Daily Brown Rice Protein with Vitamins B₆ and B₁₂

Protein is an absolutely essential dietary component. Unfortunately, determining how much a person needs is quite complex. Many people (probably most on a typical meat-based American diet) get as much protein as they need and some get more than is healthful. For that reason, many people do not need to add protein to their diet in addition to what they obtain from food. For those people who do need to add protein to their diet - there is no better protein to use than Daily Brown Rice Protein.

Protein needs depend on several factors:

- 1. Age of the person
- 2. Health of the person some illnesses or injuries may increase or decrease the need for protein.
- 3 Pregancy and lactation increase protein requirements.
- 4. Amino Acid balance of proteins consumed.
- 5. Digestibility of proteins consumed.

The Daily Reference Value for protein is 50 g/day. Ideal protein intake may be a little more, probably around 60 grams per day for most people.

Estimating the need for protein is difficult since recommendations are for total protein, but more important are specific needs for each of the essential amino acids that make up proteins. Proteins are long chains of 20 different amino acids. The body is constantly synthesizing new proteins which include muscle and other tissues, enzymes, neurotransmitters, hormones and other compounds. All of the required amino acids must be available or the body cannot make the new proteins. Of the 20 amino acids, 11 can be synthesized in the body. However 9 "Essential" amino acids cannot be made by the body and must be supplied from the diet. Foods vary in their amino acid composition. Because wheat is relatively low in lysine, it takes almost 100 grams of protein from wheat for adults to obtain adequate amounts of dietary lysine. Furthermore, some diets can be low in total protein and when low dietary intake of protein is combined with low quality protein sources serious deficiencies can occur. Although vegetarian and vegan diets are often very healthful, they can be limited in the amount and quality of protein - especially when low quality foods based on processed grains are a major source of protein.

Brown rice is a rich source of high quality protein and is probably the best quality vegetarian protein available. Brown rice protein is naturally balanced in amino acids (white rice is not). Brown rice is also non-GMO, hypoallergenic, and mild tasting. The newly developed rice proteins powders are also easily mixed in beverages. Best of all, the amino acid profile is nearly perfect. The following table shows the amino acid profiles of Daily Brown Rice Protein.

Percent of Essential Amino Acid Requirements From 20 grams/day of Daily Brown Rice Protein

Amino Acid	Requirements	Daily Rice Protein	% Requirement From
	(grams/day)	(grams/20 grams protein)	20 grams of Protein
Isoleucine	1.3 grams	1.16 grams	89 %
Leucine	2.9 grams	1.82 grams	63 %
Lysine	2.66 grams	1.02 grams	38 %
Methionine	1.33 grams	0.46 grams	35 %
Phenylalanine	2.31 grams	0.88 grams	38 %
Threonine	1.4 grams	0.95 grams	68 %
Tryptophan	0.35 grams	0.31 grams	89 %
Valine	0.96 grams	1.20 grams	125 %
	(70 kg man)		

As can be seen in the above chart, supplementing with 20 grams of Daily Brown Rice Protein per day will supply more than one third of the estimated daily requirement of all essential amino acids. Daily Brown Rice Protein can provide its share of all essential amino acids and compensate for shortfalls from other dietary proteins.

How Does Daily Brown Rice Protein Compare to Whey Protein?

A recent study by Dr. Ralph Jaeger comparing brown rice protein to whey protein for muscle growth and exercise recovery found no difference between the two. Both proteins gave excellent resusuts. In his own words:

"In the past, studies have shown that the combination of resistance exercise with consumption of animal-derived protein (such as whey, casein, eggs, meat) has had a different effect on muscle growth than when resistance exercise was paired with plant-based protein such soy," said Dr. Jaeger. "The results of this study show, for the first time, this has changed. The objective of the study, titled, 'Rice Protein Increases Lean Body Mass, Muscle Hypertrophy, Power and Strength Comparable to Whey Protein Following Resistance Exercise,' was to determine if high doses of rice protein isolate could increase recovery and elicit adequate changes in body composition compared to whey protein isolate if given following periodized resistance-training. In summary, we found that rice protein isolate administration post resistance exercise decreases fat-mass and increases lean body mass, skeletal muscle hypertrophy, power and strength comparable to whey protein isolate."

There is no question that whey protein is a high quality protein; however, the biological value (BV) of rice protein compares very favorably with whey protein and is superior to most other proteins. The BV is a commonly used measurement of how efficiently the body digests and utilizes a protein. Consuming proteins with a high BV assures that the body has adequate protein without excess protein that the body cannot utilize.

Biological Values of Common Proteins



Advantages to Using Brown Rice Protein

- 1. High Biological Value, efficiently used by the body
- 2. Contains no animal products or derivatives
- 3. Hypoallergenic (many people are allergic to common protein sources milk, egg, soy)
- 4. No toxic solvents used in the production.
- 5. From organically produced rice
- 6. Non-GMO

Why Use Daily Brown Rice Protein

In addition to being a very high quality brown rice protein, Daily Brown Rice Protein is processed to make it a mild flavored protein that mixes well in liquid. Some rice proteins are difficult to mix and hard to use. Furthermore, since vitamin B₆ is important for metabolizing protein and amino acids, increased dietary protein increases the need for vitamin B₆. Daily Brown Rice Protein contains more than enough vitamin B₆ to assure adequate metabolism of the amino acids. Daily Brown Rice Protein also contains added vitamin B₁₂, which many people have difficulty obtaining adequately from the diet - especially vegetarians and vegans.