L-GLUTAMINE

Date: February 11, 2008

Proper name(s): L-Glutamine (NIH 2007; USP 30; O’Neil et al. 2001)

Common name(s): L-Glutamine, gln, glutamine (NIH 2007; USP 30; O’Neil et al. 2001)

Source material(s): L-Glutamine (USP 30)

Route(s) of administration: Oral

Dosage form(s): Those pharmaceutical dosage forms suited to oral administration, including but not limited to chewables (eg. gummies, tablets), caplets, capsules, strips, lozenges, powders or liquids where the dose is measured in drops, teaspoons or tablespoons, are acceptable. Liquids and solutions are not permitted due to lack of stability of the finished product (Fürst et al. 1997). This monograph is not intended to include food-like dosage forms such as bars, gums or beverages.

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

- Helps restore plasma glutamine levels depleted after periods of physical stress (e.g. prolonged exhaustive exercise) (Krzywkowski et al. 2001; Bowtell et al. 1999; Castell and Newsholme 1997).
- Helps support immune system health after periods of physical stress (Shils et al. 2006; Newsholme 2001; Griffiths 1999).
- Helps support digestive system health after periods of physical stress (Shils et al. 2006, Newsholme et al. 2003; IOM 2002).
- Helps to assist in muscle cell repair after exercise (Newsholme et al. 2003; IOM 2002)
Dose(s): 5-9 g, per day (Bowtell et al. 1999; Castell and Newsholme 1997)

Duration of use: No statement required.

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

Caution(s) and warning(s):
- Consult a health care practitioner prior to use if you are following a low protein diet (Goldman and Ausiello 2004).
- Consult a health care practitioner prior to use if you are pregnant or breastfeeding.

Contraindication(s): No statement required.

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 must be pharmacopoeial grade (for a list of acceptable pharmacopoeia, see the NHPD Evidence for Quality of Finished Natural Health Products Guidance Document) or cited in an approved NHP Master File, authorized by a letter of access issued to the applicant by the NHP Master File's registered owner.

References cited:


Newsholme P. Why is L-glutamine metabolism important to cells of the immune system in health, postinjury, surgery or infection? Journal of Nutrition 2001;131(9 Suppl):2515S-22S; discussion 2523S-2524S.


References reviewed:


Garlick PJ. Assessment of the safety of glutamine and other amino acids. Journal of Nutrition 2001;131(9 Suppl):2556S-2561S.


