

## Protein, Calories, Amino Acids In A Plant Based Diet

1. This chart of whole foods, commonly found in veggie diets, will help you to combine foods for complete protein
2. It's easy to get enough protein, without fuss, if you eat a wide variety of whole foods over the course of a day
3. That's assuming you get enough calories for your size, age, activity level, pregnancy, lactation, etc.

Hint: eat more high calorie whole foods if you're underweight. Vegans often need more fat than they think

4. \*Cooked' means cooked with water, no fat added.
5. Fields where data is unknown are left blank. All data is approximate, and can vary in practice
6. Measurements: 100 grams is approximately .6 cup, or 1/2 - 2/3 of a cup.
7. \* means a rough estimate
8. Actual serving sizes will vary according to the type of food and who's eating.

Example serving sizes: 12 almonds, 1 Tbsp Miso, 1 Tbsp gr. flax seed, 1/2 - 1 cup of cooked grains or beans

9. Essential Amino Acids: nine protein building blocks which the body can't make, and must get from food:

Hystidine (HYS), Isoleucine (ISO), Leucine (LEU), Lysine (LYS), Methionine (MET), Phenylalanine (PHE), Tryptophan (TRP), Threonine (THR), Valine (VAL)

10. Limiting Amino Acids: not enough present to balance the other essential amino acids and make 'complete' protein.

### For More Information, Read The Following Articles:

[How To Get Enough Protein In Your Veggie Diet](#)

[How Much Protein and Calories Do We Really Need?](#)

| Basic Whole Foods<br>Commonly Found in<br>Vegetarian or Vegan Diets | Limiting<br>Amino<br>Acids | Serving<br>Size   | Calories<br>Per<br>Serving | Gr Protein<br>Per<br>Serving | Gr Protein<br>Per 100 g | Protein<br>as % of<br>Calories | Combine<br>With         |
|---------------------------------------------------------------------|----------------------------|-------------------|----------------------------|------------------------------|-------------------------|--------------------------------|-------------------------|
| <b>Legumes: Beans and Lentils, Cooked Unless Otherwise Noted</b>    |                            |                   |                            |                              |                         |                                |                         |
| Lentils                                                             | MET-TRP                    | 1 Cup             | 115                        | 17.13                        | 8.97                    | 24.3                           | grains                  |
| Mung Bean                                                           | TRP                        | 1 Cup             | 105                        | 13.57                        | 7.54                    | 24.3                           | nuts                    |
| Chick Pea (Garbanzo Bean)                                           | MET-TRP                    | 1 Cup             | 180                        | 15.65                        | 9.54                    | 19.4                           | seeds                   |
| Black Eyed Pea (Cow Pea)                                            | ISO                        | 1 Cup             | 115                        | 12.98                        | 7.68                    | 23.7                           | veggies                 |
| Black Bean                                                          | MET-LEU-TRP                | 1 Cup             | 115                        | 12.49                        | 7.26                    |                                |                         |
| Fava Bean (broad bean)                                              |                            | 1 Cup             | 109                        | 12.85                        | 7.56                    | 23.7                           |                         |
| Kidney Bean                                                         |                            | 1 Cup             | 126                        | 14.83                        | 8.62                    |                                |                         |
| Lima Bean (butter bean)                                             | TRP                        | 1 Cup             | 113                        | 10 g                         | 7.75                    | 20                             |                         |
| Miso (fermented soybean paste)                                      |                            | 1 Tbsp            | 199                        | 2 g                          | 11.69                   |                                |                         |
| Pigeon Peas                                                         |                            | 1 Cup             | 170                        | 9.12                         | 5.96                    |                                |                         |
| Pinto Beans                                                         | MET-TRP                    | 1 Cup             |                            | 15                           |                         |                                |                         |
| Soybean (mature)                                                    | MET                        | 1 Cup             | 172                        | 29.77                        | 16.54                   | 39.4                           |                         |
| Soymilk                                                             | VAL                        | 1 Cup             | 45                         | 6.62                         | 2.7                     | 30                             |                         |
| Split Peas                                                          | MET-TRP                    | 1 Cup             |                            |                              |                         |                                |                         |
| Tempeh (fermented soybean)                                          | VAL                        | 3 oz              |                            | 15 g                         | 17                      | 36                             |                         |
| Tofu, extra firm w/nigari                                           | MET                        | 1/2 cup           | 151                        | 20                           |                         | 61.2                           |                         |
| TVP                                                                 | MET                        | 1/2 cup           |                            | 16                           |                         |                                |                         |
| <b>Seeds, Raw</b>                                                   |                            |                   |                            |                              |                         |                                |                         |
| Flax Seeds (whole)                                                  | LYS-ISO                    | 1 Tbsp            | 44                         | 1.5 g                        | 18.29                   | 12.5                           | <b>Combine<br/>With</b> |
| Hemp Seeds                                                          | VAL                        | 1 Tbsp            |                            |                              | 29.9                    |                                | grains,                 |
| Pumpkin Seeds                                                       | LYS-ISO                    | 1 Tbsp            | 46                         | 2 g                          | 24.54                   |                                | legumes                 |
| Sesame Seeds (whole)                                                | LYS                        | 1 Tbsp            |                            | 1.6 g                        | 17.73                   | 7.9                            | veggies                 |
| Sunflower Seeds (hulled)                                            | LYS                        | 1 Tbsp            | 46                         | 1.8 g                        | 20.78                   | 19.8                           | fruit                   |
| Tahini (sesame seed paste)                                          | LYS                        | 1 Tbsp            | 47                         |                              | 17                      |                                |                         |
| <b>Nuts, Raw</b>                                                    |                            |                   |                            |                              |                         |                                |                         |
| Almond                                                              | ISO-VAL                    | 1/2 oz (12)       |                            | 3 g                          | 16.8                    | 9.6                            | <b>Combine<br/>With</b> |
| Brazil Nut                                                          | ISO-LYS                    |                   |                            |                              | 14.8                    | 7.9                            | grains,                 |
| Cashews                                                             |                            | 1 Oz.             |                            | 2.5 g                        | 17.4                    | 11.1                           | legumes                 |
| Coconut                                                             | LYS                        |                   |                            |                              | 6.6                     | 3.9                            | veggies                 |
| Hazelnut                                                            | THR-ISO                    |                   |                            |                              | 19.9                    | 11.7                           | fruit                   |
| Peanut Butter                                                       | LYS-TRP-MET                | 1 Tbsp            |                            | 4 g                          |                         |                                |                         |
| Peanuts                                                             | LYS-TRP-MET                | 1 oz.             |                            | 7 g                          |                         |                                |                         |
| Pecan                                                               | VAL                        |                   |                            |                              | 6.25                    | 7.8                            |                         |
| Pistachio                                                           | LYS-THR                    |                   |                            |                              | 18.9                    | 11                             |                         |
| Walnut                                                              | ISO-LYS                    | 1/2 oz (7 halves) |                            |                              | 15.6                    | 8.2                            |                         |

