

How Our Bodies Use Protein

Although one gram of protein will contain four calories in all cases, the amount of protein which our body can digest and use for muscle building purposes is not always 100%. In fact, the most easily digestible natural protein source are whole eggs, where the percentage net utilization by our bodies is 94%. Because eggs contain the best protein digestion rate of any natural source, eggs are given a protein rating of '100' and all other protein containing food sources are rated according to how digestible they are compared to egg protein.

Today, there exists protein powders which digest even easier than egg protein and can be utilized by our bodies even more than the 94% that natural egg protein can be. These protein powders would have a protein rating higher than 100 on the scale below.

Biological Value

The Biological Value (BV) is a scale of measurement used to determine what percentage of a given nutrient source is utilized by the body. The scale is most frequently applied to protein sources, particularly whey protein. Biological Value is derived from providing a measure intake of protein, then determining the nitrogen uptake versus nitrogen excretion. The theoretical highest BV of any food source is 100%. In short - BV refers to how well and how quickly your body can actually **use** the protein you consume.

Below is a list of various sources of protein and their respective ratings.

Protein Ratings	
FOOD	PROTEIN RATING
Eggs (whole)	100
Eggs (whites)	88
Chicken / Turkey	79
Fish	70
Lean Beef	69
Cow's Milk	60
Unpolished Rice	59
Brown Rice	57
White Rice	56
Peanuts	55
Peas	55
Whole Wheat	49
Soy beans	47
Whole-grain Wheat	44
Peanuts	43
Corn	36
Dry Beans	34
White Potato	34

As far as sources of protein created in the lab are concerned, here is a short list of some protein sources you can find in supplements common today. See how they compare to the natural sources listed above:

Protein Ratings	
PROTEIN SUPPLEMENT	PROTEIN RATING
Whey Protein Isolate	159
Whey Protein Concentrate	104

Casein	77
Soy	74