The Benefits of Liposomal Glutathione in Chronic Illness Recovery

What is Liposomal Glutathione?

Glutathione is your body's **master antioxidant**. It protects your cells from oxidative stress, supports detoxification, and plays a crucial role in immune function. **Liposomal glutathione** is a highly absorbable form that uses liposomes—tiny fat particles—to deliver glutathione directly into your bloodstream for **superior effectiveness.**

Indications for Use

You may benefit from liquid liposomal glutathione if you are experiencing or working through:

- Chronic fatigue or low energy
- Brain fog or cognitive decline
- Chronic infections or immune dysfunction
- Detoxification challenges or chemical sensitivity
- Autoimmune conditions
- Mold illness or environmental toxicity
- Long COVID or post-viral inflammation
- Heavy metal burden
- Neurological symptoms (tingling, tremors, migraines)
- Histamine intolerance or MCAS

How to Use It

- **Standard Dose:** 1 teaspoon (approx. 250–500 mg) daily on an empty stomach or as directed
- **Timing:** Morning or early afternoon (avoid late-day use in sensitive individuals)
- **Method:** Hold under tongue for 30–60 seconds before swallowing or mix into a small amount of water/juice
- **Storage:** Refrigerate after opening; keep tightly closed

Precautions

- May cause mild detox symptoms initially (headache, fatigue, nausea)
- Start with a half dose if sensitive or detox pathways are impaired

- Not recommended during acute infection without provider guidance
- If pregnant, breastfeeding, or taking chemotherapy, consult before use

Why It Matters in Functional Medicine

Glutathione is foundational in our treatment of:

- Mitochondrial health
- Phase I & II liver detox pathways
- Immune modulation
- Oxidative stress reduction

We often combine it with **binders**, **NAC,** or **phospholipid therapy** as part of a comprehensive **cellular healing protocol.**

Genetics and Glutathione: Why Some People Need More Support

Some people have a harder time making enough glutathione naturally due to **genetic variations (SNPs)**. These SNPs can reduce the activity of the key enzyme your body uses to make glutathione—**even if you're eating well and supplementing with the building blocks.**

Here are **three common gene variants** that may impact your glutathione levels:

1. GCL SNPs (Glutamate-Cysteine Ligase)

- This gene produces the enzyme that initiates glutathione production.
- About **22% of people** carry a SNP that slows this enzyme down, limiting your natural ability to make glutathione.

2. GCLC (-129T) SNP

- Affects the main subunit of the GCL enzyme.
- Associated with **lower glutathione levels** and increased risk of cardiovascular disease, diabetes, and oxidative stress-related illness.

3. GCLM (588T) SNP

- Impacts the helper subunit of the GCL enzyme.
- Linked to poor detox capacity, mood disorders, and neuroinflammation.

Supplement Strategy

If you have these SNPs, I typically recommend a **foundational precursor protocol** that includes:

- **NAC + Glycine (Designs for Health)**
- **S-Acetyl Glutathione Synergy (Designs for Health)**
- **Liposomal Glutathione** for direct antioxidant support

This combination helps **support your body at multiple points** in the glutathione pathway—improving detox, energy, and resilience.

Common Pairings

To support natural glutathione production—especially in those with genetic SNPs—we often use:

- **Pure Encapsulations- NAC/Glycine** – a key precursor for glutathione synthesis
- **Designs for Health- S-Acetyl Glutathione Synergy** – a stable form that supports intracellular levels and includes precursors to aid in glutathione synthesis
- **Phosphatidylcholine** – supports healthy cell membranes and detox pathways
- **Methylated B-vitamins** – for methylation and detox support
- **Binders** – to escort toxins out safely
- AFTER foundational support, we often **add Liposomal Glutathione** for direct replenishment

What Causes Glutathione Depletion?

Glutathione is your body's **master antioxidant and detoxifier**. But many everyday exposures can drain your levels—sometimes without you even knowing it.

Lifestyle Stressors

- Chronic emotional stress
- Poor-quality sleep
- Processed, low-protein diets
- Excess alcohol
- Smoking or vaping
- Overtraining or no exercise

Everyday Toxicants That Drain Glutathione

You are exposed to toxins daily through **air, water, food, and products**. These exposures increase your need for **glutathione**:

Home & Personal Products

- Fragrance (in candles, air fresheners, perfumes)
- Cleaning products with bleach, ammonia, or formaldehyde
- Non-stick cookware (Teflon/PFAS)
- Flame retardants in furniture
- BPA and phthalates in plastics
- Aluminum in deodorants

Food & Water Contaminants

- Pesticides and herbicides (e.g., glyphosate)
- Hormones and antibiotics in conventional meat/dairy
- Artificial additives, colors, and preservatives
- Contaminated tap water (chlorine, fluoride, heavy metals)

Environmental Pollution

- Vehicle exhaust and smog
- Industrial air and water pollutants
- Mold and mycotoxins from water-damaged buildings
- Heavy metals (mercury from fish/amalgams, lead from old pipes/paint, arsenic from rice)

Medications & Chemicals

- Acetaminophen (Tylenol)
- Statins, antibiotics, anti-inflammatories
- Chemotherapy and radiation
- Recreational drugs and alcohol

Health-Related Causes

- Chronic infections (Lyme, EBV, Long COVID)
- Mold illness (CIRS)
- Autoimmune diseases
- Liver dysfunction
- Mitochondrial dysfunction
- Neurodegeneration (Parkinson's, Alzheimer's)

Genetic Susceptibility

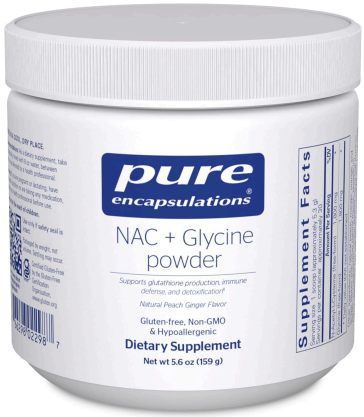
- **Genetic SNPs** in **GSTM1, GSTT1, GSS, GPX, SOD2, and MTHFR** can impair **glutathione recycling and detox capacity**.
- **MTHFR** is the **most common genetic SNP** leading to **depletion of glutathione stores**—and one of the **most important** to address.

Aging

- Natural **glutathione levels decline with age**, making it harder to keep up with exposures

Recommended Brands

		
Designs for Health Liposomal Glutathione - Liquid Glutathione Supplement	**Quicksilver Scientific** Liposomal Glutathione - Superior Absorption Oral Glutathione Supplement	**Researched Nutritionals** Tri-Fortify Liposomal Glutathione



Pure Encapsulations
NAC + Glycine Powder

Designs for Health
S-Acetyl Glutathione Synergy

Always notify Dr. Ballehr of any new symptoms or reactions.
For questions, contact: staff@drlisaballehr.com