Glutathione

Monograph Snapshot

MOST FREQUENT REPORTED USES

- Antioxidant
- Hepatic antioxidant protection, such as chronic use of alcohol, drugs (both prescription and recreational) and other environmental chemicals
- Hepatic detoxification
- Improved immunity
- Wound healing

Metabolic Monographs™

Glutathione is a key component of the body's antioxidant system and is a substrate in the conjugation and reduction reactions in the body. It also plays an important role in the removal of toxins by supporting healthy liver function. Glutathione is considered a non-essential nutrient manufactured from L-cysteine, L-glutamine, and glycine.

Glutathione is a primary protectant of skin, lens, cornea, and retina against radiation damage, and the biochemical foundation of P450 detoxification in the liver, kidneys, lungs, intestinal epithelia, and other organs.

FUNCTIONS/CLINICAL EFFICACY

- Detoxifies many compounds in the body, especially in the liver
- Helps protect the body against toxins from cigarette smoke, excess alcohol, overdoses of aspirin, and exposure to radiation
- Helps support the immune system
- Helps transport some amino acids across cellular membranes
- Involved in the synthesis of fatty acids

DOSAGE RANGE

- 500-3,000mg daily in divided dosages. Individuals with severe glutathione depletion may need larger dosages.
- Glutathione is not absorbed well across the gastrointestinal tract, and therefore supplementation with other dietary supplements that increase glutathione levels in the body may be warranted. These include alpha-lipoic acid, green tea, melatonin, S-adenosylmethionine, whey protein, milk thistle seed extract, and N-acetyl cysteine.

SYMPTOMS OF DEPLETION

- Oxidative stressors that can deplete GSH include ultraviolet and other radiation; viral infections; environmental toxins such as pesticides, smoking, household chemicals, and heavy metals; surgery; chronic inflammation; burns; septic shock; diabetes and insulin resistance; dietary deficiencies of GSH precursors and enzyme cofactors; and the aging process in general.
- Symptoms of depletion include:
  - ◊ Decreased macrophage activity and a weakened immune system
  - ◊ Increase in free radical damage throughout the body, especially in the membranes of red blood cells and mitochondria
  - ◊ Decrease in the body's ability to detoxify many compounds in the liver, including drugs and environmental chemicals; alterations in liver enzymes
  - ◊ Hair loss and baldness
  - ◊ Increased sweating and fatigue

TOXICITIES, WARNINGS, AND INTERACTIONS

There is no known toxicity when using glutathione as a dietary supplement.

FOOD SOURCES

Foods containing glutathione include avocado, watermelon, asparagus, grapefruit, potato, acorn squash, strawberries, oranges, tomatoes, cantaloupe, broccoli, okra, peaches, zucchini, and spinach.

PATIENT SNAPSHOT

Uses:

- Glutathione is an antioxidant and may help decrease the effects of oxidation and aging on the body.
- Glutathione is important for liver health and improves detoxification of the liver.
- Glutathione is used in those who take medications which may be hard on the liver, those who are substance abusers, or anyone with concerns for the health of their liver.
- Glutathione may help improve immunity, leading to faster wound healing.

Dosage:

- The most common dosage of glutathione is 500-3,000mg a day. Ask your healthcare provider which dose is best for you.

Special Concerns:

- If you are taking prescription or non-prescription medications, are pregnant or nursing, or have a pre-existing medical condition, talk with your healthcare provider before taking any dietary supplement.
- Do not take if there is an allergy to any component of this dietary supplement.

FOR MORE INFORMATION:

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