

NAC + Glycine Powder

N-Acetyl-L-cysteine and glycine combination to support glutathione production, immune defense and detoxification[†]

INDICATIONS

- Ages 18 and up
- Immune system/antioxidant support[†]
- Respiratory system and detoxification support[†]

BENEFITS

- Restores and promotes glutathione synthesis[†]
- Promotes antioxidant defenses and the body's natural detoxification process[†]
- Supports immune and respiratory health[†]
- Reduces oxidative stress associated with aging[†]

FEATURES

- 1.8 grams of both NAC and glycine per serving
- Great-tasting, natural peach-ginger flavor
- Made with high-quality vegan ingredients backed by verifiable science

VERIFIABLE SCIENCE

Glutathione is one of the main endogenous antioxidants. Found in virtually every cell of the body, glutathione defends against free radicals, in part by recycling other antioxidants. It also supports detoxification and other critical aspects of cell function.¹ Increased glutathione levels have been linked to supporting a reduction in oxidative stress and DNA damage.² Cysteine and glycine are necessary precursors for glutathione (GSH) synthesis, but the required amounts may not be met by dietary intake alone, particularly as we age.³ Co-supplementation of these nutrients has been shown to promote intracellular glutathione levels.^{4,5} In a small study involving older individuals, two weeks of supplementation with a combination of N-acetyl-L-cysteine (NAC) and glycine raised red blood cell (RBC) glutathione levels more effectively than either amino acid alone.⁵ In one study, supplementation with the combination of NAC and glycine resulted in 32% higher RBC glycine, 46% higher RBC cysteine and a 53% increase in RBC GSH concentration. There was also a significant improvement in the ratio of reduced (active) GSH to oxidized glutathione (GSSG). Increased GSH was associated with improvement in antioxidant status as measured by F2-isoprostanes, as well as mitochondrial fatty acid oxidation.⁶ In another study comparing young and

older subjects, elderly subjects had 55% lower RBC glycine, 24% lower RBC cysteine, and 46% lower RBC glutathione at baseline, as well as lower reduced (active) GSH to GSSG ratios. Supplementation with NAC and glycine in elderly subjects resulted in RBC levels of glycine, cysteine, and glutathione, as well as GSH:GSSG ratio, comparable to young unsupplemented subjects.⁴ NAC and glycine have been shown to maintain healthy cytokine release during times of metabolic stress.⁷ Research suggests that glycine may moderate TNF α and promote IL-10 to support cytokine balance, and that glycine intake is positively associated with cardiometabolic health.⁸ Studies indicate that supplementation with NAC also supports mood and social functioning.⁹ It is believed that cysteine influences the reward-reinforcement pathway by modulating the glutamate system.¹⁰ NAC additionally promotes immune defenses and supports the health of epithelial cells and cilia in the respiratory tract.¹¹ The affinity of NAC for lung tissue, together with its natural sulfur content, allows it to disrupt disulfide bonds within mucus, thinning and easing its expulsion.¹² In a randomized, double-blind trial involving mostly older individuals, 600 mg of NAC twice daily showed significant support for respiratory and immune function.^{13†}

SUGGESTED USE

As a dietary supplement, take 1 scoop daily, mixed with 8 oz water, between meals, or as directed by a health professional.

STORAGE

Store in a cool, dry place.

WARNING

If you are pregnant or lactating, have any health condition or are taking any medication, consult your health professional before use.

SOURCE

- NAC is synthetically derived
- Glycine is synthetically derived

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NOTES

Net weight 5.6 oz (159 g)

Bottle count approx. 30 servings

Order codes NGY1

Bottle size 16 oz

REFERENCES

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5. Guthikonda, et al. *American Geriatrics Society Annual Scientific Meeting*, 2006.
6. Nguyen D, et al. *J Clin Endocrinol Metab.* 2014 Jan;99(1):169-77.
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12. Tse HN, et al. *Chest.* 2013 Jul;144(1):106-18.
13. De Flora S, et al. *Eur Respir J.* 1997 Jul;10(7):1535-41.

SUPPLEMENT FACTS

1 scoop daily, mixed with 8 oz water, between meals.

Each scoop (approximately 5.3 g) contains:

N-Acetyl-L-cysteine (free-form)	1,800 mg
Glycine (free-form)	1,800 mg

Other ingredients: natural peach, mango, orange and ginger flavors with other natural flavors, potassium citrate, tri-magnesium citrate, purified stevia leaf extracts



NAC + Glycine powder	Quantity	Order Code
	5.6 oz (159 g)	NGY1

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