



GENORACLE

NMN

Purity: >97% (HPLC on request) | Molecular Formula: C₃₂H₄₂N₉O₂₂P₃
Molecular Weight: 997.65 g/mol | Sequence: Non-peptide

DESCRIPTION:

Nicotinamide adenine dinucleotide (NAD⁺) and its reduced form NADH are essential cofactors for multiple cellular metabolic reactions and has a central role in energy production. Nicotinamide mononucleotide (NMN) is a key NAD⁺ intermediate that has been shown to enhance NAD⁺ biosynthesis. NMN has suppressed age-associated body weight gain, enhanced energy metabolism, promoted physical activity, improved insulin

sensitivity and plasma lipid profile, enhanced eye function and other pathophysiologies. It has also prevented age-associated gene expression changes in key metabolic organs and enhanced mitochondrial oxidative metabolism and mitonuclear protein imbalance in skeletal muscle. NAD⁺ with the addition of NMN enhances physical performance and serves as an effective anti-aging intervention in humans.

PROTOCOL:

Content & Potency: 250mg capsule provided in a quantity of 60 capsules
Suggested dosage: Take 2 capsules once daily

CLINICAL RESEARCH:

Nicotinamide Mononucleotide: Exploration of Diverse Therapeutic Applications of a Potential Molecule

Nicotinamide mononucleotide (NMN) is a nucleotide that is most recognized for its role as an intermediate of nicotinamide adenine dinucleotide (NAD⁺) biosynthesis. Although the biosynthetic pathway of NMN varies between eukaryote and prokaryote, two pathways are mainly followed in case of eukaryotic human—one is through the salvage pathway using nicotinamide while the other follows phosphorylation of nicotinamide riboside. Due to the unavailability of a suitable transporter, NMN enters inside the mammalian cell in the form of nicotinamide riboside followed by its subsequent conversion to NMN and NAD⁺. This particular molecule has demonstrated several beneficial

pharmacological activities in preclinical studies, which suggest its potential therapeutic use. Mostly mediated by its involvement in NAD⁺ biosynthesis, the pharmacological activities of NMN include its role in cellular biochemical functions, cardioprotection, diabetes, Alzheimer's disease, and complications associated with obesity. The recent groundbreaking discovery of anti-ageing activities of this chemical moiety has added a valuable essence in the research involving this molecule. This review focuses on the biosynthesis of NMN in mammalian and prokaryotic cells and mechanism of, absorption along with the reported pharmacological activities in murine model.

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