

NAD+ levels in skeletal muscle

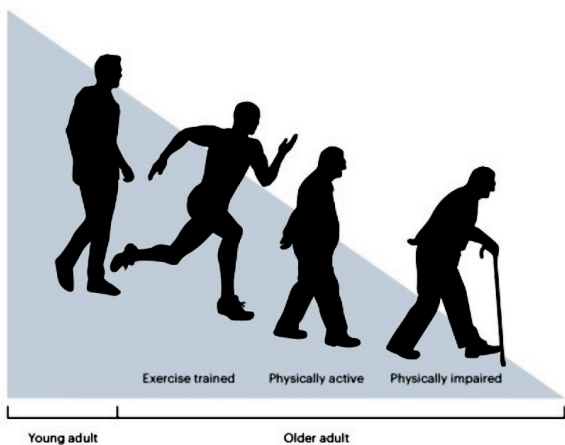


Image: NAD+ levels in skeletal muscle correlate with healthy aging. Adapted from Janssens, G.E. et al., Nat Aging 2: 254–263 (2022).

## 6 MONTHS AND BEYOND:

### Healthy aging and NAD+ go hand-in-hand

With consistent use, the sustained, elevated levels of NAD+ at six months and beyond are supporting your overall well-being and health. NAD+ declines by as much as 50% every 20 years, according to research. It's important to maintain your NMN supplementation: Research shows that four weeks after discontinuation of NMN, NAD+ levels returned to pre-supplementation levels [7]. Just like with exercise, sleep, and diet - **consistency is key for long-term results**. Human studies are beginning to show that healthy aging and NAD+ abundance go hand-in-hand [9].

<https://www.elysiumhealth.com/blogs/aging101/benefits-of-nmn>

#### References:

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- [3] Grozio, A., et al., Nature Metabolism 1: 47-57 (2019).
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- [6] Fu, J., et al., J Biol Chem. 287 (29): 24460–24472 (2012).
- [7] Okabe, K., et al., Frontiers in Nutrition 9: 868640 (2022).
- [8] Igarashi, M. et al., NPG Aging 8: 5 (2022).
- [9] Janssens, G.E. et al., Nat Aging 2: 254–263 (2022).
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- [11] Yoshino, M. et al., Science 372 (6547): 1224-1229 (2021).



Live a longer and healthier life!  
Don't settle for just one ingredient to support a healthy anti-aging process.

ΣΤΟΙΧΕΙΑ ΣΥΜΠΛΗΡΩΜΑΤΟΣ / SUPPLEMENT FACTS		
Συστατικά/ Ingredients	περιεχόμενο ανά 3 κάψουλες/ amount per serving 3 caps	Δ.Τ.Α. / N.R.V (%)*
Nicotinamide Mono Nucleotide	500 mg	**
Quercetin	500 mg	**
Resveratrol	500 mg	**
Spermidine	5 mg	**
Vitamin D3 (as cholecalciferol)	5000 IU (125 mcg)	2.500%
B-complex which contains:	10 mg	**
Vitamin B1 (Thiamin)	1.1 mg	100%
Vitamin B2 (Riboflavin)	1.4 mg	100%
Vitamin B3 (Niacin)	16 mg-NE*	100%
Vitamin B5 (Pantothenic acid)	6 mg	100%
Vitamin B6 (Pyridoxine)	1.4 mg	100%
Vitamin B7 (Biotin)	50 µg	100%
Vitamin B9 (Folic acid)	200 µg	100%
Vitamin B12 (Cobalamin)	2.5 µg	100%

Δόση: 2-3 κάψουλες την ημέρα / Δόσεις ανά συσκευασία: 30-45  
Serving size: 2-3 capsules per day/ Servings per container: 30-45

**aeonion** NAD Booster is a unique composition that offers a longevity complex with 4 revolutionary ingredients, along with the complete B complex of vitamins and vitamin D3, which has the ability to support a multitude of processes such as **oxidative stress, cellular energy production, the shortening of telomeres** - the protective caps on the ends of chromosomes that shorten as cells age, **DNA integrity and repair mechanisms** to ensure the healthy aging of your body along with the **improvement of fertility and reproductive health in women and men.**



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“when statistics are against you”



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### Natural food supplement for cellular regeneration & antiaging

- ✓ increases cellular energy and facilitates DNA repair, making it a perfect anti-aging ingredient.
- ✓ reduces fine lines and wrinkles by promoting elastin and collagen synthesis and improving cell function, leading to a smooth, firm and youthful appearance.
- ✓ counteracts the effects of aging by activating cellular autophagy and facilitating the removal of damaged cells and matter.
- ✓ strengthens hair growth by prolonging the growth phase (anagen phase), maintaining an average of 20-25% more hair per day
- ✓ helps rejuvenate the skin at the most fundamental level and boosts resilience against environmental damage, fighting aging in multiple levels.

# Benefits Of NMN Supplementation:

## From Day 1 To 6 Months

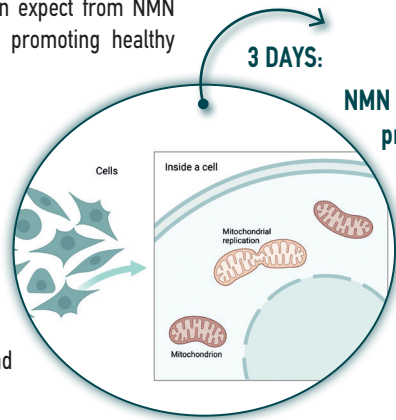
Oral supplementation with NMN is clinically proven to boost NAD+ levels. Here's a time course of the benefits you can expect from NMN supplementation, from supporting mitochondria to promoting healthy muscle function.

### Key Takeaways:

- Oral supplementation with NMN increases NAD+ levels by 40%
- Clinical trials are beginning to demonstrate various benefits of NMN supplementation in humans, from supporting mitochondrial health and cellular energy production to muscle function and healthy insulin sensitivity.

NMN or nicotinamide mononucleotide is a safe and efficient precursor to NAD+, the essential coenzyme and key metabolite found in every cell of the human body, and involved in over 500 different cellular reactions. Read on to explore the evidence-based benefits you can expect from NMN supplementation.

of NAD+ metabolites in blood plasma within the first few hours of NMN supplementation—and they continue to rise steadily, suggesting increased utilization of NAD+ in cells and tissues [4]. Cells are already taking advantage of increased NAD+ levels to support hundreds of critical cellular processes.



**3 DAYS:**

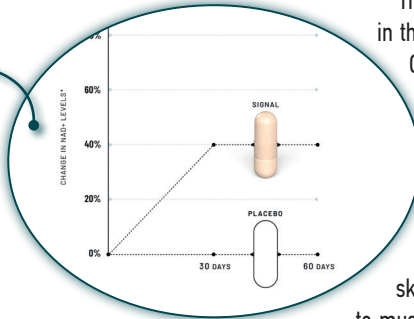
### NMN promotes mitochondrial health and cellular energy production

NAD+ levels continue to rise, now benefiting the cell's powerhouses and the place where cellular energy is made: the mitochondria. A preclinical study demonstrated that treatment of human kidney cells in culture with NMN for three days resulted in increased mitochondrial replication [5].

**30 DAYS:**

### NMN increases NAD+ levels by 40%

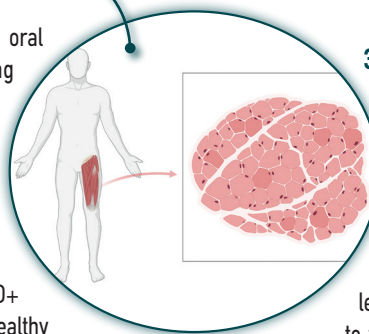
A human clinical study examining NMN supplementation at a dose of 250 mg per day in healthy adults showed 40% higher NAD+ levels in the blood compared to placebo at 30 days [7].



**6 WEEKS:**

### NMN and muscle benefits

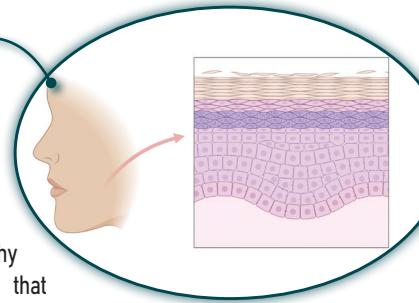
A human clinical study found that oral supplementation of NMN at a dose of 250mg per day for 6 weeks partly improved muscle strength and performance in healthy older men [8]. Another human clinical study published in *Nature Aging* demonstrated that NAD+ was one of the most depleted metabolites in aging muscle and that high levels of NAD+ were associated with healthy muscle function [9].



**8 WEEKS:**

### NMN and skin benefits

Advanced glycation end products, or AGEs, are markers of skin aging. A small clinical trial involving healthy postmenopausal women found that NMN supplementation for eight weeks at 300mg of NMN per day resulted in decreased AGEs in the skin [10].

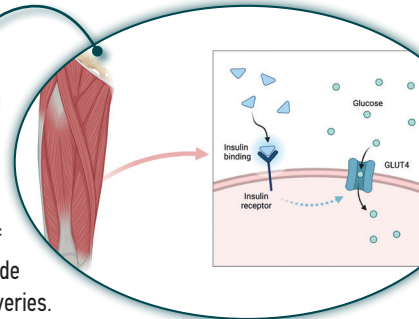


**10 WEEKS:**

### NMN supports healthy insulin sensitivity

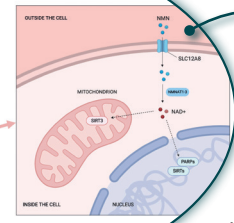
There's more happening in the muscles at 10 weeks.

One clinical study of prediabetic women made two important discoveries. The first was an increase in NMN metabolites in skeletal muscle tissue, suggesting that the muscles were using more NAD+. The second finding suggested that NMN may support healthy insulin sensitivity in skeletal muscle and helps regulate the expression of genes related to muscle remodeling - the turnover of muscle proteins, organelles, and cell populations. Participants in the trial were supplemented with 250mg of NMN per day [11].



**HOOR 1:**

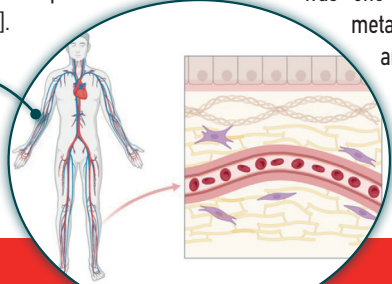
### NMN enters cells



Preclinical studies in mice on the pharmacokinetics of NMN suggest that it's absorbed from the gut into blood circulation within minutes and transported into tissues between 10 and 30 minutes [1, 2]. That's when the magic (or biochemistry) happens. The NMN is immediately utilized for NAD+ biosynthesis. Research suggests that fast uptake is made possible by an NMN-specific transporter. A study published in *Nature Metabolism* identified the transporter, which is especially concentrated in the small intestine.[3].

**5 HOURS: NAD+ levels begin to rise**

Studies in humans show increased levels



**3 MONTHS:**

### NMN supports gait speed

It's been three months, and you've logged 60 days of 40% higher NAD+ in your cells and tissues. Benefits at the cellular and tissue level are beginning to translate to functional benefits. One clinical trial found an improvement in walking speed in healthy, elderly men who took 250mg of NMN per day [8].

