Whey Protein - Supplement Review
By John M. Berardi

Nutrient:
Whey Protein

What is it?
Whey protein is a milk protein extract recognized for its excellent amino acid profile, high cysteine content, rapid digestion, and interesting peptides (lactoglobulins, immunoglobulins, lactoferrin, etc).

What does it do?
Whey protein, like other protein sources, provides a rich amino acid supply to the body. Current data suggest that exercise can increase protein needs and that increased protein intakes can improve the response to exercise training. Whey protein is rapidly digested and this property of whey makes it optimal for post-exercise consumption since rapid increases in blood amino acid concentrations can lead to acute increases in protein synthesis. Furthermore, since whey protein contains a good amount of cysteine, whey protein may contribute to improved antioxidant defense (via increases in glutathione) in the body.

Where does it come from?
Whey protein makes up approximately 20% of the protein in milk. The beneficial properties of whey protein are partly a result of the amino acid composition and partly a result of the active peptides (the unique amino acid chain configurations that make up whey). In order to prevent the denaturing (or destruction) of the interesting peptides, appropriate processing techniques are required. The best processing includes ion exchange whey protein isolation (yielding approximately 90% protein with only 10% additional ingredients including lactose and fat) and cross flow micro filtration, yielding approximately 99% whey protein and high calcium content.

How do I use it?
Whey protein is a convenient way to supplement one’s whole food diet with additional protein and amino acids. Usually I suggest using anywhere between 20 and 40g per day of supplemental whey protein. After exercise, whey protein is especially useful as its rapid digestion and absorption provides the body with a rapid influx of amino acids for improving protein status. Protein supplements, however, should never be used as one’s exclusive protein source.

Credibility Rating -- 4/4

Rating Scale:

4/4 This supplement/regimen has significant scientific backing and can produce significant benefits in most individuals.

3/4 There exists a sound theoretical basis for its ergogenic effects; may work in certain individuals; further research is needed to elucidate their respective effects.

2/4 Science is equivocal, animal data and human data may be conflicting; or mechanism of action may be unclear.

1/4 Little or no science as well as poor theoretical foundation.

Scientific References:


