



Nature's Phenyltol (with NEM)

Stock #1180-3 (60 capsules)

Nature's Phenyltol contains a unique blend of nutrients and herbs that have been shown to help relieve joint pain and inflammation without causing gastrointestinal irritation or other side-effects commonly associated with over-the-counter and prescription pain-relievers. Nature's Phenyltol also provides the added benefit of NEM (natural eggshell membrane), which contains naturally-occurring substances needed for healthy joint function and connective tissue production. Nature's Phenyltol may be beneficial for those with osteo- or rheumatoid arthritis, back pain, headaches, rheumatic complaints, or even nerve-related pain such as sciatica. Each capsule of Nature's Phenyltol contains:

DL-phenylalanine (DLPA) is a combination of the essential amino acid L-phenylalanine (found in animal protein) and D-phenylalanine (found in plant and bacterial cultures).

L-phenylalanine is a precursor to l-tyrosine, an amino acid necessary for the production of the mood-regulating neurotransmitters, norepinephrine, epinephrine (also known as adrenaline) and dopamine. D-phenylalanine inhibits the action of enzymes that break down endorphins and enkephalins—morphine-like hormones that act as natural pain-killers to reduce the sensation of pain. Individuals suffering from chronic pain exhibit decreased levels of endorphin activity. Thus, preliminary studies suggest that DLPA may help relieve pain and provide antidepressant effects in individuals suffering from osteoarthritis, rheumatoid arthritis, low back pain and migraine headaches.¹⁻¹⁰

Although most studies indicate an absence of side effects or contraindications, with the exception of an increase in blood pressure in a few individuals, DL-phenylalanine should be avoided by those with phenylketonuria (PKU), a genetic defect in the body's ability to metabolize phenylalanine. DL-phenylalanine is not recommended during pregnancy and should not be taken in conjunction with antidepressant medications (particularly MAO inhibitors). Individuals with hypertension or schizophrenia should consult their health care professional before taking DL-phenylalanine.^{2,3,10}

NEM (Natural Eggshell Membrane) - The eggshell membrane, which separates the egg from the calcified shell, is composed of protein fibers and other nutrients, including collagen, glucosamine, chondroitin and hyaluronic acid. These nutrients naturally occur in the human body, where they function as key components of connective tissues such as cartilage. For example, collagen is responsible for maintaining the integrity of tendons, ligaments and cartilage; glucosamine stimulates the production of substances needed for cartilage development and regeneration; chondroitin is a major component of joint cartilage, responsible for drawing and maintaining fluids within the cartilage; and hyaluronic acid is a ubiquitous (existing everywhere) component of connective tissue that also plays an important role in maintaining synovial fluid to lubricate the joints. Thus, use of eggshell membrane as a natural source of these important nutrients may facilitate joint health and function.^{1,11-20}

White willow bark contains the active ingredient salicin, which is metabolized in the body into salicylic acid—a chemical relative of acetylsalicylic acid and the active ingredient in aspirin. Salicylic acid helps relieve inflammation and pain by inhibiting COX-2 activity. COX-2 (cyclooxygenase-2) is an enzyme that stimulates the release of hormone-like compounds called prostaglandins, which cause inflammation and pain. Thus, willow bark is predominantly used as a natural anti-inflammatory for symptomatic relief of gouty arthritis and as an analgesic (pain-reliever) for mild neuralgic pains (nerve-related pain), toothaches and headaches. The German Commission E has approved willow bark for rheumatic ailments, headaches, and diseases accompanied by fever. A number of clinical studies have proven the efficacy of willow bark extract in painful inflammatory and degenerative rheumatic diseases, while randomized, double-blind studies have found standardized willow bark extract to be far more effective than placebo for treating chronic low back pain and osteoarthritis. In addition, a randomized, controlled clinical trial comparing the effects of willow bark extract to the prescription drug rofecoxib (a synthetic COX-2-inhibitor) found no significant difference in effectiveness between the two treatments, other than willow bark was about 40% less expensive than the drug.²¹⁻²⁹

It is important to note that willow bark does not interfere with coagulation—it does not prolong bleeding time, nor does it inhibit platelet aggregation. In addition, willow bark's active ingredients are metabolized by the liver, by-passing the gastrointestinal tract and thus, avoiding gastrointestinal irritation.^{21,23}

Morinda root has been used for centuries in Traditional Chinese Medicine to relieve inflammation, rheumatoid arthritis, and low back and leg pain. In Japanese herbal medicine, known as Kampo, morinda root is given for pain and weakness in the lower back, as well as joint pain, torn ligaments, broken or degenerating bones, and even menstrual pain. Morinda root is also taken for general pain that seems to migrate throughout the body. An extract of

morinda root has been shown to inhibit the production of nitric oxide, as well as block COX-2 activity. In addition, researchers have identified several compounds in morinda root that possess antidepressant activity.³⁰⁻³⁷

Wood betony has been used throughout history, dating back to ancient Egypt, for its sedative effects on the nervous system. Wood betony acts as a relaxant and tonic for the nervous system, helping to calm nervous tension and soothe the pain, especially nerve pain. Wood betony has been indicated for a variety of health problems, including arthritic conditions, gout, hypertension, menstrual pain, migraines, neuralgia, nervous disorders, rheumatism, sciatica, and headaches stemming from poor circulation and nervous tension. Although few scientific studies have been published in peer-reviewed medical journals, Russian researchers have identified substances in wood betony that possess anti-inflammatory and hypotensive (blood pressure-lowering) actions. For example, wood betony contains the iridoid glycoside, harpagide, which demonstrates analgesic, antiarthritic and anti-inflammatory properties.^{30,38-50}

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