GREEN TEA EXTRACTS

Date: April 18, 2008

Proper name(s): *Camellia sinensis* (L.) Kuntze, synonym: *Thea sinensis* L. (Theaceae) (USDA 2007)


Source material(s): Leaf (Nagao et al. 2005; Chantre and Lairon 2002)

Route(s) of administration: Oral

Dosage form(s): Those pharmaceutical dosage forms suited to oral administration, including but not limited to chewable tablets, caplets, capsules, strips, lozenges, powders or liquids where the dose is measured in drops, teaspoons, or tablespoons are acceptable. This monograph is not intended to include food-like dosage forms such as beverages, bars or chewing gums.

Use(s) or Purpose(s): Statement(s) to the effect of:

- Source of antioxidants for the maintenance of good health (Camargo et al. 2006; Coimbra et al. 2006; Henning et al. 2004; Nakagawa et al. 1999; Van het Hof et al. 1997)
- To be used with a program of reduced intake of dietary calories and increased physical activity (if possible) to help in weight management (Nagao et al. 2005; Westerterp-Plantenga et al. 2005; Chantre and Lairon 2002; Dulloo et al. 1999)
Dose(s):

Antioxidant: Extracts providing up to 690 mg total catechins, and no more than 150 mg caffeine, per day (Nagao et al. 2005; Henning et al. 2004; Nakagawa et al. 1999)

Weight management: Extracts providing 136-300 mg (-)-epigallocatechin-3-gallate (EGCG) and 75-150 mg caffeine, with an EGCG:caffeine ratio of 1.8:1 to 4:1, per day (Nagao et al. 2005; Westerterp-Plantenga et al. 2005; Chantre and Lairon 2002)

Directions for use: Take with food.

Duration of use: Consult a health care practitioner for use beyond 12 weeks (Nagao et al. 2005; Westerterp-Plantenga et al. 2005; Chantre and Lairon 2002).

Risk Information: Statement(s) to the effect of:

Caution(s) and warning(s):

- Consult a health care practitioner prior to use if you have a liver disorder or develop symptoms of liver trouble (such as abdominal pain, dark urine or jaundice) (HC 2007a; Molinari et al. 2006; Gloro et al. 2005).
- Consult a health care practitioner prior to use if you are pregnant or breastfeeding (HC 2007b).
- Consult a health care practitioner prior to use if you have an iron deficiency (Cooper et al. 2006; Nelson and Poulter 2004; Zijp et al. 2000).

Contraindication(s): No statement required.

Known adverse reaction(s): No statement required.

Non-medicinal Ingredients: 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: Must comply with the minimum specifications outlined in the current NHPD Compendium of Monographs.
References cited:


References reviewed:


Dashwood WM, Orner GA, Dashwood RH. Inhibition of beta-catenin/Tcf activity by white tea, green tea, and epigallocatechin-3-gallate (EGCG): minor contribution of H(2)O(2) at physiologically relevant EGCG concentrations. Biochemical and Biophysical Research Communications 2002;296(3):584-588.


Hakim IA, Harris RB, Chow HH, Dean M, Brown S, Ali IU. Effect of a 4-month tea intervention on oxidative DNA damage among heavy smokers: role of glutathione S-transferase genotypes. Cancer Epidemiology, Biomarkers, & Prevention 2004;13(2)242-249.

Halder J, Bhaduri AN. Protective role of black tea against oxidative damage of human red blood cells. Biochemical and Biophysical Research Communications 1998;244(3):903-907.


