

JUNIPER

- Date:** April 21, 2008
- Proper name(s):** *Juniperus communis* L. (Cupressaceae) (USDA 2003)
- Common name(s):** Juniper, common juniper (McGuffin et al. 2000)
- Source material(s):** Fruit (Bradley 2006)
- Route(s) of administration:** Oral
- Dosage form(s):** Those suited to the allowable route(s) of administration.
This monograph is not intended to include food-like dosage forms such as bars, chewing gums or beverages.
- Use(s) or Purpose(s):** Statement(s) to the effect of:
- ▶ Traditionally used in Herbal Medicine as a diuretic (ESCOP 2003; Felter and Lloyd 1983 [1898]).
 - ▶ Traditionally used in Herbal Medicine as a urinary tract antiseptic to help relieve benign urinary tract infections (Bradley 2006; Hoffmann 2003; Felter and Lloyd 1983 [1898]).
 - ▶ Traditionally used in Herbal Medicine to help relieve digestive disturbances such as flatulent dyspepsia (carminative) (Bradley 2006; ESCOP 2003; Hoffmann 2003; Blumenthal et al. 2000; Felter and Lloyd 1983 [1898]).
 - ▶ Traditionally used in Herbal Medicine to aid digestion and stimulate appetite (stomachic) (Bradley 2006; Hoffmann 2003; Grieve 1971 [1931]).
- Dose(s):** Preparations equivalent to 0.3-12 g dried fruit, per day (Bradley 2006; ESCOP 2003; Hoffmann 2003; Blumenthal et al. 2000)
- See Appendix 1 for examples of appropriate dosage preparations, frequencies of use and directions for use, according to cited

references. The purpose of Appendix 1 is to provide guidance to industry.

Duration of use:

Statement(s) to the effect of:

Diuretic:

For occasional use only (Berardi et al. 2002; CPA 2002).

Other uses:

Consult a health care practitioner for use beyond 4 weeks (ESCOP 2003; Brinker 2001).

Risk information:

Statement(s) to the effect of:

Caution(s) and warning(s):

- ▶ Consult a health care practitioner if symptoms persist or worsen.
- ▶ Consult a health care practitioner prior to use if you are breastfeeding (Mills et al. 2006).

Contraindication(s):

- ▶ Do not use if you are pregnant (Bradley 2006; ESCOP 2003; Hoffmann 2003; Brinker 2001).
- ▶ Do not use if you have a kidney disorder (Bradley 2006; ESCOP 2003; Hoffmann 2003; Brinker 2001).

Known adverse reaction(s): No statement required.

Non-medicinal ingredients: Must be chosen from the current NHPD *List of Acceptable Non-medicinal Ingredients* and must meet the limitations outlined in the list.

Specifications:

- ▶ The finished product must comply with the minimum specifications outlined in the current NHPD *Compendium of Monographs*.
- ▶ The medicinal ingredient may comply with the specifications outlined in the Juniper Monographs published in the European or British Pharmacopoeias.

References cited:

Berardi RR, DeSimone EM, Newton GD, Oszko MA, Popovich NG, Rollins CJ, Shimp LA, Tietze KJ, editors. Handbook of Nonprescription Drugs: An Interactive Approach to Self-Care,

13th edition. Washington (DC): American Pharmaceutical Association; 2002.

Blumenthal M, Goldberg A, Brinkmann J, editors. Herbal Medicine: Expanded Commission E Monographs. Boston (MA): Integrative Medicine Communications; 2000.

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, 3rd edition. Sandy (OR): Eclectic Medical Publications; 2001.

CPA 2002: Canadian Pharmacists Association. Patient Self-Care. Helping Patients Make Therapeutic Choices. Ottawa (ON): Canadian Pharmacists Association; 2002.

ESCOPE 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 2, 18th edition. Sandy (OR): Eclectic Medical Publications; 1983 [Reprint of 1898 original].

Grieve M. A Modern Herbal, Volume 2. 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.

Mills E, Dugoua J, Perri D, Koren G. Herbal Medicines in Pregnancy and Lactation: An Evidence-Based Approach. London (UK): Taylor and Francis Medical; 2006.

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

USDA 2003: United States Department of Agriculture, Agricultural Research Service, National Genetic Resources Program. Germplasm Resources Information Network (GRIN). *Juniperus communis* L. National Germplasm Resources Laboratory, Beltsville (MD). [Accessed 2008-04-21]. Available from: http://www.ars-grin.gov/cgi-bin/npgs/html/tax_search.pl

References reviewed:

Barnes J, Anderson LA, Philipson JD. Herbal Medicines, 3rd edition. London (UK): The Pharmaceutical Press; 2007.

Robbers JE, Tyler VE. Tyler's Herbs of Choice: The Therapeutic Use of Phytomedicinals. New York, NY: The Haworth Herbal Press, 1999

Sanchez de Medina F, Gamez MJ, Jimenez I, Jimenez J, Osuna JI, Zarzuelo A. Hypoglycemic activity of Juniper berries. *Planta Medica* 1994; 60: 197-200.

Appendix 1: Examples of appropriate dosage preparations, frequencies of use and directions for use

Dried fruit:

- ▶ 2-3 g, 3-4 times per day (Bradley 2006)
- ▶ 2-10 g, per day (Blumenthal et al. 2000)

Infusion:

- ▶ 2-3 g dried berry, 3-4 times per day (Bradley 2006; ESCOP 2003)
- ▶ 2.5 g dried berry, 3 times per day (Hoffmann 2003)
- ▶ 2-10 g dried berry, per day (Blumenthal et al. 2000)

Directions for use:

- ▶ Pour 150-250 ml (1 cup) of boiling water over dried berry. Infuse for 20 minutes in a covered container (Hoffmann 2003; Blumenthal et al. 2000).
1 tsp = 2.5 g (Wichtl 2004)

Fluidextract:

- ▶ 2-3 g dried equivalent, 3-4 times per day
(1:1, 25% alcohol, 2-3 ml) (Bradley 2006)
- ▶ 2-3 g dried equivalent, 3 times per day
(1:1, 2-3 ml) (Blumenthal et al. 2000)

Tincture:

- ▶ 0.2-0.4 g dried equivalent, 3 times per day
(1:5, 45% alcohol, 1-2 ml) (ESCOP 2003)
- ▶ 0.1-0.2 g dried equivalent, 3 times per day
(1:5, 40% alcohol, 0.5-1 ml) (Hoffmann 2003)