



Fibralgia

(formerly Fibro-Malic)

Stock# 4061-6 (90 capsules)

Fibralgia provides the important health benefits of malic acid and magnesium, in one source. Both ingredients have been shown to benefit individuals suffering from the chronic muscle aches and pains, stiffness and fatigue associated with fibromyalgia syndrome (FMS). As a natural alternative to prescription anti-inflammatories, Fibralgia offers those with FMS a drug-free option for achieving better health.

It is estimated that between 3 and 6 million Americans suffer from FMS—a condition of chronic, debilitating and widespread musculoskeletal pain, stiffness and fatigue. FMS patients also suffer from notable mental and physical dysfunction characteristic of immune system abnormalities and disrupted sleep patterns. Such symptoms include, but are not limited to, chest pain, depression, dizziness, frequent abdominal pain, headaches, insomnia, irritable bowel syndrome, low-grade fever, poor memory and concentration, restless sleep, swollen lymph nodes, and tingling sensations in the extremities. FMS appears to be much more common in women (70-88%) than men, with the majority of women falling between the ages of 25 to 45 years old.¹⁻⁴

Recent research suggests that FMS may be the result of local hypoxia in the muscles—a condition of decreased oxygen delivery to muscle cells which can cause muscles to become easily fatigued. Additionally, low levels of the energy-producing compound adenosine triphosphate (ATP) have been identified in FMS sufferers. ATP is crucial to the production of cellular energy, which takes place in the mitochondria of each cell. With this in mind, researchers theorize that hypoxia in muscle tissues (which inhibits ATP synthesis) causes the body to break down muscle proteins into amino acids which can be utilized to produce ATP. This theory has been supported by muscle biopsies taken from FMS patients, which reflect muscle tissue breakdown and mitochondrial damage, and may serve as the explanation behind the muscle pain associated with FMS.⁵⁻⁸

Malic acid—one of several alpha-hydroxy acids (AHAs) found in apples, grapes, cranberries, and other fruits and vegetables—is a naturally-occurring antioxidant and essential component for the synthesis of ATP. Malic acid can also be manufactured in the body through the citric acid cycle. According to research findings, malic acid appears to be essential for preventing and reversing hypoxia's inhibition of energy production.⁷⁻¹⁰

On a side note, animal studies have shown that malic acid also enhances aerobic capacity and exercise performance, which may prove helpful for increasing stamina and endurance in human athletes.^{7,8}

Magnesium is found in the mitochondria of cells, where it operates as an essential element in various cellular functions, including energy production, protein synthesis, and cell replication. Magnesium is also a cofactor of 300+ enzymatic functions in the body, and controls the various metabolic steps necessary for creating energy (i.e. the formation of ATP). Consequently, low levels of magnesium are equated with low levels of energy. Recent research involving post-menopausal women showed that low levels of magnesium result in wasted energy, making physical exertion more difficult. Magnesium deficiency has been found to cause many of the same symptoms associated with FMS—fatigue, mood disorders, sleep disorders and muscle dysfunction—and may be an important factor in its development. Thus, it comes as no surprise that individuals diagnosed with FMS typically exhibit low red-cell magnesium levels. Incidentally, magnesium deficiency can also cause a buildup of aluminum in the brain which, in turn, has been shown to produce symptoms of FMS.^{1,4,5,9,11-13}

Many natural treatment protocols for FMS include supplementation with both malic acid and magnesium, based on supporting evidence from various studies. According to one study in the *Journal of Nutritional Medicine*, 15 patients with FMS (aged 32-60), receiving daily doses of malic acid and magnesium, experienced a notable reduction in pain within the first 48 hours. During an 8-week period, overall muscle tenderness and pain decreased 67%. However, participants' conditions deteriorated within 48 hours after being switched to a placebo.^{1,4,7,11,13,14}

Likewise, a double-blind, placebo controlled study published in the *Journal of Rheumatology* demonstrated the effectiveness of malic acid and magnesium for achieving significant reductions in the severity of pain and tenderness associated with primary FMS.^{1,4,16}

Each capsule of Fibralgia provides 350mg of malic acid and 80mg of magnesium.

References:

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