GASTROINTESTINAL HEALTH

Glutathione
Counteracts oxidative stress in the intestinal mucosa (gut wall); Recycles antioxidants such as vitamins C & E.[1,2,3]

Selenium
Cofactor to glutathione peroxidase (GPx), which protects intestinal wall from inflammatory damage; Lower GPx activity due to selenium deficiency is very common in people with gut inflammation.[3,4,5]

Glutamine
Preferred fuel for enterocytes (small intestine cells), which use the most glutamine in the entire body; Keeps the junctions between intestinal epithelial cells tight so foreign proteins cannot enter bloodstream.[6,7,8]

Zinc
Decreases intestinal permeability; Maintains integrity of intestinal wall, especially when inflammatory chemicals (TNFα) compromise epithelial lining; Works with vitamin A in regenerating cells that line the gut.[9,10,11]

Vitamin A
Regulates growth of epithelial cells, including those that line the gastrointestinal (GI) tract; Reduces inflammatory proteins in the gut.[12,13]

Lipoic Acid
Supresses damaging chemicals (cytokines) in GI tract that cause an inflammatory immune response; Preserves glutathione levels and recycles vitamin C.[35,36]

Vitamin C
An inflamed gut uses up the antioxidant vitamin C faster than a healthy gut; Promotes tissue healing in GI tract; Reduces gastrointestinal inflammation.[14,15]

Magnesium
Deficiency affects the amount of good bacteria found in the gut; May help prevent stomach ulcers; Insufficient levels are very common in people with irritable bowel; Antacids induce magnesium deficiency.[32,33,34]

Vitamin D
Keeps gut flora healthy by protecting good bacteria; Activates adaptive immunity that originates in GI tract; Promotes gut barrier integrity; Deficiency linked to inflammatory bowel disease flare-ups.[16,17,18]

Choline
Maintains the barrier function of gastric epithelium (helps prevent stomach ulcers) via its role in building cell membranes and acting as a surfactant in the GI tract.[30,31]

Vitamin K
Synthesized by intestinal bacteria; Deficiency common in chronic GI disorders; Bone demineralization that occurs with inflammatory bowel diseases (Crohn's, etc) is caused by vitamin K deficiency since it is a required cofactor for bone formation.[19,20]

Folate
Deficiency alters genes in a way that makes colon cells more likely to become cancerous.[28,29]

Vitamin B6
Deficiency is strongly linked with a higher risk of developing colon cancer.[26,27]

Carnitine
May be therapeutically beneficial in people with colitis (inflammation of colon) due to its role in fatty acid metabolism, which is often impaired in GI disorders.[23,24,25]

Vitamin B12
Improves gastrointestinal complaints in some patients with dyspepsia (indigestion); Antacids deplete B12.[21,22]

Additional nutrients affect gastrointestinal health. This list is non-exhaustive.

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