# NAC N-Acetyl-L-Cysteine Supports Immune Function 500 mg

# **Product Summary**

N-Acetyl-L-Cysteine (NAC) is known to have diverse physiological and therapeutic benefits, attributed largely to its antioxidant, anti-inflammatory and mucolytic effects. It is well-accepted to increase the critical intracellular antioxidant glutathione, by supplying a stable form of L-cysteine, the rate-limiting factor for glutathione synthesis.¹ The number of conditions with altered glutathione homeostasis continues to grow, including not only cardiovascular, neurodegenerative, pulmonary and age-related diseases, but there is also a growing clinical recognition of metabolic disturbances linked to environmental toxin exposure, such as diabetes and persistent organic pollutants.² By restoring glutathione levels, NAC also is well established as the most effective therapy for acetaminophen toxicity.³

Additionally, NAC's ability to cleave disulfide bonds provides efficacy as a mucolytic agent, with clinical benefit for individuals with COPD and pulmonary fibrosis.<sup>4,5</sup> Breaking disulfide bonds may also be the same mechanism by which it lowers homocysteine and improves endothelial function in coronary artery disease.<sup>6</sup> NAC has immunomodulating and anti-inflammatory effects, improving influenza symptomology and SLE disease activity.<sup>7,8</sup> By modulating glutamatergic and neurotropic pathways, NAC also has shown benefit for schizophrenia, bipolar disorder and autism.<sup>9,10,11,12</sup>

### **Unique Features**

- Supports glutathione synthesis, key cellular antioxidant and conjugator of numerous environmental toxins
- Improves endothelial function and supports nitric oxide synthesis
- Provides 500 mg NAC per capsule, allowing for easy and therapeutic dosing levels
- Stable and well-absorbed form of the easily oxidized amino acid L-cysteine
- Evidence base for diverse clinical uses

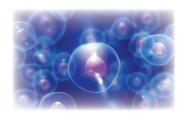


# **NAC**

N-Acetyl-L-Cysteine 90 Vegetarian Capsules

Code: 9524

NPN: 80044142







Actual size: 20.97 mm x 7.49 mm Feature: Supports immune function



## **Supplement Facts**

Serving Size: 1 Capsule Servings per Container: 90

**Each Capsule Contains:** 

Non-medicinal Ingredients: Rice starch, vegetarian capsule (carbohydrate gum [cellulose], purified water), vegetable grade magnesium stearate (lubricant).

Contains no artificial colours, preservatives, or sweeteners; no dairy, sugar, wheat, gluten, yeast, soy, corn, egg, fish, shell-fish, salt, tree nuts, or GMOs. Sealed for your protection. Do not use if seal is broken. For freshness, store in a cool, dry place.

**Recommended Adult Dose:** 1 capsule 2–3 times per day or as directed by a health care practitioner. Do not use beyond 24 weeks. Take with meals providing protein.

**Recommended Use:** NAC supports the body's natural detoxification process and the production and utilization of glutathione, an amino acid manufactured in the body that is a powerful antioxidant and free radical scavenger. NAC also supports immune function in adults over 65 who are suffering from chronic degenerative diseases and helps relieve symptoms of chronic bronchitis. Antioxidant for the maintenance of good health.

**Contraindications:** Consult a health care practitioner prior to use if you are taking nitroglycerin. Do not use if you have acetylcysteine allergy, or if you are pregnant or breastfeeding. Consult a health care practitioner prior to use if you are taking antibiotics. Consult a health care practitioner if you have cystinuria. Keep out of reach of children.

**Drug Interactions:** Although NAC may reduce nitroglycerin tolerance and improve its efficacy for unstable angina, severe headaches and hypotension may occur. NAC may also reduce the capacity of activated charcoal to absorb acetaminophen.

### References:

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- 12. Berk M, Copolov DL, Dean O, et al. N-acetyl cysteine for depressive symptoms in bipolar disorder-a double-blind randomized placebo-controlled trial. Biol Psychiatry. 2008 Sep 15;64(6):468-75.



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