



## PROTEIN: A FOUNDATION FOR A HEALTHY LIFE

### Part 3: PDCAAS and PRO-TF®

David Vollmer, PhD • Chief Scientific Officer and  
Health Sciences Advisory Board Member

*This “From the 4Life® Labs” article is the third installment in a four-part series discussing the many benefits of protein and PRO-TF.*

In [Part 1](#) and [Part 2](#), we established that protein is essential for the body to function, and we discussed its key role in muscle growth and adaptation from physical activity. We also reviewed the benefits of PRO-TF as a high-quality, convenient whey protein that is easier to digest than other protein powders. In this part, we’ll delve more into the enhanced digestibility of PRO-TF, which allows for improved absorption in your body.\*

The most internationally-recognized method for measuring the value of high-quality protein sources is the Protein Digestibility-Corrected Amino Acid Score, or PDCAAS. This quality measurement has been used for decades by many global regulatory bodies, including the Food and Agriculture Organization of the United Nations,<sup>1</sup> the World Health Organization,<sup>1</sup> and the U.S. Food and Drug Administration.<sup>2</sup>

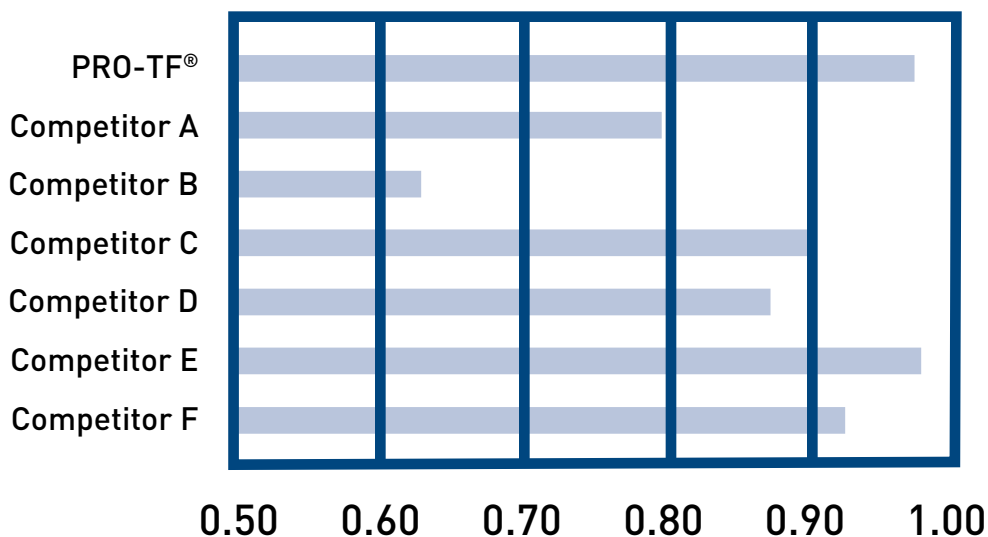
In a nutshell, the quality of a protein source is based on the amino acid requirements of the human body and its ability to digest the protein. The PDCAAS test calculates the amino acid profile of the protein source against a standard amino acid profile. It also includes a digestibility component, which is measured from a feces sample after ingestion of the protein source. The 0 to 1 ranking system is generally most influenced by the amino acid that is in shortest supply in the protein source. Below are the PDCAAS scores of some common protein sources.

## PDCAAS VALUES FOR COMMON FOODS

Whey	1.00	Fruits	0.76
Cow's milk	1.00	Vegetables	0.73
Chicken egg	1.00	Legumes	0.70
Beef	0.92	Cereals	0.59
Soy	0.91	Whole wheat	0.42

As you can see from the above table, dairy-sourced proteins, including whey, score very high on the PDCAAS scale. But that doesn't mean that all whey protein products on the marketplace are the same.

4Life® worked with an internationally-recognized, independent, third-party testing laboratory to determine the PDCAAS of PRO-TF® and other popular protein powders on the market, including some that claim to be pure whey protein isolates.



PRO-TF® outperformed most of the other protein products tested. The results likely stem from PRO-TF's higher essential amino acid amount per serving, when compared to most other products. Moreover, PRO-TF includes of 300 mg of 4Life Transfer Factor® per serving, which contains bioactive proteins sourced from both dairy and egg and could possibly lead to a higher PDCAAS score than most of the products tested.

I believe this makes PRO-TF your best option for daily consumption, easy digestion, and enhanced absorption!\*

1. FAO/WHO Expert Consultation (1990) Protein Quality Evaluation. Food and Agricultural Organization of the United Nations, FAO Food and Nutrition Paper 51, Rome.
2. United States Federal Register, Vol. 58, No. 3, Wednesday, January 6, 1993.

**LEARN MORE ABOUT THE SCIENCE OF PRO-TF.**

**Learn More**



4LIFE SCIENCE [3] 4LIFE.COM

\*THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.