

ASTHMA

Magnesium Promotes relaxation of bronchial smooth muscle; Inhibits histamine release; Reduces tendency to develop anaphylaxis; Low intracellular levels linked to asthma severity.^{1,2,3,4}

Carnitine Protects the surface of the lungs; Improves pulmonary function in asthmatics; Decreases inflammation in lung tissue.^{5,6,7}

Coenzyme Q10 Steroid medications for asthma cause damage to mitochondria (site of cellular energy production); CoQ10 repairs this damage and may reduce corticosteroid dosage in asthmatics.^{8,9}

Vitamin E In pulmonary epithelial tissue (inside surface of lungs), vitamin E fights inflammatory enzymes that cause asthmatic symptoms.^{10,11,12,13}

Choline Animal and human studies show that taking choline strongly suppresses oxidative stress in lung tissue caused by asthma.^{14,15}

Folate Plays a key role in cellular immunity; Low folate status linked to severity of an allergic response.^{16,17}

Vitamin D Higher levels increase lung capacity in asthmatics; Deficiency increases severity of asthma attacks.^{18,19,20}

Vitamin C Dilates bronchial airways; Inhibits histamine-induced constriction of airways; Needed for production of epinephrine, which mitigates asthma attacks.^{21,22}

Vitamin B6 Binds with the chemical that causes airway constriction (histamine) and inactivates it; The common asthma drug theophylline depletes B6.^{23,24}

Vitamin A Prevents exercise-induced asthma; Regulates bronchial responsiveness.^{25,26}

Selenium Part of the enzyme (called glutathione peroxidase) that protects against asthmatic lung tissue damage; Supplementation trials are promising.^{27,28,29,30}

Zinc Regulates immune system including allergic response; Deficiency can exacerbate asthma symptoms.^{31,32}

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