn't mean much if most of those later years are spent dealing with chronic illness, pain, or loss of independence. That's why conversations around longevity today are focusing more on how we can stay healthier for longer, not just extend the clock.

In this guide, we'll dive into top 10 scientifically proven supplements for longevity.

Are you ready?

LongeviFit



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**IF YOU CAN
DREAM IT, YOU
CAN DO IT.**

– WALT DISNEY.

THE BIGGER PICTURE

Supplements can be helpful—but they're not the foundation of longevity.

If you're not already sleeping well, eating nourishing food, moving your body regularly, and managing stress, no pill will do much to compensate. In truth, no supplement can replace the basics—and trying to use them that way often leads to disappointment.

IF YOU'RE NOT ALREADY SLEEPING WELL, EATING NOURISHING FOOD, MOVING YOUR BODY REGULARLY, AND MANAGING STRESS, NO PILL WILL DO MUCH TO COMPENSATE.




Here's what really builds long-term health:

- Eating mostly whole, minimally processed foods
- Staying physically active
- Getting quality sleep
- Managing stress and nurturing mental health
- Staying socially connected and engaged
- Seeing your doctor for regular check-ups

Think of supplements as tools—not shortcuts. The goal of this guide is not to sell a dream of “anti-aging,” but to offer honest, evidence-based insights into how certain nutrients and compounds might support your body as you grow older.





10 TOP SUPPLEMENTS FOR LONGEVITY

There's no shortage of supplements out there promising more energy, sharper thinking, or a longer life. Some are backed by serious science, others by clever marketing—but if you're here, you're likely looking for honest, well-researched insight into what might actually support a longer, healthier life.

In this chapter, we're going to explore 10 supplements that have gained attention for their potential role in promoting healthy aging. Some of them support basic cellular functions; others target inflammation, energy production, or brain health. A few are still in early stages of research, while others have more robust clinical backing.

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01 NMN – NICOTINAMIDE MONONUCLEOTIDE

NMN is a direct precursor to NAD⁺ (nicotinamide adenine dinucleotide), a molecule critical to cellular energy production and mitochondrial health. NAD⁺ levels decline with age, contributing to metabolic dysfunction, reduced DNA repair, and diminished cellular resilience. NMN supplementation has been shown to restore NAD⁺ levels, which in turn activates sirtuins (SIRT1 and SIRT3), enzymes linked to longevity, genomic stability, and mitochondrial biogenesis.

Animal studies, such as those by Dr. Shin-ichiro Imai and Dr. David Sinclair, have demonstrated that NMN improves insulin sensitivity, enhances mitochondrial function, and increases physical endurance in aging mice. Early human studies, including trials from Keio University and Washington University, suggest NMN is safe and may modestly improve aerobic capacity and metabolic biomarkers.



BENEFITS

- Improved cellular energy and metabolism
- Enhanced cognitive and physical performance
- Support for cardiovascular and metabolic health

SOURCING



Look for purity-tested NMN from reputable manufacturers.



RISKS & CAUTIONS

- Mild side effects may include nausea, flushing, or digestive discomfort.
- Pregnant or breastfeeding individuals
- People taking medications that affect NAD⁺ pathways

DOSAGE



Typical dosage: 250–500 mg/day.

02 RESVERATROL

Resveratrol is a natural polyphenol found in red grapes, berries, and peanuts. It is best known for activating sirtuins, particularly SIRT1, mimicking some of the cellular benefits of calorie restriction—a well-documented method for extending lifespan in multiple organisms. Resveratrol also exerts antioxidant and anti-inflammatory effects by modulating NF- κ B and other inflammatory pathways.

In animal models, resveratrol has extended lifespan and improved markers of cardiovascular and metabolic health. Human studies are more mixed but have shown benefits in insulin sensitivity, endothelial function, and inflammation reduction in at-risk populations. A notable study in *Cell Metabolism* (Timmers et al., 2011) found that resveratrol supplementation improved metabolic profiles in obese men, though effects were modest.



BENEFITS

- Improved insulin sensitivity
- Reduced inflammation
- Cardiovascular and cognitive support



SOURCING

Choose supplements with clearly labeled trans-resveratrol content.



RISKS & CAUTIONS

- High doses can cause gastrointestinal issues. May interact with blood thinners and NSAIDs.
- People on anticoagulants or NSAIDs
- Pregnant or nursing individuals

DOSAGE



Typical dosage: 100–500 mg/day. Trans-resveratrol is the active form.

03 OMEGA-3 FATTY ACIDS (EPA/DHA)

Omega-3 fatty acids, particularly EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid), are essential fats with anti-inflammatory, neuroprotective, and cardioprotective effects. They incorporate into cell membranes, making them more fluid and functional, which is particularly important for neurons and heart cells. EPA and DHA also downregulate pro-inflammatory cytokines and upregulate anti-inflammatory molecules via pathways like PPARs (peroxisome proliferator-activated receptors).

Large-scale human studies, including the GISSI-Prevenzione trial and the VITAL study, have demonstrated that omega-3 supplementation reduces cardiovascular mortality, improves triglyceride levels, and supports cognitive health. Some observational studies have linked higher omega-3 status with reduced biological aging markers, such as telomere length.



BENEFITS

- Heart and brain health
- Reduced systemic inflammation
- Joint and eye support

SOURCING



Choose products tested for heavy metals. Look for IFOS certification or similar.



RISKS & CAUTIONS

- May cause fishy aftertaste or mild gastrointestinal discomfort. High doses can increase bleeding risk.
- Individuals on high-dose blood thinners (unless advised by a doctor)

DOSAGE



EPA + DHA combined: 1000–2000 mg/day.

04 CURCUMIN (FROM TURMERIC)

Curcumin is the active compound in turmeric, known for its potent anti-inflammatory and antioxidant properties. It inhibits NF- κ B, a key regulator of chronic inflammation, and modulates the expression of various pro-inflammatory cytokines. Curcumin also enhances cellular stress responses by activating Nrf2, which upregulates antioxidant genes.

Human clinical trials have shown that curcumin supplementation can reduce markers of inflammation, improve joint health, and support cognitive function. A meta-analysis published in *Phytotherapy Research* (2016) confirmed curcumin's effectiveness in reducing systemic inflammation (CRP levels) in various populations.



BENEFITS

- Anti-inflammatory and antioxidant support
- Cognitive and joint health
- May protect against neurodegenerative and cardiovascular conditions



SOURCING

Choose curcumin supplements standardized to 95% curcuminoids.



RISKS & CAUTIONS

- Generally safe. High doses may cause gastrointestinal discomfort. May interact with anticoagulants or medications that affect liver enzymes.

DOSAGE



500–1000 mg/day of curcumin with piperine (black pepper extract) for absorption.

05 COENZYME Q10 (COQ10)

CoQ10 is a lipid-soluble antioxidant and essential component of the mitochondrial electron transport chain. It supports ATP production and protects cells from oxidative damage. CoQ10 levels decline with age and are depleted by statin use.

Clinical trials have shown that CoQ10 supplementation improves endothelial function, reduces blood pressure, and enhances energy levels, particularly in individuals with heart failure or chronic fatigue. A 2013 meta-analysis in *The Journal of the American College of Cardiology* highlighted CoQ10's benefits for improving heart function in heart failure patients.



BENEFITS

- Supports mitochondrial energy production
- Cardiovascular health and exercise endurance
- May reduce oxidative stress



SOURCING

Select CoQ10 supplements with ubiquinol and third-party testing for potency and purity.



RISKS & CAUTIONS

- Well tolerated. Possible mild side effects include nausea, headache, or insomnia.

DOSAGE



100–300 mg/day. Ubiquinol form has better absorption than ubiquinone.

06 VITAMIN D3 (CHOLECALCIFEROL)

Vitamin D3 is a fat-soluble vitamin that functions more like a hormone, playing a critical role in calcium metabolism, immune regulation, and cellular growth. It binds to vitamin D receptors (VDRs), which are present in nearly every tissue in the body, and influences gene expression related to inflammation, cellular repair, and immune resilience.

Numerous observational studies link adequate vitamin D levels with reduced risk of all-cause mortality, cardiovascular disease, cancer, and cognitive decline. Randomized controlled trials (e.g., the VITAL study) have shown modest reductions in cancer death and autoimmune diseases with supplementation, particularly in those who are deficient.



BENEFITS

- Immune support and inflammation regulation
- Bone and muscle health
- Potential protection against age-related diseases

SOURCING



Look for D3 (not D2), ideally from lanolin or lichen. Third-party tested for purity.



RISKS & CAUTIONS

- High doses may cause hypercalcemia, kidney stones, or toxicity. Interacts with certain medications like corticosteroids and weight loss drugs.

DOSAGE



1000–4000 IU/day is typical. D3 (cholecalciferol) is more effective than D2.

07 MAGNESIUM (CITRATE, GLYCINATE)

Magnesium is a cofactor in over 300 enzymatic reactions, including those related to ATP production, DNA repair, muscle contraction, and nervous system regulation. It modulates NMDA receptors and influences insulin signaling, circadian rhythm, and inflammation.

Epidemiological studies have linked higher magnesium intake with lower risk of cardiovascular disease, type 2 diabetes, and frailty. Clinical trials show magnesium supplementation improves sleep, reduces blood pressure, and enhances insulin sensitivity.



BENEFITS

- Supports muscle, nerve, and cardiovascular function
- Improved sleep quality and insulin sensitivity
- Reduces risk of age-related metabolic diseases

SOURCING



Avoid poorly absorbed forms like magnesium oxide. Look for third-party tested.



RISKS & CAUTIONS

- High doses can cause diarrhea (especially with magnesium oxide). Caution in people with kidney disease.

DOSAGE



200–400 mg/day. Magnesium glycinate and citrate are well-absorbed.

08 QUERCETIN

Quercetin is a flavonoid with senolytic, antioxidant, and anti-inflammatory properties. It scavenges free radicals, inhibits NF- κ B, and modulates key enzymes related to inflammation. In combination with compounds like dasatinib, quercetin has shown senolytic activity—removing damaged "senescent" cells that accumulate with age.

Animal studies suggest quercetin extends lifespan and improves metabolic and cardiovascular health. Human data is still limited, but early trials show reduced inflammation, improved immune function, and antiviral effects.



BENEFITS

- Senolytic activity (clears senescent cells)
- Immune and vascular support
- May improve endurance and metabolic health

SOURCING



Choose products standardized for quercetin dihydrate.



RISKS & CAUTIONS

- Generally safe; high doses may cause headache or digestive upset. May interact with antibiotics or blood thinners.

DOSAGE



500–1000 mg/day. Best taken with a fat-containing meal.

09 ASTAXANTHIN

Astaxanthin is a carotenoid pigment derived from microalgae with powerful antioxidant properties. It stabilizes cell membranes and neutralizes reactive oxygen species (ROS), especially in mitochondria and the skin. It also modulates inflammatory pathways like COX-2 and enhances immune cell function.

Animal studies and small human trials suggest astaxanthin improves skin health, cardiovascular markers, and exercise recovery. A 2011 double-blind trial found it significantly reduced oxidative stress and inflammation markers in healthy adults.



BENEFITS

- Mitochondrial and skin protection
- Supports eye, heart, and immune health
- May reduce fatigue and enhance endurance



SOURCING

Choose natural astaxanthin from microalgae. Look for third-party tested products.



RISKS & CAUTIONS

- Very safe overall. High doses may tint skin slightly orange or pink.

DOSAGE



4–12 mg/day. Naturally derived from *Haematococcus pluvialis* is superior to synthetic.

10

ALPHA-LIPOIC ACID (ALA)

ALA is a mitochondrial antioxidant that also regenerates other antioxidants (vitamins C and E, glutathione). It improves insulin sensitivity, reduces oxidative stress, and helps recycle cellular energy via the Krebs cycle. ALA can also cross the blood-brain barrier, offering neuroprotective effects.

Clinical trials show benefits in diabetic neuropathy, metabolic syndrome, and cognitive function. ALA may reduce biomarkers of aging and inflammation, especially in older adults with metabolic conditions.



BENEFITS

- Supports glucose metabolism and nerve health
- Mitochondrial and cognitive protection
- Reduces oxidative stress and inflammation

SOURCING

Seek stabilized R-ALA with third-party testing.



RISKS & CAUTIONS

- Generally safe; may cause nausea or skin rash. Can lower blood sugar—monitor if diabetic.

DOSAGE

300–600 mg/day. R-ALA is more bioavailable than standard ALA.



