Whey Protein Plus L-Carnitine

What is Whey Protein Plus L-Carnitine?
Whey Protein Plus L-Carnitine is a high-quality protein supplement that provides pure, microfiltered whey protein isolate derived from cow’s milk that has been fortified with L-carnitine. Microfiltration retains the full biological activity of whey proteins. Whey Protein Plus L-Carnitine is an instantized powder that dissolves easily in food or beverage.

What is the difference between whey protein concentrate and whey protein isolate?
Whey protein isolate is the purest form of whey protein and contains a higher protein content than whey protein concentrate. Isolates have a lower percentage of fat and lactose than concentrates. In addition, specific types of whey protein isolates retain the full complement of natural whey protein constituents that are beneficial for medical weight management and immune function. ProThera's microfiltered whey protein isolate preserves the bioactivity of all whey protein components, contains over 90% protein, provides zero calories from fat, and is free of lactose and cholesterol.

What is the difference between the various types of whey protein isolates?
There are two major commercial methods for manufacturing whey protein isolate, ion-exchange and microfiltration. Whey protein isolate prepared by ion-exchange is the most common form of isolate. While ion-exchange normally preserves the full complement of beta-lactoglobulin, the principal whey protein, other beneficial protein components, such as glycomacropeptides, are typically lost or significantly reduced during the manufacturing process. Unlike ion-exchange, microfiltration allows the whey proteins to be recovered in their natural proportions in the final product. In addition to retaining glycomacropeptides, microfiltered whey protein isolates also tend to have higher percentages of protein constituents that support immune responsiveness. ProThera's whey protein isolate is manufactured using a patented microfiltration process to ensure that the bioactivity of all whey protein fractions is retained.

What types of proteins are found in ProThera® microfiltered whey protein isolate?
**60-65% Beta-Lactoglobulin:** Beta-lactoglobulin is the most abundant protein found in whey. This protein is rich in the amino acid cysteine as well as the branched-chain amino acids, leucine, isoleucine, and valine.

**15-20% Alpha-Lactalbumin:** Alpha-Lactalbumin is another rich source of essential and branched-chain amino acids. It helps improve calcium absorption and can help reduce oxidative stress by binding toxic metals found in the body. Alpha-Lactalbumin also antagonizes a wide range of pathogenic bacteria. It has a high tryptophan content that can assist more restful sleep and morning alertness.

**15-20% Glycomacropeptide (GMP):** GMP is a strong stimulator of the release of cholecystokinin, a hormone that suppresses appetite, decreases gastric emptying, and stimulates pancreatic secretion of digestive enzymes. GMP also benefits the immune system and can bind bacterial pathogens.

**2-3% Immunoglobulins:** Immunoglobulins, also known as antibodies, are known for their role in protecting the body against foreign pathogens. Whey immunoglobulins may help bind potential pathogens and toxins in the intestines and enhance immune function.

**1-2% Serum albumin:** In addition to providing essential amino acids, serum albumin may help protect against oxidative stress.

**<1% Lactoferrin:** This valuable component of whey binds iron and several other minerals, aiding their absorption. It also has protective benefit for the immune system and exerts powerful antioxidant actions.

Who should take this product?
Whey Protein Plus L-Carnitine is especially suitable as part of a weight management program or after weight loss surgery as it provides a highly effective means of meeting protein requirements and possesses several actions useful in helping to control body weight. It is also an excellent protein choice for individuals of all ages who wish to support protein status, immune responsiveness, lean muscle mass, cardiovascular function, energy metabolism, and general wellness.

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Why is whey protein a suitable choice of protein after weight loss surgery?

Protein is one of the main nutrients affected by weight loss surgery and protein malnutrition occurs frequently among this population. Malabsorption of protein resulting from a decrease in enzyme secretions or bypassing segments of the stomach and small intestine where most protein is digested is a primary cause. Whey protein has the highest Biological Value of any known protein which means that it is easily broken down and incorporated into bodily proteins. And unlike other proteins such as soy and rice, whey protein provides all the essential amino acids needed in the body, including the important branched-chain amino acids, leucine, isoleucine, and valine. Whey protein also supports weight management as it provides specific whey proteins that activate satiety signals that affect both short-term and long-term regulation of food intake.

How does Whey Protein Plus L-Carnitine support weight management?

ProThera® whey protein isolate is often a preferred choice for persons trying to lose weight. The microfiltration process enables the retention of important whey proteins that promote satiety. Glycomacropeptide stimulates the release of cholecystokinin, a well-recognized satiety hormone. Other proteins found in ProThera® whey protein have been shown to stimulate the release of insulin, glucagon-like peptide-1, peptide YY, and other hormones that help mediate satiety and reduce food intake. The branched-chain amino acids provided in this product may also support weight management as studies suggest they can help blunt appetite, improve energy, and inhibit muscle breakdown.

Why is L-carnitine added to the formulation?

L-carnitine has an essential role in meeting the energy demands of heart and skeletal muscle and effectively promotes healthy fat and energy metabolism. This amino acid derivative may also play a role in facilitating weight loss as it has been shown to increase fatty acid oxidation, reduce fat mass, and preserve muscle mass. L-carnitine is a conditional nutrient that may need to be supplemented under certain conditions to prevent deficiency. Tissue levels of L-carnitine decline with age and may be low after weight loss surgery as a result of avoiding major food sources, such as red meat in the diet. The addition of L-carnitine offers a more focused approach for both surgical and non-surgical bariatric patients as well as others needing to ensure adequate levels.

What should I mix Whey Protein Plus L-Carnitine powder with?

This product is unflavored and is free of added sweeteners, which allows the powder to be mixed in a variety of foods, juices, and other beverages without adversely affecting their flavor. This product has also been instantized so that it readily mixes and dissolves without clumping, even in small amounts of liquid.

How much Whey Protein Plus L-Carnitine should I take?

The amount needed depends on how much extra protein is required to supplement the protein content provided by the daily diet. Each 15.8 gram serving (1 scoop) supplies 15 grams of protein and 400 mg of L-carnitine. Typically, 1 scoop taken before meals or exercise, 1 to 3 times daily is often recommended.

These statements made have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

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