

Why we need Glutathione

What is glutathione? Why do we need it?

Glutathione is a small protein comprised of three amino acids - cysteine, glutamic acid and glycine. It helps to detoxify the body by removing heavy metals, solvents and other toxins, and also acts as an antioxidant. Glutathione found in fruit and vegetables has been shown to protect against some forms of cancer in both test-tube and animal studies.

Although glutathione can be absorbed by the body, research has found that the human gastrointestinal tract contains an enzyme that breaks down glutathione before it can be fully absorbed. As a result, some practitioners suggest that patients take glutathione tablets, which may be absorbed in the mouth. Several substances, such as vitamin B6, riboflavin and selenium are necessary for the body to create glutathione. Glutathione levels in the body also appear to be linked to the presence of a variety of other substances, including alpha lipoic acid, vitamin C, methionine and SAME.

While the effectiveness of oral glutathione supplements remains in questions, intravenous or intramuscular injections have been shown to be useful for a wide range of conditions, from reducing high blood pressure levels in people with diabetes, to reducing the side-effects of certain chemotherapy drugs, to increasing sperm counts in men with low sperm levels. In addition, glutathione nasal sprays may lessen symptoms in people with allergic rhinitis.

How much glutathione should I take?

Because glutathione is produced naturally by the body, the exact amount that should be taken daily remains in question. Many studies of glutathione have used doses ranging from 3,000 to 5,000 mg per day. People who smoke may need larger doses of glutathione than normal, because cigarette smoking increases its utilization rate. Low glutathione levels have also been associated with diabetes, low sperm counts, liver disease, cataracts, and some forms of cancer. Patients with these conditions may wish to speak with a licensed health care provider about increasing glutathione intake.

What forms of glutathione are available?

Glutathione is found in both fresh and frozen fruits and vegetables, meat, and fish. Walnuts, asparagus and avacados are particularly good sources of glutathione. Glutathione tablets are also available, as are prescription injections and aerosol sprays.

What can happen if I take too much glutathione? Are there any interactions I should be aware of? What precautions should I take?

As of this writing, there are no known adverse affects associated with oral glutathione supplements. However, glutathione may interact with some chemotherapy medications, such as cisplatin and cyclophosphamide. Patients taking those drugs should consult with a licensed health care provider before taking intravenous or intramuscular glutathione injections. As always, make sure to consult with a licensed health care provider before taking glutathione or any other dietary supplement or herbal remedy.

References

- Amores-Sanchez MI, Medina MA. Glutamine, as a precursor of glutathione, and oxidative stress. *Mol Genet Metab* 1999;67:100-5.

- Hagen TM, Wierzbicka GT, Sillau AH, et al. Fate of dietary glutathione: disposition in the gastrointestinal tract. *Am J Physiol* 1990;259(4Pt1):G530-5.
- Jones DP, Coates RJ, Flagg EW, et al. Glutathione in foods listed in the National Cancer Institute's Health Habits and History Food Frequency Questionnaire. *Nutr Cancer* 1995;17:57-75.
- Lenzi A, Culasso F, Gandini L, et al. Placebo-controlled, double-blind, cross-over trial of glutathione therapy in male infertility. *Hum Reprod* 1993;8:1657-62.
- Smyth JF, Bowman A, Perren T, et al. Glutathione reduces the toxicity and improves quality of life of women diagnosed with ovarian cancer treated with cisplatin: results of a double-blind, randomized trial. *Ann Oncol* 1997;8:569-73.

Reference website: http://www.naturopathydigest.com/nutrition_herbs/vitamins/glutathione.php