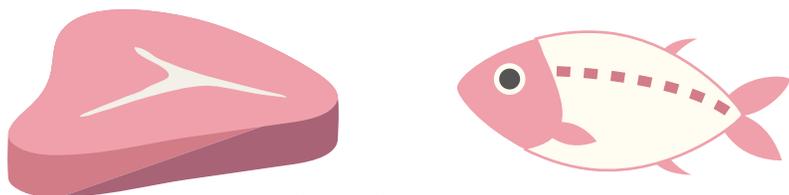


PDCAAS TO FIND %DV PROTEIN

: protein digestibility-corrected amino acid score

DEFINITION

A Protein Digestibility-Corrected Amino Acid Score (PDCAAS) for a food item is used to calculate the %DV for protein for U.S. child labels or on adult labels that make a protein claim. You can obtain PDCAAS from a lab analysis or you can calculate the value.



calculations

PDCAAS VALUE (This is going to be a value from 0-1)

- **Amino acid score x recipe protein digestibility**

Amino acid score

1. In Genesis R&D®, open the Protein Quality report.
2. Find the lowest amino acid score (a percent) and use that value for the calculation.

For accuracy, amino acid data is needed for all ingredients contributing to total protein.

Recipe protein digestibility

1. Identify each ingredient's *protein digestibility*. You can refer to the chart on this page: <http://bit.ly/protein-chart> or conduct your own research for specific ingredients.
2. In Genesis R&D, open your recipe. Open the Single Nutrient report and select protein to view what *percent* each ingredient contributes to the total protein value.
3. For each ingredient, multiply this *percent* by the ingredient's protein digestibility (from the chart at the link above).
4. Once you have a final value for each ingredient, add those values to get the *recipe protein digestibility*.

Recipe protein digestibility =

(Ingred. 1 %total protein x Ingred. 1 protein digestibility) + (Ingred. 2 %total protein x Ingred. 2 protein digestibility), etc.

Amino acid score x recipe protein digestibility = PDCAAS

(If your PDCAAS calculation totals greater than 1, enter 1.)

RECIPE EXAMPLE

1. Open a Recipe and its Protein Quality report. Fine lowest amino acid score (Lysine at 87%).
2. Find first ingredient (soy protein isolate) on the protein digestibility chart. (0.98)
3. Open Single Nutrient report. Soy protein isolate contributes 44.63% of the Recipe's total protein. So: $.45 \times .98 = .4410$
4. Repeat for all Recipe ingredients to get:

Soy Protein Isolate	.45 x .98 = .4410
Oatmeal	.43 x .82 = .3526
Walnuts	.12 x .861 = .1033
5. Add these for recipe protein digestibility of: **.8969**
6. Amino acid score (from step 1) x recipe protein digestibility (from step 5) = PDCAAS
.87 x .8969 = .7803

ON THE LABEL

1. Open your Recipe in Genesis R&D
2. Select Edit Label > Nutrient Options, expand Protein and enter .7803 PDCAA (from above example)
3. Check "Show Percent DV Protein"
4. Click OK and View Label

Nutrition Facts	
3 servings per container	
Serving size	1 cup (100g)
Amount per serving	140
Calories	140
	% Daily Value*
Total Fat 8g	21%
Saturated Fat 3g	30%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 5mg	0%
Total Carbohydrate 19g	13%
Dietary Fiber 2g	14%
Total Sugars 14g	
Includes 3g Added Sugars	12%
Protein 8g	12%
Vitamin D 0mcg	0%
Calcium 16mg	2%
Iron 0mg	0%
Potassium 210mg	8%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet.