



NATURAL HEALTH PRODUCT

NICOTINAMIDE MONONUCLEOTIDE

This monograph is intended to serve as a guide to industry for the preparation of Product Licence Applications (PLAs) and labels for natural health product market authorization. It is not intended to be a comprehensive review of the medicinal ingredient.

Notes

- Text in parentheses is additional optional information which can be included on the label at the applicant’s discretion.
- The solidus (/) indicates that the terms and/or statements are synonymous. Either term or statement may be selected by the applicant on the label.

Date

August 28, 2024

Proper name(s), Common name(s), Source information

Table 1. Proper name(s), Common name(s), Source information

Proper name(s)	Common name(s)	Source information
		Source ingredient(s)
3-(Aminocarbonyl)-1-(5-O-phosphonato-beta-D-ribofuranosyl)pyridinium	<ul style="list-style-type: none"> • Nicotinamide mononucleotide • NMN 	Nicotinamide mononucleotide

References: Proper name: NIH 2024; Common names: NIH 2024; Source information: NHPID 2024.

Route of administration

Oral

Dosage form(s)

This monograph excludes foods or food-like dosage forms as indicated in the Compendium of Monographs Guidance Document.

Acceptable dosage forms for oral use are indicated in the dosage form drop-down list of the web-based Product Licence Application form for Compensial applications.



Use(s) or Purpose(s)¹

- Source of (an) antioxidant(s)/Provides (an) antioxidant(s) (Picciotto et al. 2016)².
- Source of (an) antioxidant(s)/Provides (an) antioxidant(s) that help(s) fight/protect (cell) against/reduce (the oxidative effect of/the oxidative damage caused by/cell damage caused by) free radicals (Picciotto et al. 2016)².
- A factor in the maintenance of good health (HC 2023).
- A factor in normal growth and development (HC 2023).
- Supports biological functions which play a key role in the maintenance of good health (HC 2023).
- Helps normal growth and development (HC 2023).
- Helps in energy metabolism/(and) tissue formation (HC 2023).
- Helps (to) maintain/support the body's ability to metabolize nutrients (HC 2023)³.
- NMN is a NAD⁺ precursor which is a factor in normal growth and development (Abdellatif et al. 2021; Blanco-Vaca et al. 2021; Covarrubias et al. 2021).
- NMN is a NAD⁺ precursor which helps to support biological functions which play a key role in the maintenance of good health (Abdellatif et al. 2021; Blanco-Vaca et al. 2021; Covarrubias et al. 2021).
- NMN is a NAD⁺ precursor which is an important cofactor in energy metabolism (Abdellatif et al. 2021; Blanco-Vaca et al. 2021; Covarrubias et al. 2021).

Notes:

- ¹NMN is a vitamin B3 derivative and therefore uses associated with vitamin B3 as per the Multi-vitamin/mineral Supplements Monograph are acceptable.
- ²If NMN is combined with other medicinal ingredients with antioxidant properties, there is an option to use the antioxidant claims in plural. The singular should be used when the product only contains one chemical substance (e.g., NMN) as the medicinal ingredient associated with the antioxidant claim.
- ³This claim is not intended to convey that taking these vitamins helps to boost metabolism, upregulate a bodily system and/or directly convert food to energy. Inferring such claims would be misleading and is not permitted. In order to avoid any misinterpretation of this claim, the terms 'carbohydrates, fats, proteins, etc.' **must not** be used to further specify the term 'nutrients'.
- The above uses can be combined on the product label (e.g., Source of an antioxidant and helps normal growth and development).

Dose(s)

Subpopulation(s)

Adults 18 years and older



Quantity(ies)

Antioxidant

Not to exceed 1,200 milligrams of NMN, per day; and 600 milligrams per single dose (Huang 2022; Liao et al 2021; Okabe et al. 2022).

Other uses

3 – 1,200 milligrams of NMN, per day; not to exceed 600 milligrams per single dose (HC 2023; Huang 2022; Liao et al 2021; Okabe et al. 2022).

Direction(s) for use

No statement required.

Duration(s) of use

Products providing 250 milligrams or less of NMN, per day

Ask a health care practitioner/health care provider/health care professional/doctor/physician for use beyond 12 weeks (Katayoshi et al. 2023; Okabe et al. 2022).

Products providing more than 250 milligrams of NMN, per day

Ask a health care practitioner/health care provider/health care professional/doctor/physician for use beyond 8 weeks (Yi et al. 2023; Liao et al. 2021).

Risk information

Caution(s) and warning(s)

- **Ask a healthcare practitioner/health care provider/health care professional/doctor/physician before use if you are pregnant or breastfeeding.**
- **Ask a healthcare practitioner/health care provider/health care professional/doctor/physician before use if you have diabetes (Yoshino et al. 2021).**

Contraindication(s)

No statement required.



Known adverse reaction(s)

No statement required.

Non-medicinal ingredients

Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database.

Storage conditions

Must be established in accordance with the requirements described in the *Natural Health Products Regulations*.

Specifications

- The finished product specifications must be established in accordance with the requirements described in the Natural and Non-prescription Health Products Directorate (NNHPD) Quality of Natural Health Products Guide.
- The medicinal ingredient must comply with the requirements outlined in the NHPID.



EXAMPLE OF PRODUCT FACTS:

Consult the Guidance Document, [Labelling of Natural Health Products](#) for more details.

Product Facts	
Medicinal ingredient in each capsule	
Nicotinamide mononucleotide	XX mg
Uses	
<ul style="list-style-type: none"> • Source of an antioxidant. • Source of an antioxidant that helps protect cell against free radicals. • A factor in the maintenance of good health. • A factor in normal growth and development. • Supports biological functions which play a key role in the maintenance of good health. • Helps normal growth and development. • Helps in energy metabolism and tissue formation. • Helps (to) maintain the body’s ability to metabolize nutrients. • NMN is a NAD+ precursor which is a factor in normal growth and development. • NMN is a NAD+ precursor which helps to support biological functions which play a key role in the maintenance of good health. • NMN is a NAD+ precursor which is an important cofactor in energy metabolism. 	
Warnings	
If applicable¹:	
Allergens: food allergen, gluten (gluten source), sulphites	
Contains aspartame	
Ask a health care practitioner before use if • you are pregnant or breastfeeding • you have diabetes.	
Directions	
Adults 18 years and older: • Take X capsule(s), X time(s) a day • Ask a health care practitioner for use beyond 12 weeks ² /for use beyond 8 weeks ³ .	
Other information	
(Add storage information)	
Non-medicinal ingredients	
List all NMIs	
Questions? (Call) 1-XXX-XXX-XXXX	

¹This section can be removed from the table if the product contains no allergen or aspartame.

²Products providing 250 milligrams or less of NMN, per day.

³Products providing more than 250 milligrams of NMN, per day.

References cited

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