

PRESCRIPTION MONOGRAPH

Compounded Active Ingredients: NAD⁺

Form: Sublingual Rapid Dissolve Tablet

Drug Class:

- Nicotinamide adenine dinucleotide (NAD⁺) is recognized as a vital coenzyme present in all living cells
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Mechanism of Action¹:

NAD⁺ is a coenzyme central to cellular metabolism. It functions as an electron carrier in redox reactions and is intended to play a critical role in:

- ATP production via mitochondrial oxidative phosphorylation
- DNA repair (through activation of PARP enzymes)
- Sirtuin activation, influencing aging, inflammation, and metabolic regulation
- Neurotransmitter modulation, especially in detox and neurodegenerative pathways

When administered exogenously, NAD⁺ is intended to replenish intracellular stores, enhance mitochondrial function, and support cellular repair.

Indications Commonly Prescribed For:

- Treatment of pellagra (severe niacin deficiency)
 - Adjunctive treatment in substance use detox (alcohol, opioids, etc.)
 - Anti-aging and longevity protocols
 - Cognitive enhancement and neurodegenerative disorders (e.g., Alzheimer's) – under study
 - Chronic fatigue syndrome, fibromyalgia
 - Athletic recovery and cellular repair
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Before Use: Let your health care provider know if you have any medication allergies before you take this compounded preparation. Let your health care provider know if you have any liver or kidney problems. Let your healthcare provider know of all supplements you are currently taking.

Contraindications:

- Hypersensitivity to NAD⁺ or formulation excipients
 - Use cautiously in individuals with active gout (may increase uric acid)
 - Not recommended during acute severe illness without supervision
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Cautions: Let your Healthcare provider know if you experience any adverse side effects.

How to Use: This compounded preparation is in the form of a sublingual rapid dissolve tablet. Place tablet under tongue to dissolve completely. Do not chew or crush the capsule. Once the tablet has fully dissolved, do not rinse your mouth, brush your teeth, or consume food or beverages for at least five minutes to allow absorption. If you miss a dose, take as soon as you remember, but not at the time for the next dose. The desired results may take up to several weeks.

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Warnings and Precautions:

- Rapid infusion may cause adverse reactions: anxiety, dyspnea, hypotension
 - Electrolyte disturbances possible with prolonged infusions
 - Limited safety data in pregnancy and lactation
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Adverse Reactions:

Common:

- Nervousness
- Sleep disturbances
- Fatigue

Serious:

- Hypotension (from vasodilation)
 - Bradycardia (if infused too rapidly)
 - Allergic reaction (rare)
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Interactions:

- No known major drug interactions
 - May theoretically interact with chemotherapeutics that rely on redox mechanisms
 - Oral niacin/nicotinamide should be spaced from NAD⁺ to reduce GI effects
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Use in Specific Populations:

- Pregnancy & Lactation: Not enough evidence; avoid unless prescribed
 - Pediatrics: Safety not established
 - Elderly: Well-tolerated in wellness protocols, but monitor comorbidities
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Storage:

- Store in original container at room temperature (up to 30°C or 86°F)
 - Store in a cool dry place away from heat, sunlight, and moisture
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Monitoring Parameters:

- Monitor during infusion for vital signs, discomfort
 - Consider pre- and post-treatment electrolyte and liver function labs in high-dose regimens
 - Clinical assessment of fatigue, cognition, or detox symptoms if applicable
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Citations:

1. Conlon NJ. The Role of NAD⁺ in Regenerative Medicine. *Plast Reconstr Surg.* 2022 Oct 1;150(4 Suppl):41S-48S. doi: 10.1097/PRS.0000000000009673. Epub 2021 Sep 28. PMID: 36170435; PMCID: PMC9512238
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