NATURAL HEALTH PRODUCT

CARAWAY – CARUM CARVI

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

August 5, 2019

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

Caraway dried seed

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

Proper name(s)	Common name(s)	Source material(s)		
		Proper name(s)	Part(s)	Preparation(s)
Carum carvi	Caraway	Carum carvi	Seed	Dried

References: Proper name: USDA 2019; Common name: McGuffin et al. 2000, Wiersema and Léon 1999; Source material: Bradley 2006, Blumenthal 1998.

Caraway essential oil

Table 2. Proper name(s), Common name(s), Source material(s)

Proper name(s)	Common name(s)	Source material(s)	
		Proper name(s)	Part(s)
Carum carvi	Caraway essential oil	Carum carvi	Seed

References: Proper name: USDA 2019; Common name: NHPID 2019; Source material: Bradley 2006, Blumenthal 1998.

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 by age group:

Infants 6-12 months, and Children 1-2 years: The acceptable dosage forms are limited to emulsion/suspension and solution/liquid preparations (Giacoia et al. 2008; EMA/CHMP 2006). Children 3-5 years: The acceptable dosage forms are limited to chewables, emulsion/suspension, powders and solution/liquid preparations (Giacoia et al. 2008; EMA/CHMP 2006). Children 6-11 years, Adolescents 12-17 years, and Adults 18 years and older: The acceptable dosage forms for this age category and specified route of administration are indicated in the Compendium of Monographs Guidance Document.

Use(s) or Purpose(s)

- ► Traditionally used in Herbal Medicine to aid digestion and to help stimulate appetite (stomachic) (Bradley 2006; Wichtl 2004; Hoffmann 2003; Ellingwood 1983; Felter and Lloyd 1983a; Grieve 1971).
- ► Traditionally used in Herbal Medicine to help relieve digestive spasms (anti-spasmodic) and indigestion/flatulent dyspepsia (carminative) (Bradley 2006; ESCOP 2003; Hoffmann 2003; Blumenthal 1998; Felter and Lloyd 1983a,b; Grieve 1971).

Note

Claims for traditional use must include the term "Herbal Medicine", "Traditional Chinese Medicine", or "Ayurveda".

Dose(s)

Subpopulation(s)

As specified below.

Quantity(ies)

Methods of preparation: Dry, Powder, Non-Standardized Extracts (Dry extract, Tincture, Fluid extract, Decoction, Infusion)





Table 3. Dose information for caraway dried seed presented as dose (grams) per day

Subpopulation(s) ^{1,2}		Caraway dried seed (g/day)	
		Minimum	Maximum
Infants	6-12 months	0.06	1
Children	1-3 years	0.3	2
	4-9 years	0.3	4
	10-11 years	0.3	15
Adolescents	12-17 years	0.3	15
Adults	18 years and older	0.3	15

¹The use of caraway seed in infants, children and adolescents is supported by the following references: Bradley 2006, McIntyre 2005, ESCOP 2003, Schilcher 1997.

Methods of preparation: Oil, Essential (water steam distillation)

Table 4. Dose information for caraway essential oil presented as dose (microliters) per day

Subpopulation(s) ^{1,2}		Caraway essential oil (μl/day)	
		Minimum	Maximum
Infants	6-12 months	0.26	130
Children	1-3 years	18	260
	4-11 years	18	390
Adolescents	12-17 years	18	390
Adults	18 years and older	18	600

¹The use of caraway essential oil in infants, children and adolescents is supported by the following references: Bradley 2006, McIntyre 2005, ESCOP 2003, Schilcher 1997.

Direction(s) for use

No statement required.

Duration(s) of use

No statement required.

Risk information

Caution(s) and warning(s)

- ► Consult a health care practitioner/health care provider/health care professional/doctor/physician if symptoms persist or worsen (ESCOP 2003).
- ▶ Consult a health care practitioner/health care provider/health care professional/doctor/ physician prior to use if you are pregnant, breastfeeding or experiencing acute abdominal pain (ESCOP 2003).



² Adult dose supported by the following references: Bradley 2006, Wichtl 2004, ESCOP 2003, Hoffmann 2003.

² Adult dose supported by the following references: Bradley 2006, Blumenthal 1998.



Contraindication(s)

No statement required.

Known adverse reaction(s)

Stop use if hypersensitivity/allergy occurs (Brinker 2010; ESCOP 2003).

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

No statement required.

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.

References cited

Blumenthal M. The Complete German Commission E Monographs. Austin (TX): American Botanical Council: 1998.

Bradley PR, editor. British Herbal Compendium: A Handbook of Scientific Information on Widely Used Plant Drugs, Volume 2. Bournemouth (UK): British Herbal Medicine Association; 2006.

Brinker F. Herb Contraindications and Drug Interactions, 4th edition. Sandy (OR): Eclectic Medical Publications; 2010.

Ellingwood F. American Materia Medica, Therapeutics and Pharmacognosy. Sandy (OR): Eclectic Medical Publications; 1983 [Reprint of 1919 original]. EMA/CHMP 2006: European Medicines Agency: Pre-authorization Evaluation of Medicines for Human Use. Committee for Medicinal Products for Human Use. Reflection Paper: Formulations of choice for the paediatric population. Adopted September 2006. EMA/CHMP/PEG/194810/2005. [Accessed 2019 June 14]. Available from: https://www.ema.europa.eu/en/documents/scientific-guideline/reflection-





paper-formulations-choice-paediatric-population_en.pdf

ESCOP 2003: ESCOP Monographs: The Scientific Foundation for Herbal Medicinal Products, 2nd edition. Exeter (UK): European Scientific Cooperative on Phytotherapy and Thieme; 2003.

Felter HW, Lloyd JU. King's American Dispensatory, Volume 1, 18th edition. Sandy (OR): Eclectic Medical Publications; 1983a [Reprint of 1898 original].

Felter HW, Lloyd JU. King's American Dispensatory, Volume 2, 18th edition. Sandy (OR): Eclectic Medical Publications; 1983b [Reprint of 1898 original].

Giacoia GP, Taylor-Zapata P, Mattison D. Eunice Kennedy Shriver National Institute of Child Health and Human Development Pediatric Formulation Initiative: selected reports from working groups. Clinical Therapeutics 2008; 30(11):2097-2101.

Grieve M. A Modern Herbal, Volume 1. New York (NY): Dover Publications; 1971 [Reprint of 1931 Harcourt, Brace & Company publication].

Hoffmann D. Medical Herbalism. Rochester (VT): Healing Arts Press; 2003.

McGuffin M, Kartesz JT, Leung AY, Tucker AO, editors. Herbs of Commerce, 2nd edition. Silver Spring (MD): American Herbal Products Association; 2000.

McIntyre A. Herbal Treatment of Children - Western and Ayurvedic Perspectives. Toronto (ON): Elsevier Limited; 2005.

NHPID 2019: Natural Health Products Ingredients Database. Drugs & Health Products, Health Canada. [Accessed 2019 June 20]. Available from: http://webprod.hc-sc.gc.ca/nhpid-bdipsn/search-rechercheReq.do

Schilcher H. Phytotherapy in Paediatrics: Handbook for Physicians and Pharmacists. Stuttgart (D): Medpharm Scientific Publishers; 1997.

USDA 2019: United States Department of Agriculture, Agricultural Research Service, National Genetic Resources Program. Germplasm Resources Information Network (GRIN). *Carum carvi* L. National Germplasm Resources Laboratory, Beltsville (MD). [Accessed 2019 June 13]. Available from: https://npgsweb.ars-grin.gov/gringlobal/taxon/taxonomysimple.aspx

Wichtl M, editor. Herbal Drugs and Phytopharmaceuticals: A Handbook for Practice on a Scientific Basis, 3rd edition. Stuttgart (D): Medpharm GmbH Scientific Publishers; 2004.

Wiersema J, Léon B. World Economic Plants: A Standard Reference. Boca Raton (FL): CRC Press LLC; 1999.





References reviewed

BHP 1983: British Herbal Pharmacopoeia. Cowling (UK): British Herbal Medical Association; 1983.

McGuffin M, Hobbs C, Upton R, Goldberg A, editors. American Herbal Products Association's Botanical Safety Handbook. Boca Raton (FL): CRC Press; 1997.

Moerman DE. Native American Ethnobotany. Portland (OR): Timber Press; 1998.

Williamson EM, Evans FJ, Wren RC. Potter's New Cyclopaedia of Botanical Drugs and Preparations. Saffron Walden (UK): C.W. Daniel Company Limited; 1988.