NADH

PRODUCT INFORMATION

NICOTINAMIDE-ADENINE-DINUDEOTIDE

Vesta Ingredients has been a leader in the nutraceuticals industry for over 25 years. The superior quality of Vesta Brand raw ingredients has ensured the success of our clientele.

What is NADH?

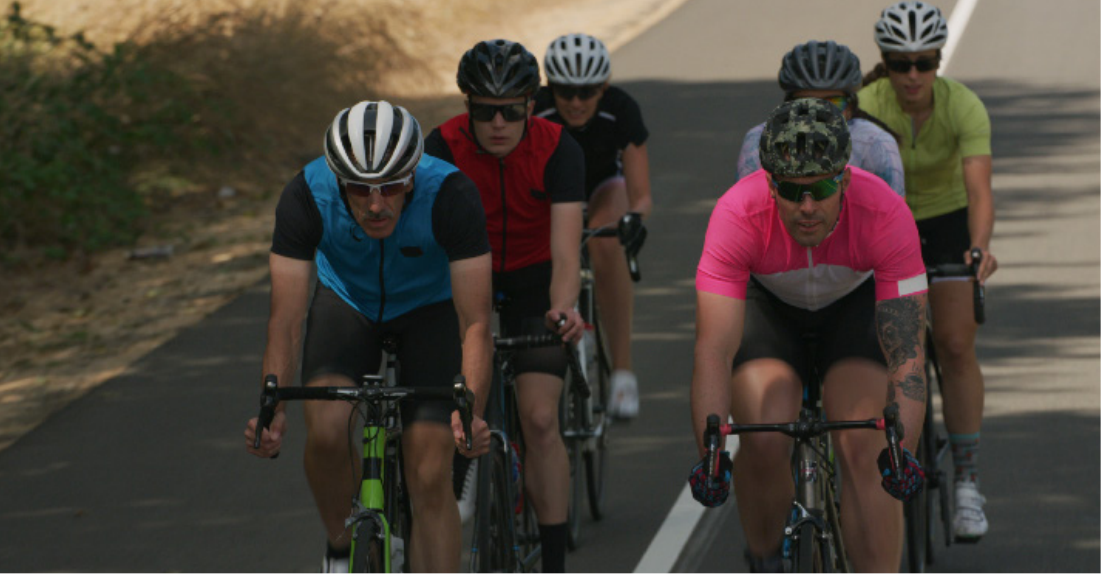
Vesta NADH is nicotinamide adenine dinucleotide (NAD). It is a coenzyme found in all living cells. The compound is a dinucleotide because it consists of two nucleotides joined by their phosphate groups. One nucleotide contains an adenine base and the other nicotinamide. Nicotinamide adenine dinucleotide exists in two forms: an oxidized and reduced form abbreviated as NAD+ and NADH respectively.

In metabolism, nicotinamide adenine dinucleotide is involved in redox reactions, carrying electrons from one reaction to another. The coenzyme is, therefore, found in two forms in cells: NAD+ is an oxidizing agent – it accepts electrons from other molecules and becomes reduced. This reaction forms NADH, which can then be used as a reducing agent to donate electrons. These electron transfer reactions are the main function of NAD. However, it is also used in other cellular processes, most notably a substrate of enzymes that add or remove chemical groups from proteins, in posttranslational modifications. Because of the importance of these functions, the enzymes involved in NAD metabolism are targets for drug discovery.

In organisms, NAD can be synthesized from simple building-blocks (de novo) from the amino acids tryptophan or aspartic acid. In an alternative fashion, more complex components of the coenzymes are taken up from food as niacin. Similar compounds are released by reactions that break down the structure of NAD. These preformed components then pass through a salvage pathway that recycles them back into the active form. Some NAD are converted into nicotinamide adenine dinucleotide phosphate (NADP); the chemistry of this related coenzyme is similar to that of NAD, but it has different roles in metabolism.

Although NAD+ is written with a superscript plus sign because of the formal charge on a particular nitrogen atom, at physiological pH, for the most part, it is actually a singly charged anion (charge of minus 1), while NADH is a doubly charged anion.

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.



Vesta Nutra®

Why Take NADH?

Many researchers believe that NADH might be the key to healthy aging, but that is just the beginning of its many benefits. Our bodies must be able to process the alcohol in adult beverages. The alcohol must be detoxified by enzymes and that is where NAD+ comes in. It must first detoxify the alcohol into sugar, and then turn the sugar into energy. Energy metabolism is one of the essential functions of NAD+, so burning fats and proteins in cells are one of its jobs. This works for carbs too, as glycolysis.
Surprisingly, this energy booster can also improve your sleep. Our circadian rhythms dictate our body temperatures, hormone regulation and energy metabolism.
NAD regulates them and keeps them all in sync. For all these reasons, plus the muscle and breathing benefits, NADH makes a great sports supplement.

Benefits of NADH

- Improve mental clarity
- Help with focus and concentration
- Increase energy levels
- Help improve physical performance
- Can reduce alcohol's effect on liver
- Help boost mood

Uses and Product Integration:

- Dietary Supplement
- Capsules/Tablets/Powder

Product Information:

- Appearance: Powder
- Odor/Taste: Characteristic
- Dosage: 5-20mg

Packing & Storage:

- Store in a cool dry place away from prolonged, direct sunlight exposure
- Do not freeze/thaw
- Package Unit: 5kg

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SPECIALTY INGREDIENTS

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