

Magnum Compounding, LLC 9960 NW 116<sup>th</sup> Way, Suite 4 Phone: 7866222301 Toll Free: 8554036028



## COMPOUNDED L-Glutathione Injection Injection Concentration: 200mg/ml Usage: Intravenous (IV) / Intramuscular (IM) Use Only

**Dosage:** Seek advice from an appropriately qualified and licensed physician/ healthcare provider. Typical 1-3mL's IV, 1-2mL's IM once a week for the duration of the treatment.

#### Overview

L-Glutathione, or simply glutathione, is a powerful antioxidant comprised of amino acids cysteine, glycine, and glutamic acid. Glutathione has many functions. It is vital to mitochondrial function and necessary to produce DNA. Its ability to cross the blood-brain barrier means it plays an important role in removing toxins, such as mercury, from the brain and other cells. It is key in supporting immune function, metabolism, forming sperm cells, tissue building and repair, and helping with certain enzyme functions. As an antioxidant, it may help fight the effects of free radicals, which cause oxidative stress, damage healthy cells, and contribute to aging and certain degenerative illnesses. Unlike most antioxidants, glutathione can be made in the human liver. Glutathione can be found in every cell of the human body. It is also found in many foods, including spinach and avocados, but is poorly absorbed by the body when consumed orally. Supplements that can support glutathione production include curcumin, N-acetylcysteine, selenium, silymarin, vitamin C, and Vitamin E. Glutathione levels in the body naturally decline as we age but can also be reduced by factors like stress, malnutrition, and environmental toxins.

#### **Reported Uses**

Athletic performance, chemotherapy toxicity (Most evidence), nonalcoholic fatty liver dz, Parkinson dz, skin lightening. Lglutathione injections may also treat a wide variety of health issues, including male infertility (intramuscular use), plaque deposits in the arteries, liver diseases, memory loss, and Parkinson's disease (intravenous). Supplementally, glutathione can be taken in the treatment and prevention of cataracts, glaucoma, aging, alcoholism, cancer, heart disease, liver disease, lung disease, Alzheimer's disease, Parkinson's disease, osteoarthritis, diseases that break down the body's immune system and many more. As an antioxidant It may improve immune response, help to metabolize toxins and activate enzymes, aid the liver in metabolizing alcohol, reduce the amount of fat stored in the belly, help to reduce oxidative stress and improve complexion.

#### Adverse Reactions: irritability, rash (topical use)

#### **Precautions/Side Effects**

Glutathione is not recommended for use by individuals with asthma due to the possibility of increasing its symptoms, in particular the inhaled use. There is not enough information on the impact of this medication on individuals who are pregnant or breastfeeding; therefore, use is not advised. It is important to talk with your healthcare provider before starting to supplement glutathione to ensure it is the right solution for you. Glutathione may interact with some medications. It is always important to list any medications, supplements or herbal products you may be taking for your doctor. Glutathione is generally safe for most adults. Some studies have linked long-term consumption of glutathione to lower zinc levels.

**Storage**: Controlled refrigeration. Protect from light. Store under refrigeration 2° to 8°C (36° to 46°F).



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## Shipping:

This medication was shipped in a cooler or insulated bag with ice packs to preserve the integrity of the medication during transportation. If you suspect that your medication could have been tampered, or is damaged, or is outside the expected temperature, DO NOT USE IT and call the pharmacy to obtain advise.

## **References:**

1. Pubmed.ncbi.nlm.nih.gov/7569285/

2. Aruoma OI. Methodological consideration for characterization for potential antioxidant actions of bioactive components in plants foods. *Mutat Res. 2003;532:9–20.* [PubMed] [Google Scholar]

3. Mohammed AA, Ibrahim AA. Pathological roles of reactive oxygen species and their defence mechanism. *Saudi Pharm J. 2004;12:1–18. [Google Scholar]* 

4 Bagchi K, Puri S. Free radicals and antioxidants in health and disease. *East Mediterranean Health Jr. 1998;4:350–60.* 

**5** Glutathione reverses endothelial dysfunction and improves nitric oxide bioavailability *Am Coll Cardiol.* 1999; **34**: 507-514