NAC & ALA 500 mg & 200 mg per day



About NAC & ALA 500 mg & 200 mg per day

- N-acetyl-L-cysteine (NAC) and alpha-lipoic acid (ALA) are complementary antioxidants that help mitigate damage caused by elevated blood glucose levels, support more optimal metabolic function, and improve blood vessel health.
- NAC is the chief building block for glutathione, perhaps the most important antioxidant found within the cell, which is critical for detoxifying many of the environmental pollutants known to impair blood sugar metabolism.^{1,2}
- Supplementation with NAC has been associated with lower homocysteine levels as well as improved endothelial function, both markers for cardiovascular health.^{3,4}
- ALA helps recycle other important antioxidants, including vitamin C and glutathione, helping to limit oxidative damage within the cell.⁵
- Supplementation with ALA has been shown to help with blood sugar control
 and improve both insulin sensitivity and blood vessel health (endothelial
 function) in people with metabolic abnormalities.^{6,7} It has also been shown
 to support the maintenance of a healthy weight.⁸
- ALA has broad antioxidant effects protecting multiple tissues, including nerve and heart cells, against the damages of excessive sugar levels.^{9,10} It's been shown to reduce inflammation and oxidative stress in a variety of conditions.^{11,12}

How to Use NAC & ALA 500 mg & 200 mg per day

 To provide daily antioxidant protection, take 1 capsule 2 times per day with a meal or as directed by a health care practitioner.

Cautions and Contraindications

PATIENT NAME:

- Caution: Consult a health care practitioner prior to use if you are pregnant, breastfeeding, or have diabetes or kidney stones. Stop use and consult a health care practitioner if you experience sweating, paleness, chills, headache, dizziness, and/or confusion (as these may be symptoms of serious low blood sugar). Keep out of reach of children.
- Contraindications: Do not use this product if you are taking antibiotics or nitroglycerin. Avoid use with acetylcysteine allergy, and use with caution in individuals with asthma.

Drug Interactions

• ALA was shown to prevent drug-induced weight gain associated with atypical antipsychotics without reducing drug efficacy. ^{13,14} Caution should be used with anti-diabetes medications, as they may have additive hypoglycemic effects. Long-term use may warrant low-dose copper and/or thiamine supplementation. 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. NAC is shown to prevent the drop in GSH following acetaminophen use, without interfering with antinociceptive effects. ¹⁵

Quick Tips for Optimal Health

	A wholefood, plant-rich diet provides diverse types of antioxidants and has been associated with reduced risk for many conditions, including those related to elevated blood sugar. 16					
	Foods to emphasize are those typically associated with the Mediterranean diet, including whole grains, fruits and vegetables, nuts, legumes, and olive oil. Foods to eliminate or reduce include juices and sweetened beverages, refined grains, starchy vegetables such as potatoes, and sweets. ¹⁷					
	Weight loss, especially when part of a comprehensive primary-care-led program, has been shown to drastically improve blood sugar control, reversing diabetes in at least one-third of participants followed over two years in a controlled trial. 18 A ketogenic diet may be a helpful component of weight loss. 19					
	Minimizing your exposure to persistent environmental toxins, including organochlorine pesticides, dioxins, bisphenols, and phthalates (found in many plastics), may help improve your blood sugar control, as these pollutants have all been linked to greater risk for elevated blood sugar. ²⁰ NAC and ALA both help increase glutathione levels, which is needed to eliminate these toxins from the body.					
	Other foods that support healthy glutathione levels include brassica vegetables, polyphenol-rich fruits and vegetables, green tea, and foods rich in omega-3 fatty acids. ²¹					
	A combination of both aerobic and resistance exercise may be the most useful for helping to gain better control of blood sugar levels and improve insulin sensitivity. ²²					
PRACTITIONER CONTACT INFORMATION:						

PRACTITIONER NOTES:						

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