

# Acetyl-Glutathione

## Well Absorbed Oral Glutathione\*

Acetyl-Glutathione is a novel oral glutathione formulation that is stable in the stomach and gastrointestinal tract, well absorbed, and able to enter the cells directly and present to the cytosol for mitochondrial entry.\* Unlike other forms of glutathione, Acetyl-Glutathione tablets are convenient and easy to take.

Glutathione is found throughout the body, and is concentrated in the liver and kidneys, as well as the lining of the lungs and intestines. It is the body's major endogenous antioxidant, playing a central role in maintaining the redox state of every cell in the body.\*



#76430 • 100 mg 60 tablets

#77060 • 300 mg 60 tablets

### Key Features

- Stable in the stomach and gastrointestinal tract, and well absorbed\*
- Able to enter the cells directly, and naturally replenish intracellular glutathione levels\*
- Unlike many other forms of glutathione, Acetyl-Glutathione tablets are easy to take

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**Glutathione** directly reacts with oxidants, and recycles other antioxidants back to their reduced forms, both endogenous antioxidants such as glutaredoxins, and exogenous antioxidants including vitamins C and E.\* It serves as a cofactor for glutathione peroxidases, and is involved in the regulation of the nitric oxide cycle.\* Glutathione is important in liver and kidney detoxification processes, and glutathione levels are considered a key marker of immune status.\*

Because glutathione is a tripeptide (i.e., made of three amino acids), oral reduced glutathione has unfavorable biochemical and pharmacokinetic properties. It is not well absorbed from the gut, it has a short half-life in blood plasma, and it is not clear that it is transported into cells to any significant extent. When taken orally, the body must break most of the glutathione into its component amino acids (cysteine, glutamate, glycine) to allow absorption into the blood stream. Even if some whole glutathione does gain access to the blood stream, in order to be taken up by cells, it must be broken down and re-synthesized to glutathione intracellularly. Metabolic and enzymatic obstacles in the body can and do impair these processes.

**S-acetyl-glutathione** is one of several reversible bioconjugates of glutathione that are stable in plasma, and that can be taken up by cells directly.\* De-acetylation is an ordinary occurrence in cells, and once in the cells, S-acetyl-glutathione is naturally de-acetylated to glutathione.\* S-acetyl-glutathione contains one acetyl group on the sulfhydryl portion of the peptide. Intracellularly, the acetyl group is removed to replenish glutathione for mitochondrial action.\*

Other enhanced absorption glutathione preparations, such as liposomal forms or suppositories, can be difficult or unpleasant for some to make use of. Acetyl-Glutathione, in contrast, has none of these problems, and is easy to take. Taking Acetyl-Glutathione with vitamin C may enhance the properties of both.\*

#### References:

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## Acetyl-Glutathione 100 mg

### Supplement Facts

Serving Size	1 Tablet
Servings Per Container	60
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Amount Per Serving	% Daily Value
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S-Acetyl-L-Glutathione	100 mg *
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\* Daily Value not established.

Other ingredients: Microcrystalline cellulose, Micosolle®, calcium phosphate, sodium starch glycolate, vegetable magnesium stearate.

**Suggested Use:** As a dietary supplement, 1 tablet two times daily on an empty stomach, or as directed by a healthcare professional.

## Acetyl-Glutathione 300 mg

### Supplement Facts

Serving Size	1 Tablet
Servings Per Container	60
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Amount Per Serving	% Daily Value
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S-Acetyl-L-Glutathione	300 mg *
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\* Daily Value not established.

Other ingredients: Microcrystalline cellulose, Micosolle®, sodium starch glycolate, vegetable magnesium stearate.

**Suggested Use:** As a dietary supplement, 1 tablet daily on an empty stomach, or as directed by a healthcare professional.



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