



L-GLUTATHIONE

The body's principal antioxidant – and an FDA warning worth knowing about

Glutathione is the most abundant antioxidant your cells make, and its role in detoxification and oxidative defence is well established. The injectable form carries a specific regulatory history that anyone selling or buying it should be aware of.

● In Plain English

Glutathione is your cells' main defence against oxidative damage – it neutralises reactive molecules and helps the liver process toxins. Your body makes it constantly, and levels fall under oxidative stress, illness and age. Swallowing it does not work well, because the gut breaks it down before it reaches circulation, which is why injectable and IV routes exist.

What people use it for. Antioxidant support, liver and detoxification support, and skin brightening – the last of which is the most common reason people seek it out.

What to know before you buy. One thing you should know up front: FDA has issued warnings specifically about injectable glutathione sold for skin lightening. That is the most-marketed use of this compound and it is the one the agency has acted against, so expectations should be set accordingly. The underlying antioxidant biology is solid and IV glutathione has real clinical uses. If your goal is simply raising glutathione levels, N-acetylcysteine is a cheaper oral precursor with better evidence behind it, and it is worth knowing that before spending more.

● What It's Used For

GOAL	WHAT THAT RESTS ON
Antioxidant defence	The principal antioxidant your cells make; also regenerates vitamins C and E
Liver and detoxification	Central to phase II hepatic detoxification
Clinical precedent	IV glutathione has established use in specific protocols, including alongside cisplatin chemotherapy
Honest caveat	FDA has warned specifically about injectable glutathione marketed for skin lightening

The left column lists goals people commonly pursue with this compound; the right column states what that rests on. These are described uses and research findings, not proven outcomes or treatment claims. Individual results vary and no outcome is promised.

● Pricing & Sizes

PRICING

1500mg vial

\$60

Bulk pricing: 2-3 vials -5% | 4-6 vials -10% | 7-9 vials -15% | 10+ vials -20%

Ships sealed and lyophilized — stable for years at room temperature, reconstitute before use, or ask and it will be reconstituted free at the volume shown below. **Free shipping on every order, no minimum.** Third-party COA available for every batch — HPLC purity and mass spec verification.

Reconstitution — bacteriostatic water: 1500mg vial at 10mL = 150mg/mL, so 10 units on a 100-unit syringe draws 15mg. Concentrations are arithmetic from vial content and diluent volume, not a dosing recommendation.

● At a Glance

CLASS	Endogenous tripeptide antioxidant (glutamate-cysteine-glycine)
FUNCTION	Principal intracellular antioxidant; central to phase II liver detoxification and regeneration of vitamins C and E
ESTABLISHED USE	Intravenous glutathione has genuine clinical application, including in cisplatin chemotherapy protocols
FDA POSITION	FDA has issued warnings regarding injectable glutathione marketed for skin lightening , citing safety concerns and unapproved status
ORAL LIMITATION	Oral glutathione is poorly bioavailable — largely broken down in the gut, which is the main argument for parenteral routes
REGULATORY (US)	Not FDA-approved for skin lightening or general wellness use. Not on the July 2026 PCAC agenda
FORMAT	1500mg vial

3

AMINO ACIDS

Master

ANTIOXIDANT ROLE

FDA warning

ON SKIN-LIGHTENING USE

Poor

ORAL BIOAVAILABILITY

REGULATORY STATUS — THE SKIN-LIGHTENING ISSUE

FDA has issued public warnings about **injectable glutathione marketed for skin lightening or whitening**, noting it is unapproved for that use and raising safety concerns including the risk associated with unregulated injectable products. This is the most common consumer-facing marketing angle for the compound and it is specifically the one FDA has acted against. Marketing injectable glutathione for skin lightening carries real regulatory exposure. Not on the July 2026 PCAC agenda.

● What the Evidence Supports

Well established

Glutathione's biochemical role is not in question. It is the principal intracellular antioxidant, essential to phase II hepatic detoxification conjugation reactions, and it regenerates other antioxidants including vitamins C and E. Depletion is a recognised feature of oxidative stress states, and IV glutathione has established clinical use in specific protocols, notably alongside cisplatin chemotherapy to reduce neurotoxicity.

Less established

Whether supplemental glutathione produces meaningful benefit in healthy adults for general wellness, energy or longevity is not well demonstrated. For skin lightening specifically — the dominant marketing use — the evidence is limited and FDA has warned against the practice.

The precursor alternative

N-acetylcysteine supplies cysteine, the rate-limiting amino acid in glutathione synthesis, and has a substantially better-established oral evidence base. For raising glutathione status, the precursor route is generally the better-supported approach and is worth knowing about as a point of comparison.

THE BOTTOM LINE

Genuine and important biology, with a real clinical role in specific protocols. The general-wellness and skin-lightening applications are far less supported, and the latter is the subject of explicit FDA warnings. Worth stating plainly rather than selling around.

● Also in the Range

Compare with **NAD+** in the cellular support category. Different pathways — glutathione is antioxidant defence and detoxification, NAD+ is energy metabolism and DNA repair.

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