

# Liposomal Glutathione

180mg of micellar liposomal glutathione and 160mg of lactoferrin in each teaspoon to provide enhanced bioavailability, stability and sustained release. Orange spice flavour for improved compliance.

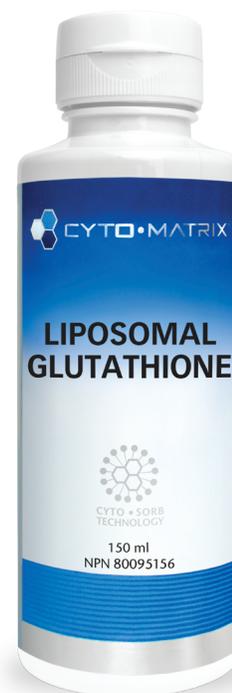
Each 5ml teaspoon contains:

L-glutathione (liposome)

180mg

150 ml

GMO, gluten and soy free.



Glutathione is a tripeptide molecule synthesized within the body from three amino acids: cysteine, glycine and glutamate. Glutathione is considered to be one of the body's most powerful antioxidants, involved in a number of enzyme systems necessary for detoxification, the neutralization of free radicals and maintaining blood-brain barrier function. A number of health conditions are associated with low levels of intracellular glutathione including neurological deficits, cognitive issues, parkinson's disease, autism and respiratory conditions. Quite simply, a glutathione deficiency is a marker of mitochondrial dysfunction and oxidative stress.

One survey found that over 62% of individuals supplementing with intranasal glutathione reported health benefits for either multiple chemical sensitivities, allergies, sinusitis, Parkinson's disease, Lyme disease or fatigue. Moreover, glutathione

has demonstrated the ability to bind mycotoxins from mold exposure and successfully treat associated neurocognitive symptoms.

The concern with many glutathione supplements is that they cannot be orally ingested without being digested into single amino acids prior to absorption. The tripeptide molecule is too large to be absorbed intact. The rate-limiting substrate for glutathione production appears to be cysteine, hence why N-acetylcysteine has such a multitude of health benefits in clinical practice and research. However, an even better solution exists. Liposomal glutathione has proven to be an effective method of delivering stable glutathione into the body tissues. Liposomal glutathione has been shown to be 100 times more effective at replenishing intracellular glutathione levels when compared to non-liposomal glutathione in animal models.

## Key points

- Patented Cyto-Sorb technology utilizes a two-phase emulsion process with phosphatidylcholine sourced from GMO-free sunflower, vitamin E and organic coconut vegetable glycerin in order to create micellar liposomes and drastically improve the bioavailability, stability and sustained release of glutathione
- Glutathione is necessary for detoxification pathways and antioxidant defence. It is indicated in cases of environmental toxicity, mitochondrial dysfunction and neurological deficits.
- Lactoferrin is added for its ability to stabilize glutathione and provide additional antiviral and antimicrobial support
- 30 servings per bottle

Liposomal delivery systems were originally developed to optimize the pharmacokinetics and efficacy of pharmaceutical drugs. These same principles have now been applied to natural health ingredients. A liposome consists of either a single-layered or multi-layered phospholipid structure with an aqueous core. Active ingredients can be placed inside the aqueous core or within the phospholipid bilayer, where they are protected from various enzymatic and digestive processes. Ultimately, liposomes provide improved bioavailability for active ingredients.

However, not all liposomal deliveries are created equal. Liposomes are several hundred nanometers in size, which means that there is still a significant amount of digestion that must occur to decrease surface area and allow for proper absorption. Micelles, on the other hand, are significantly smaller and can be absorbed directly at ~20 nanometers in size.

Liposomal Glutathione by Cyto-Matrix utilizes a unique and patented technology, Cyto-Sorb, in order to create a stable multi-layered liposome with additional micellar delivery of glutathione.

In addition, lactoferrin is included as a necessary stabilizing agent for the glutathione molecule, to prevent it from oxidizing and degrading into its parent amino acids, cysteine, glutamine and glycine. Lactoferrin is therapeutic in its own right, with the ability to carefully transport iron within the body and provide antiviral and antimicrobial protection. Collectively, the processing techniques and the addition of lactoferrin allow for micronutrient stability, improved bioavailability and delivery of glutathione to the intestinal sites of absorption in a sustained release fashion.

Cyto-Sorb liposomal formulas are produced through a two-phase emulsion process utilizing phosphatidylcholine sourced from GMO-free sunflower, vitamin E and organic coconut vegetable glycerin. Potassium bicarbonate is strategically added to stabilize the active ingredient, prevent oxidation and improve flavour. **Liposomal Glutathione** by Cyto-Matrix provides 180mg of stable glutathione and 160mg of lactoferrin per teaspoon in a delicious orange spice flavour for improved compliance. Each bottle provides 30 servings.

## Related products

Alpha Lipoic Acid 600  
Liposomal B12  
Liposomal C  
Liposomal CoQ10  
Mito-Matrix  
NAC-Matrix

**Non-Medicinal Ingredients:** Glycerin, lactoferrin, phosphatidylcholine, medium chain triglycerides, d-alpha tocopherol, oleic acid, riboflavin, molybdenum, natural vanilla flavour, natural orange flavour, cinnamon, clove oil, stevia.

**Indications:** Provides antioxidants that help protect against the oxidative damage caused by free radicals.

**Directions:** Adults - Take 1 teaspoon, 2 times per day or as directed by a healthcare professional. Can be taken directly or mixed with a glass of water. Shake before use.

**Duration of use:** Consult a healthcare professional for use beyond 8 weeks.

**Contraindications:** Do not use this product if you are pregnant or breastfeeding.

**Warnings:** Do not use if safety seal is broken



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