



Medallion Labs

In-Vitro PDCCAS Report Definitions

	1	2	3	4	5	6	7
Amino Acid	Amino Acid Conc. Dehydrated (g/100g sample)	Amino Acid Conc. Hydrated (g/100g sample)	Amino Acid Conc. Dehydrated (mg/g protein)	Amino Acid Conc. Hydrated (mg/g protein)	1991 Reference Protein (mg/g protein)	Ratio Dehydrated	Ratio Hydrated
Cystine + Methionine*	1.35	1.55	17.03	19.66	25.00	0.681	0.787
Tryptophan*	0.79	0.87	10.00	10.97	11.00	0.909	0.997
Aspartic acid	7.42	8.58					
Threonine*						0.48	0.999
Serine							
Glutamic Acid							
Proline							
Glycine							
Alanine							
Valine*							
Isoleucine*							
Leucine*							
Tyrosine + Phenylalanine*							
Total Lysine*							
Histidine*							
Arginine							

	8 Dehydrated Amino Acids	9 Hydrated Amino Acids	
10 Total Moisture (%) =	6.36	6.36	
11 Total Crude Protein (Dumas Combustion, %) =	79.0	79.0	1.91 1.408
12 In Vitro Digestibility =	1.00	1.00	1.14 1.639
13 First Limiting Amino Acid =	Cystine + Methionine*	Cystine + Methionine*	1.96 1.154
14 Amino Acid Score =	0.68	0.79	1.39 1.385
15 PDCAAS Value =	0.68	0.79	1.59 1.208
16 Total Quality Protein (g/100g) =	53.8	62.1	1.58 1.197
17 Serving Size (g) =	8	8	
18 Total Quality Protein per Serving (g/serving) =	4.3	5.0	

Reference	Name	Definition
1	Amino Acid Conc. Dehydrated	Hydrolysis of proteins into amino acids results in water molecule added to amino acids. This column is the Amino Acid value without the weight of water.
2	Amino Acid Conc. Hydrated	Hydrolysis of proteins into amino acids results in water molecule added to amino acids. This column is the Amino Acid value <u>with</u> the weight of water.
3	Amino Acid Conc. Dehydrated (mg/g protein)	Amino Acid value divided by Total Crude Protein (Column 1*1000mg/g), then divided by Box 11.)
4	Amino Acid Conc. Hydrated (mg/g protein)	Same definition as box 3, using hydrated results. ((Column 2*1000mg/g), then divided by Box 11.)
5	1991 Reference Protein (mg/g protein)	Suggested patterns of Amino Acid Requirements set by FAO/WHO in 1991.
6	Ratio Dehydrated	Ratio of column 3 vs. column 5 (Column 3 ÷ Column 5)
7	Ratio Hydrated	Ratio of column 4 vs. column 5 (Column 4 ÷ Column 5)
8	Dehydrated Amino Acids	Amino Acid and PDCAAS information calculated and summarized using dehydrated amino acid values.
9	Hydrated Amino Acids	Amino Acid and PDCAAS information calculated and summarized using hydrated amino acid values.
10	Total Moisture	Total moisture measured in sample
11	Total Crude Protein	Crude Protein determined by Dumas Combustion using protein factor, 6.25.
12	In Vitro Digestibility	A human digestion simulation. Value ranges from 0-1.00.
13	First Limiting Amino Acid	Amino Acid with lowest ratio in columns 6 and/or 7.
14	Amino Acid Score	Lowest ratio value rounded from columns 6 and/or 7. Value ranges from 0-1.00.
15	PDCAAS Value	Amino Acid Score*In Vitro Digestibility. Value ranges from 0-1.00.
16	Total Quality Protein	Total Crude Protein*PDCAAS Value
17	Serving Size	Serving size specified on sample submission form.
18	Total Quality Protein per Serving	Total Quality adjusted to serving size