Antioxidants Clinical trials show antioxidant therapy is an effective treatment for chronic pain; Vitamin E reduces neuropathic pain; Vitamin C can lower morphine consumption after surgery; Coenzyme Q10 relieves statin-induced myopathy.28,29,30,31,32

Vitamin D presents clinically as muscle or bone pain.23,24,25

Choline receptors in brain and spine that lower acute pain.17,18

Lipoic Acid Very effective treatment for neuropathic pain.26,27

Cysteine Reduces pain caused by systemic inflammation due to its potent antioxidant properties.1,2

Inositol In animal studies, treatment with inositol induces antinociception (pain reduction).3,17

Oleic Acid This fatty acid is a precursor of oleamide, an analgesic that affects neurotransmitters such as dopamine, serotonin, acetylcholine and GABA (gamma amino butyric acid), all of which play a role in pain signaling.4,5

Minerals is a cofactor for the potent antioxidant superoxide dismutase, which fights free radicals, a known source of pain. Copper supplementation can relieve arthritic pain. Treatment with Selenium improves muscle pain in deficient patients. Research suggests both Zinc and Calcium play a role in the transmission of pain signals through nerves.12,13,14,15,16

Carnitine Deficiency of this amino acid may manifest as muscle weakness, pain (myalgia) or neuropathy. Supplementation reduces several types of chronic pain.6,7,8

Magnesium Lowers pain by blocking NMDA receptors in spinal cord; Effective in reducing post-operative pain.9,10,11

Vitamin B1, B2, B6, B12 These produce a dose dependent decrease in various kinds of pain (heat, pressure, chemical); Increases sensitivity to pain meds; Their effect is likely mediated through serotonergic neurotransmitters.19,20,21,22

Choline Activates specific receptors in brain and spine that lower acute pain.17,18

Copyright 2012 SpectraCell Laboratories, Inc. All rights reserved. Doc 382 08.12
REFERENCES


