Cinnamon - Cinnamomum verum

Cinnamon - Cinnamomum Verum (PDF Version - 76.3 KB) 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 July 26, 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 material(s) Part(s) Preparation(s) Cinnamomum verum Ceylon cinnamon Cinnamon True cinnamon Tvak Cinnamomum verum Branch bark Shoot bark Dry References: Proper name: USDA 2024; Gardner and McGuffin 2013; Blumenthal et al. 2000; Common names: ITIS 2024; RSC 2024; USDA 2024; Gardner and McGuffin 2013; BHC 2006; API 2001; Blumenthal et al. 2000; Source information: API 2001; Blumenthal et al. 2000. 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 application. Use(s) or Purpose(s) Source of antioxidants/Provides antioxidants (Gruenwald et al. 2010; Roussel et al. 2009; Halvorsen et al. 2006; Shan et al. 2005). Source of antioxidants/Provides antioxidants that help fight/protect (cell) against/reduce (the oxidative effect of/the oxidative damage caused by/cell damage caused by) free radicals (Gruenwald et al. 2010; Roussel et al. 2009; Halvorsen et al. 2006; Shan et al. 2005). Traditionally used in Ayurveda as a carminative/(and) digestive for minor bowel complaints (such as indigestion, flatulence, diarrhea and vomiting) (Paranjpe 2005; Kapoor 2001). (Traditionally) used in Herbal Medicine as a carminative/(and) digestive for digestive disturbances/complaints (such as mild spasms/cramps of the gastrointestinal tract, gastrointestinal colic, feeling of bloating and flatulence) (Godfrey et al. 2010; BHC 2006; Wichtl 2004; Blumenthal et al. 2000). (Traditionally) used in Herbal Medicine for loss of appetite (BHC 2006; Wichtl 2004; Blumenthal et al. 2000). Notes: The above uses can be combined on the product label if from the same traditional or non-traditional system of medicine (e.g. Traditionally used in Herbal Medicine for loss of appetite and as a carminative for digestive disturbances). For multi-ingredient products: To prevent the product from being represented as a "traditional medicine", any indicated traditional use claim must refer to the specific medicinal ingredient(s) and recognized traditional system of medicine from which the claim originates when 1) both traditional and modern claims are present or 2) when claims originate from multiple systems of traditional medicine (e.g. Cinnamon is traditionally used in Ayurveda for bowel complaints). When ALL of the medicinal ingredients (MIs) in the product are used within the SAME identified system of traditional medicine AND the product makes ONLY traditional claims, listing of MIs in the traditional claim(s) is not required. Dose(s) Subpopulation(s) Adults 18 years and older Quantity(ies) Antioxidant Methods of preparation: Powdered, Non-standardized Extracts (Dry extract*, Tincture, Fluid extract, Decoction, Decoction concentrate, Infusion, Infusion concentrate) Not to exceed 4 grams of dried bark, per day (BHC 2006; Wichtl 2004; Blumenthal et al. 2000). *Note: Solvents allowed for the method of preparation “Non-Standardized Extracts (Dry extract)” as part of this monograph are ethanol and/or water only. Digestive disturbances (Herbal Medicine); Appetite loss (Herbal Medicine) Methods of preparation: Powdered, Non-standardized Extracts (Dry extract*, Tincture, Fluid extract, Decoction, Decoction concentrate, Infusion, Infusion concentrate) 0.5 - 1.3 gram of dried bark, 3 times per day (BHC 2006; Wichtl 2004; Blumenthal et al. 2000). *Note: Solvents allowed for the method of preparation “Non-Standardized Extracts (Dry extract)” as part of this monograph are ethanol and/or water only. Bowel complaints (Ayurveda) Methods of preparation: Powdered, Non-standardized Ethanolic Extracts (Dry extract*, Tincture, Fluid extract) 0.2 - 1 gram of dried bark, 3 times per day (API 2001; Kapoor 2001). *Note: Solvents allowed for the method of preparation “Non-Standardized Ethanolic Extracts (Dry extract)” as part of this monograph are a mixture of ethanol and water but not water only. Direction(s) for use Appetite loss (Herbal Medicine) Take 30 minutes before meals. Digestive disturbances (Herbal Medicine) Take after meals (Wichtl 2004). Duration(s) of Use No statement required. Risk Information Caution(s) and warning(s) All products Ask a health care practitioner/health care

provider/health care professional/doctor/physician before use if you are breastfeeding. Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you have diabetes (Brinker 2010; Blumenthal et al. 2000; WHO 1999). All products except antioxidants Ask a health care practitioner/health care provider/health care professional/doctor/physician if symptoms persist or worsen. Contraindication(s) Do not use if you are pregnant (Brinker 2010; BHC 2006; Blumenthal 2000). 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. References Cited API 2001: The Ayurvedic Pharmacopoeia of India. Part I, Volume I, First Edition. Delhi (IN): The Controller of Publications; 2001 [Reprint of 1990 publication]. [Accessed 2024 July 16]. Available from: https://www.ayurveda.hu/api/API-Vol-1.pdf Blumenthal M, Goldberg A, Brinckmann J. Herbal Medicine: Expanded Commission E Monographs. Boston (MA): American Botanical Council. 2000. BHC 2006: Bradley PR, editor. British Herbal Compendium Volume 2: A Handbook of Scientific Information on Widely Used Plant Drugs—Companion to the British Herbal Pharmacopoeia. 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USDA 2024: United States Department of Agriculture, Agricultural Research Service (USDA ARS), Germplasm Resources Information Network (GRIN) - Global. U.S. National Plant Germplasm System. Cinnamomum verum J. Presl. [Accessed 2024 July 16]. Available from: https://npgsweb.ars-grin.gov/gringlobal/taxon/taxonomysearch WHO 1999: World Health Organization. WHO Monographs on Selected Medicinal Plants, Volume 1. Geneva (CH): World Health Organization; 1999. Wichtl M, editor. Herbal Drugs and Phytopharmaceuticals: A Handbook for Practice on a Scientific Basis. 3rd edition. Stuttgart (DE): Medpharm Scientific Publishers; 2004. References Reviewed Anderson RA, Broadhurst CL, Polansky MM, Schmidt WF, Khan A, Flanagan VP, et al. Isolation and characterization of polyphenol type-A polymers from cinnamon with insulin-like biological activity. J Agric Food Chem. 2004;52(1):65-70. Altschuler JA, Casella SJ, MacKenzie TA, Curtis KM. 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Journal of Clinical Nutrition 2009;89:815-821. Hlebowicz J, Darwiche G, Björgell O, Almé LO. Effect of cinnamon on postprandial blood glucose, gastric emptying, and satiety in healthy subjects. American Journal of Clinical Nutrition 2007;85:1552-1556. Imparl-Radosevich J, Deas S, Polansky MM et al. Regulation of PTP-1 and insulin receptor kinase by fractions from cinnamon: implications for cinnamon regulation of insulin signalling. Horm Res 1998;50:177-182. Jarvill-Taylor KJ, Anderson RA, Graves DJ. A hydroxychalcone derived from cinnamon functions as a mimetic for insulin in 3T3-L1 adipocytes. J Am Coll Nutr. 2001;20(4):327-236. JEFCA Evaluation. Summary of Evaluations Performed by the Joint FAO/WHO Expert Committee on Food Additives: Cinnamaldehyde. [Accessed 2024 July 16]. Available from http://www.inchem.org/documents/jecfa/jeceval/jec_418.htm Joint Food and Agriculture Organization of the United Nations (FAO)/World Health Organization (WHO) Expert Committee on Food Additives. WHO Food Additives Series: 60. Safety evaluation of certain food additives. Geneva (CH): World Health Organization. 2009. [Accessed 2024 July 16]. Available from: http://www.inchem.org/documents/jecfa/jecmono/v60je01.pdf Leung AY, Foster S. Encyclopedia of Common Natural Ingredients: Used in Food, Drugs and Cosmetics. Second edition. New York (NY): John Wiley & Sons; 1996. Qin B, Nagasaki M, Ren M, Bajotto G, Oshida Y, Sato Y. Cinnamon extract (traditional herb) potentiates in vivo insulin-regulated glucose utilization via enhancing insulin signaling in rats. Diabetes Res Clin Pract. 2003;62:139-148. Solomon TPJ, Blannin AK. Effects of short-term cinnamon ingestion on in vivo glucose tolerance. Diabetes Obes Metab 2007;8:895-901. Solomon TPJ, Blannin AK. Changes in glucose tolerance and insulin sensitivity following 2 weeks of daily cinnamon ingestion in healthy humans. Eur J Appl Physiol. 2009;105:969-976. Soni R, Bhatnagar V. Effect of cinnamon (Cinnamonum cassia) intervention on blood glucose of middle aged adult male with non-insulin dependent diabetes mellitus (NIDDM). Ethno-Med 2009;3:141-144. United Kingdom Prospective Diabetes Study (UKPDS) Group. Intensive blood-glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). Lancet 1998;352:837-853. Vanschoonbeek K, Thomassen BJW, Senden JM, Wodzig WKWH, van Loon LJC. Cinnamon supplementation does not improve glycemic control in postmenopausal type 2 diabetic patients. J Nutr 2006;136:977-980. WHO Food Additives Series 46: Cinnamyl Alcohol and Related Substances. 2010. [Accessed 2024 July 16]. Available from: http://www.inchem.org/documents/jecfa/jecmono/v46je07.htm WHO Food Additives Series 14: Cinnamaldehyde. 2010. [Accessed 2024 July 16]. Available from: http://www.inchem.org/documents/jecfa/jecmono/v14je07.htm Ziegenfuss TN, Hofheins JE, Mendel RW, Landis J., Anderson RA. Effects of a water-soluble cinnamon extract on body composition and features of the metabolic syndrome in pre-diabetic men and women. J Int Soc Sports Nut. 2006;3:45-53. Report a problem on this page Date modified: 2019-03-01

DOSAGE FORM(S)

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 application.

RISK INFORMATION

Caution(s) and warning(s) All products Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you are breastfeeding.Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you have diabetes (Brinker 2010; Blumenthal et al. 2000; WHO 1999). All products except antioxidants Ask a health care practitioner/health care provider/health care professional/doctor/physician if symptoms persist or worsen. Contraindication(s) Do not use if you are pregnant (Brinker 2010; BHC 2006; Blumenthal 2000). 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 theNatural Health Products Regulations.

STORAGE CONDITION(S)

Must be established in accordance with the requirements described in theNatural 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

REFERENCES

Route of Administration Oral

Proper name(s)	Common name(s)	Source information		
Source material(s)	Part(s)	Preparation(s)		
Cinnamomum verum	Ceylon cinnamonCinnamonTrue cinnamonTrue	Cinnamomum verum	Branch barkShoot bark	Dry