

NATURAL HEALTH PRODUCT

FREE PLANT STEROLS

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 PLA and product 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.

Date

February 23, 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 materials(s)	Part(s)
Free plant sterols	Free plant sterols	 Arachis hypogaea Brassica napus	Whole plant
		 Glycine max Gossypium herbaceum Helianthus annuus	Seed
		Olea europaeaSecale cerealTriticum aestivumZea mays	Whole plant

References: Proper name: EC 2002, FDA 2001; Common name: EC 2002, FDA 2001; Source information: USDA 2023, EC 2002, Kerckhoffs et al. 2002, FDA 2001.

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 Compendial applications.

Use(s) or Purpose(s)

- Helps lower blood total and low density lipoprotein (LDL) cholesterol (Lau et al. 2005; Thomsen et al. 2004; FDA 2001).
- Helps lower bad cholesterol (Lau et al. 2005; Thomsen et al. 2004; FDA 2001).
- Helps maintain healthy cholesterol levels (Lau et al. 2005; Thomsen et al. 2004; FDA 2001).

Note: The above uses can be combined on the product label (e.g., Helps lower blood total and low density lipoprotein (LDL) cholesterol and maintain healthy cholesterol levels).

Dose(s)

Subpopulation(s)

Adults 18 years and older

Quantity(ies)

0.74 – 3 grams of Free plant sterols per day, including at least 80 % of Combined beta-Sitosterol, Campesterol and Stigmasterol, per day (FDA 2023; Lau et al. 2005; Thomsen et al. 2004; EC 2002; Kerckhoffs et al. 2002; FDA 2001).

Direction(s) for use

Take with food (FDA 2023; Lau et al. 2005; Thomsen et al. 2004; FDA 2001).

Duration(s) of use

No statement required.

Risk information

Caution(s) and warning(s)

Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you are pregnant or breastfeeding.

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, <u>Labelling of Natural Health Products</u> for more details.

Product Facts

Medicinal ingredient in each scoop

Free plant sterols (Arachis hypogaea – whole plant)

XX% of combined beta-Sitosterol, Campesterol and Stigmasterol

Uses

- Helps lower blood total and low density lipoprotein (LDL) cholesterol.
- Helps lower bad cholesterol
- Helps maintain healthy cholesterol levels.

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.

Directions

Adults 18 years and older: • Take X scoop(s), X time(s) a day • Take with food.

Other information

(Add storage information)

Non-medicinal ingredients

List all NMIs

Questions? (Call) 1-XXX-XXX-XXXX

References cited

EC 2002: European Commission. General view of the Scientific Committee on Food on the long-term effects of the intake of elevated levels of phytosterols from multiple dietary sources, with particular attention to the effects on beta-carotene. Health & Consumer Protection Directorate-General. [Accessed 2024 February 5]. Available from: https://food.ec.europa.eu/system/files/2020-12/sci-com_scf_out143_en.pdf

FDA 2001: Food and Drug Administration, Department of Health and Human Services. Food labeling: health claims; plant sterol/stanol esters and coronary heart disease. Interim final rule; notice of extension of period for issuance of final rule. Federal Register. 66(109):30311-30313.

FDA 2023: Food and Drug Administration. § 101.83 Health claims: plant sterol/stanol esters and risk of coronary heart disease (CHD). [Accessed 2024 January 26]. Available from: http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=101.83

Kerckhoffs DA, Brouns F, Hornstra G, Mensink RP. Effects on the human serum lipoprotein profile of beta-glucan, soy protein and isoflavones, plant sterols and stanols, garlic and tocotrienols. J Nutr. 2002 Sep;132(9):2494-2505.

Lau VW, Journoud M, Jones PJ. Plant sterols are efficacious in lowering plasma LDL and non-



XX g

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



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Clifton PM, Noakes M, Sullivan D, Erichsen N, Ross D, Annison G, Fassoulakis A, Cehun M, Nestel P. 2004. Cholesterol-lowering effects of plant sterol esters differ in milk, yoghurt, bread and cereal. European journal of clinical nutrition. 58: 503-509.

Davidson, MH, Maki KC, Umporowicz DM, Ingram KA, Dicklin MR, Schaefer E, Lane RW, McNamara JR, Ribaya-Mercado JD, Perrone G, Robins SJ, Franke WC. Safety and Tolerability of Esterified Phytosterols Administered in Reduced-Fat Spread and Salad Dressing to Healthy Adult Men and Women. 2001 Journal of the American College of Nutrition. 20: 307-319.

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Goldberg AC, Ostlund RE Jr, Bateman JH, Schimmoeller L, McPherson TB, Spilburg CA. Effect of plant stanol tablets on low-density lipoprotein cholesterol lowering in patients on statin drugs. Am J Cardiol. 2006 Feb 1;97(3):376-379.

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