



NATURAL HEALTH PRODUCT

GLUCOMANNAN

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

December 30, 2022

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 material(s)	Part(s)	Preparation(s)
Glucomannan	Glucomannan	<ul style="list-style-type: none"> ▶ <i>Amorphophallus bulbifer</i> ▶ <i>Amorphophallus konjac</i> ▶ <i>Amorphophallus muelleri</i> 	Tuber	Isolate

References: Proper name: NIH 2019, O'Neil et al. 2009; Common names: NIH 2019, Chua et al. 2010, O'Neil et al. 2009; Source information: USDA 2019, O'Neil et al. 2009.

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.

The acceptable dosage forms are limited to capsules and powder.

Use(s) or Purpose(s)

- ▶ Helps to lower cholesterol levels (by reducing cholesterol absorption from the gastrointestinal tract) (EFSA 2009; Sood et al. 2008; Martino et al. 2005; Chen et al. 2003; Arvill and Bodin 1995; Walsh et al. 1984).
- ▶ (Used in Herbal Medicine as a) bulk-forming laxative (Chua et al. 2010; Chen et al. 2008; Chen et al. 2006; González Canga et al. 2004; Loening-Baucke et al. 2004).
- ▶ (Used in Herbal Medicine to) promote(s) bowel movements (by increasing bulk volume and water content) (Chua et al. 2010; Chen et al. 2008; Chen et al. 2006; González Canga et al. 2004; Loening-Baucke et al. 2004).
- ▶ (Used in Herbal Medicine to) provide(s) gentle relief of constipation and/or irregularity (Chua et al. 2010; Chen et al. 2008; Chen et al. 2006; González Canga et al. 2004; Loening-Baucke et al. 2004).

The following combined use(s) or purpose(s) is/are also acceptable:

(Used in Herbal Medicine as a) bulk-forming laxative to provide gentle relief of constipation or irregularity and promote bowel movements (by increasing bulk volume and water content) (Chua et al. 2010; Chen et al. 2008; Chen et al. 2006; González Canga et al. 2004; Loening-Baucke et al. 2004).

Dose(s)

Subpopulation(s)

Adults 18 years and older

Quantity(ies)

Lowering of cholesterol

1 - 1.5 grams of glucomannan, 3 times per day (EFSA 2009; Martino et al. 2005; Chen et al. 2003; Arvill and Bodin 1995; Walsh et al. 1984)

Laxative; Promotion of bowel movement; Constipation relief

0.5 - 5 grams of glucomannan, 3 times per day (Chen et al. 2008; Chen et al. 2006; González Canga et al. 2004; Loening-Baucke et al. 2004)

Direction(s) for use

All products

- ▶ Take 2 hours before or after taking other medications or natural health products (Sweetman



2007; Keithley and Swanson 2005).

- ▶ Taking this product with insufficient liquid may result in choking, or blockage/obstruction of the throat, esophagus or intestine (FDA 2009; Sweetman 2007; Vanderbeek et al. 2007; Henry et al. 1986).

Optional:

- ▶ Take during the day (not immediately prior to bedtime) (Sweetman 2007).

Lowering of cholesterol

Take 0.5-1 hour before meals (Chen et al. 2003; Arvill and Bodin 1995; Walsh et al. 1984).

Laxative; Promotion of bowel movement; Constipation relief

- ▶ Take with meals (Chen et al. 2008; Chen et al. 2006; González Canga et al. 2004; Loening-Baucke et al. 2004).
- ▶ Effects observed 12-24 hours after first dose, but may take 2-3 days (Berardi et al. 2002).

Optional: *For products with a dosage range*

- ▶ Minimum daily dose may be increased, up to the maximum daily dose, until desired effect is obtained.

For capsules

Take with at least 240 milliliters of liquid (e.g. water, milk, fruit juice or other similar beverage) (FDA 2018; Martino et al. 2005; Chen et al. 2003; Arvill and Bodin 1995; Walsh et al. 1984).

For powder

For each gram of glucomannan, mix well with at least 240 milliliters of liquid (e.g. water, milk, fruit juice or other similar beverage). Stir briskly and drink immediately. Maintain adequate fluid intake (FDA 2018).

Duration(s) of use

Cholesterol-lowering products

Consult a healthcare practitioner/health care provider/health care professional/doctor/physician for use beyond 8 weeks (Martino et al. 2005; Walsh et al. 1984).

Risk information

Caution(s) and warning(s)

All products



- ▶ Consult a health care practitioner/health care provider/health care professional/doctor/physician prior to use if you are pregnant or breastfeeding.
- ▶ Consult a health care practitioner/health care provider/health care professional/doctor/physician prior to use if you have diabetes (Chen et al. 2003; Vuksan et al. 2001).

Laxative; Promotion of bowel movement; Constipation relief

- ▶ Consult a health care practitioner/health care provider/health care professional/doctor/physician if symptoms worsen or if laxative effect does not occur within 7 days (Pray 2006; Repchinsky 2002).
- ▶ Consult a health care practitioner/health care provider/health care professional/doctor/physician prior to use if you are experiencing a sudden change in bowel habits that has persisted for more than 2 weeks, undiagnosed rectal bleeding, or have failed to defecate following the use of a laxative product (Pray 2006).
- ▶ Consult a health care practitioner/health care provider/health care professional/doctor/physician prior to use if you have symptoms such as abdominal pain, nausea, vomiting or fever (as these could be signs of other serious conditions) (Pray 2006; Berardi et al. 2002).

Contraindication(s)

Do not use this product if you have difficulty swallowing (FDA 2018; Sweetman 2007; Vanderbeek et al. 2007; Henry et al. 1986).

Known adverse reaction(s)

- ▶ Seek immediate medical attention if you experience chest pain, vomiting, or difficulty swallowing or breathing after taking the product (FDA 2018).
- ▶ May cause temporary gas and/or bloating (Sood et al. 2008).

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* (NHPR).

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.

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