The Daily, Near-Perfect Protein

Quantum Whey Protein PowderTM

Delicious Advanced Meal Replacement



Quantum Whey Protein

Whey protein is not something new. It has been used for hundreds of years. During the last decade, a bright spot light has been focused on whey protein, making it much better known, but toxic processing methods have left many people reacting to the highly heated whey and unable to get the benefits.

Now, a completely nontoxic method is available which uses ion exchange with extremely low heat, leaving the whey's broad array of healing protein molecules intact, in particular, the delicate glycomacropeptides (GMPs) which are critical healing compounds normally comprising 28 to 29% of whey protein free of heat and processing damage.

Potent, Healing Glycomacropeptides

Always check the content of glycomacropeptides (GMPs) on the label in a whey protein product. GMPs are conspicuously absent (or present in minimal quantities) in poorly processed whey protein products. Unprocessed whey should contain a maximum of approximately 29% GMPs. Highly heated whey protein contains 1% or less. Lower-heated whey protein products may claim 5% GMPs. And yes, if the GMP content is not listed on the label, it's most likely due to poor amounts or no GMP's at all.

Quantum Whey Protein contains a guaranteed 25 to 28% GMPs



Quantum Whey Protein Benefits

- Great taste: the perfect protein for your daily shake
- Promotes lean body weight, high energy, anti-aging and immune boost*
- Fully active, nontoxic whey protein, produced at very low temperatures to preserve all its exquisite healing compounds such as glycomacropeptides.
 Not highly heated-like most whey products
- Unmatched quality: guaranteed 25% (or more) glycomacropeptides for immune support, rapid tissue repair and muscle building*
- Unmatched purity: guaranteed pesticide-free

– due to its superior, low-heat processing – the highest amount available in whey protein on the market today.

Now, you can get all the great benefits of whey in Quantum Whey Protein Powder, one of the only whey proteins produced using ultra-low heat via ion exchange. Quantum Whey Protein delivers the full powerhouse of healing compounds identified in fresh whey (including immunoglobulins, GMPs, lactoferrin and much more) fully intact and ready to work for you.

Q & A: Quantum Whey

Q: Why does the body need protein?

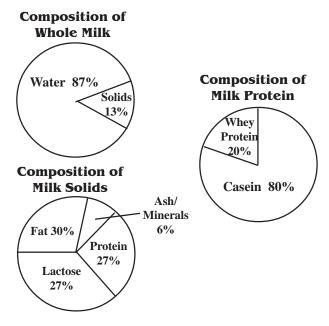
A: Protein is an essential requirement for good health. It is made up of two types of amino acids: a) non-essential amino acids can usually be synthesized by a healthy body from the foods that we eat each day and b) essential amino acids which must be obtained directly through the daily diet.

Protein has several key roles in the body, including:

- Synthesizes immunoglobulins for a healthy immune system
- Builds and repairs muscles, bones and all body cells
- Regulates many important metabolic processes in the body

Q: What is Quantum Whey Protein?

A: Whey protein is a highly nutritious protein if separated from high quality dairy milk. Milk contains two primary proteins: casein and whey protein. When cheese is produced, the liquid whey separates from the 'curd' or casein. The whey proteins are then separated from the liquid whey and purified to various concentrations of whey protein. The graphs below show the percentages in the composition of milk.



Q: Are all whey proteins the same?

A: Of course not. If you extract whey protein from the milk of sick, commercially fed cows, then you'll get "sick" whey protein (because it will still contain pesticide or other toxic residues, etc.) The key is a great quality source of milk. For superior whey, the milk must be taken from cows which are healthy. Secondly, the processing of the whey is equally important. Most commercial whey is rapidly processed using high heat which damages the healing factors. In contrast, Quantum Whey Protein is made using ion exchange without damaging the protein structure.

Q: What factors are found in whey protein?

A: Whey protein is not a single protein but consists of several individual protein components. Recent new technology has enabled manufacturers to isolate and further purify some of these individual components. The following is a list of key individual components in whey protein:

- Beta-lactoglobulin
- Glycomacropeptide (GMP)
- Alpha-lactalbumin
- Lactoferrin
- Immunoglobulins
- Lactoperoxidase
- Bovine Serum Albumin (BSA)
- Lysozyme

Q: How does whey protein compare to other protein sources?

A: When whey protein is obtained from a high quality source, it is an excellent source of complete protein containing all of the essential amino acids required by the body every day. Quality whey protein has been proven to be an excellent, pure source of protein.

- 1. <u>Highly Digestible</u>. Whey protein has a *Protein Digestibility* Corrected Amino Acid Score (PDCAAS) of 1.14. The reported score is 1.0, which is the maximum value allowed by the USDA for reporting purposes. The PDCAAS is the USDA's officially approved method of scoring protein quality.
- 2. Full Complement of Protein. Another method used to measure protein quality is the *Protein Efficiency Ratio (PER)*. Whey protein has a PER of 3.2, making it one of the highest single source proteins. The PER rating is based upon the evaluation of the growth of animals consuming a fixed amount of dietary protein from a single source. As the PER increases, so does the quality of the protein.
- 3. Highly Absorbed Protein. Biological Value (BV), another measure of protein quality, measures the amount of protein that is retained from the absorbed protein for maintenance and growth. It measures the fraction of the nitrogen in the diet that remains after the nitrogen losses in the waste products have been subtracted. Whey protein has a biological value of 100, which is a higher value than for casein (milk protein), soy protein, beef or wheat gluten.

Q: Should a person with lactose intolerance and/or milk allergies avoid whey protein?

A: Whey protein, at a concentration of 80%, contains only 5-6% lactose. This low level of lactose can usually be well tolerated by individuals with lactose intolerance. If a person is allergic to milk protein (less than 1% of the population), it is important to know if the allergic reaction is caused by the milk's casein (the most common allergy) or whey, or both. Often, an allergy to casein does not include allergy to whey.

In addition, some so-called milk allergies are really toxic reactions to pesticides, antibiotic residues or synthetic hormones contained in commercially produced milk (and passed along in the whey). When some of these individuals were tested on non-toxic, pesticide-free whey, no reaction was incurred. However, if you are lactose-intolerant or allergic to milk protein, it it may be best to avoid this product unless otherwise directed by your healthcare practitioner.

Quantum Whey Protein Powder: Ingredients

10 oz./bottle

100% pesticide-free whey protein concentrate (minimum 25% glycomacropeptides) produced via ion exchange at low temperature. Other Ingredients: None (no toxic tagalongs such as magnesium stearate or "natural flavors" [a term for hidden MSG])