

FLAX & WHEY PROTEIN— Two Weight-Loss & Immune Health Darlings Joined in Nutritional Matrimony



Flax and whey. Now, there's a potent, healthy combo for athletes, exercise fanatics, baby boomers, the elderly, and anybody else needing supplemental protein. The combination answers the question: How do people on protein diets ensure they get the right fats at the same time they are eliminating the wrong fats?

Most people are deficient in not only omega-3 fatty acids but protein as well, and athletes and exercisers need a lot of both. But mixing up too many shakes isn't the answer either. And we have to have quality.

So how do you get your quality protein while also getting the best fats that your body needs, the good fats, the omega-3 fatty acids, the ones that tamp down inflammation and build up cognitive function? MRM (Metabolic Response Modifiers) comes to the rescue once again with their all natural and totally awesome tasting Flax-N-Whey™ powder. Wait until you read how both flax and whey support your health.

FLAX'S MAJOR HEALTH BENEFITS

Most people today are deficient in the omega-3 fatty acids, for which flax and fish oils are the prime sources. But for athletes and highly active individuals, one of the most important benefits of flaxseed's unique omega-3 fatty acids, including alpha-linolenic acid (ALA), is the role ALA plays in optimizing energy reserves in the body. ALA improves the metabolism of fats, which is especially helpful in endurance sports, such as running, riding, swimming or during cardio exercise.

Furthermore, ALA improves the body's response time to brain messages. Electrical impulses must move from brain to muscles and across cell membranes (which are comprised mostly of lipid). Depending on the diet, cell membranes can be fluid or stiff; unsaturated or saturated; efficient or poor. ALA is an unsaturated fat, which increases fluidity of cell membranes and aids in the repair of muscle after strenuous exer-

cise or activity. Use of ALA helps maintain healthy cellular activities and, according to some experimental and clinical studies, might even help to contain spread of damaged cells, aid in joint health, and support healthy low-normal inflammation levels. All of this is vital to healthy living.

WHEY TO GO

Whey protein not only helps with weight loss and maintaining muscle mass better than red meat or casein-based protein products; it also increases insulin sensitivity, supports healthy blood pressure levels, and sustains health among hepatitis sufferers. No wonder so many health experts now believe that whey protein truly is the "whey" to health.

Every animal, including humans, must have an adequate source of protein in order to grow or maintain itself. Proteins, which yield amino acids, are the fundamental structural element of every cell in the body. Specific proteins are now recognized as the functional elements in certain specialized cells, glandular secretions, enzymes and hormones. It's no wonder that the word protein, which is of Greek derivation, means "of first importance."

What is whey protein? Many experts consider whey protein to be the single best important protein source today—and they have plenty of solid studies to back this claim. Whey protein is a pure, natural, high-quality protein from cow's milk. It is a rich source of all of the essential amino acids needed on a daily basis by the body. In its purest form, as whey protein isolate, it contains little to no fat, lactose, or cholesterol. Whey protein has one of the highest protein digestibility-corrected amino acid scores (PDCAAS; a measure of protein bioavailability) and is more rapidly digested than other proteins, such as casein (another milk protein).

According to experts, whey offers benefits in sports performance, weight management, immune support, bone health, and general wellness.

ALL-IMPORTANT BCAAs

A high-quality whey protein supplement contains highly concentrated essential amino acids (about 50 percent), half of which are "branched chain"

(muscle preserving) amino acids (BCAAs). In fact, whey is one of nature's richest sources of BCAAs.

The BCAAs provide L-leucine, L-isoleucine, and L-valine, which are probably the most essential of the essential amino acids for athletes in training. Research has shown that they account for roughly 33 percent of your muscle protein. Some experts believe even moderate exercise can drastically increase your body's need for one of the BCAAs, L-leucine.

Research has indicated that BCAA supplementation supports this free amino acid pool in the muscle tissue, increasing protein synthesis, and allowing the body to build and maintain lean muscle mass. Because the body cannot manufacture its own BCAAs, their inclusion in the diet is vital for maximum muscle growth and recovery. These powerful—and completely natural—anabolic agents not only help you make faster gains in lean muscle, they also help you keep that hard-earned muscle!

Current investigations on protein balance and exercise suggest that BCAAs are used as a “direct” source of energy to a much greater extent than previously thought—as they are oxidized in the muscles, not the liver. The BCAAs are the most rapidly absorbed of all amino acids. In fact, 70 percent immediately pass through the liver and are “pushed” into the muscle tissue where the majority of their metabolism takes place.

A BETTER LOOKING BODY

Whey Protein Helps Limit Muscle Loss

Researchers in Europe compared casein (slower to digest) to whey protein (more rapidly digested). In a group of nine elderly men, protein synthesis was greater with whey protein than casein. The team concluded that a more rapidly digested protein, whey protein, might be more beneficial than a more slowly digested protein by helping to limit protein losses in seniors.

Whey Protein Better Than Meat for Reducing Body Weight, Increasing Insulin Sensitivity

Here's some good news for people fighting obesity and/or diabetes. A new experimental study supports previous evidence that a high-protein diet can reduce body weight and increase insulin sensitivity but suggests that the type of protein may also have a role to play. High dietary protein reduced energy intake and visceral, subcutaneous and carcass fat, they report in the June 2004 issue of the *Journal of Nutrition* (134[6]:1454-1458).

Whey Protein Inhibits ACE, Lowers BP

Hydrolyzed whey proteins significantly reduced blood pressure in a small clinical trial, likely by altering multiple cardiovascular disease risk factors, say researchers reporting their findings in 2002 at the 11th International Congress on Cardiovascular Pharmacotherapy (held by the International Society of Cardiovascular Pharmacotherapy, May 18-21 in Montreal, Quebec, Canada). Treatment resulted in a significant reduction in blood pressure (BP) levels by the end of the first week of treatment. This effect was maintained throughout the study. Treatment significantly reduced angiotensin-converting enzyme (ACE) activity while ACE activity remained mostly unchanged by the control protein. “In our study, hydrolyzed whey proteins significantly reduce BP, likely by altering ACE activity and bradykinin levels,” concluded the team.

Whey Protein and Chronic Hepatitis

In an open study, the clinical efficacy of milk serum (whey) protein isolated from fresh milk and purified without heating was evaluated in 25 patients with chronic hepatitis B or C. Serum alanine aminotransferase (ALT) activity was reduced, and plasma glutathione (GSH) levels increased in 6 and 5 of 8 patients with chronic hepatitis B, respectively, 12 weeks after the start of the supplement. Serum lipid peroxide levels significantly decreased, and interleukin (IL)-2 levels and natural killer (NK) cell activity significantly increased. (However, there were no significant beneficial changes in 17 patients with chronic hepatitis C.) These findings suggest that the long-term supplementation of whey protein alone may be effective for improving liver dysfunctions in patients with chronic hepatitis B.

OMEGA-3 POWERHOUSE

A key ingredient in Flax-N-Whey, Flax3™ contains a gently processed, solubilized flax meal combined with an ultra-refined stabilized source of marine omega-3 fatty acids to deliver a robust matrix of 36 mg of EPA and DHA combined with 540 mg of ALA from flax per serving. Stability of these essential fats is maintained by an array of natural antioxidants found in flaxseed which act synergistically to protect these precious oils. ■

Special Processing and Blend

Flax-N-Whey delivers the optimal source of whey protein by combining a highly refined cross-flow micro-filtration and ion exchange processed whey. This specialized processing system ensures a high quality protein source in the form of short and long chain peptides to increase protein retention or High Biological Value (HBV) protein. Flax-N-Whey is also remarkably high in BCAAs, the most required amino acids for maintaining metabolic rate (energy production) especially during dieting or protracted periods of “in-between” meals.

With omega-3s from flax supporting fat metabolism as well, Flax-N-Whey is the perfect one-two punch for fueling your active, healthy lifestyle.



Resources

Flax-N-Whey is available at natural health retailers nationwide. To find a store near you or for more information, please call 1-800-948-6296 or visit www.mrm-usa.com.