Cooking plant-based: how to get enough protein

Good for you & good for the planet!
Reducing meat consumption to include more plant foods can benefit both our health and the planet.

Plant-based diets based on whole plant foods such as pulses, fruit and vegetables, nuts and seeds tend to be lower in saturated fat and salt, and richer in fibre. They also have a lower impact on the environment due to their low greenhouse gas emissions.

Whether you wish to transition to a fully plant-based diet or simply incorporate more plant foods in your day-to-day, this factsheet will be a useful guide to get you started on your journey.

Can you get enough protein from plant foods?
Getting enough quality protein from plants is possible and there are many options you can opt for: from pulses and whole grains to meat substitutes. The key is to make sure to combine and vary different sources throughout the day.

How much do we need?
The general recommendation for healthy adults is to eat at least 0.83 grams of protein per kilogram of weight. However, requirements vary for everyone.

What can a day look like?*
*to reach 54 g of protein, based on the average protein requirements for a 65 kg adult.

12 g oatmeal (40 g of oats) with soy drink (200 ml) & 1 tbsp of flax seeds
13 g 2 bean burgers (80 g), 4 tbsp of rice, varied veggies
18 g lentil soup (200 ml), 2 slices of whole grain bread, 2 tbsp of hummus & 1 mandarin
9 g soy yoghurt, a handful of walnuts & 1 banana
**The secrets to tastier tofu**

1. Select the right texture: firm or soft, depending on the kind of recipe.
2. Press it (15 min) or freeze it to get rid of moisture & allow it to absorb flavours.
3. Marinate it in a water-based marinate, between 1 hour & 1 day.
4. Bake it, fry it or cook it in a sauce. It is extremely versatile!

Tofu is also a source of calcium, which is important for those who exclude dairy from their diets.

**How much protein is in soy products**

- **Tempeh (cooked)**: 50 g ≈ 3 thin slices, 10.3 g of protein.
- **Edamame beans (frozen)**: 80 g = 6–7 tbsp, 9.8 g of protein.
- **Tofu (steamed)**: 100 g ≈ 2 slices, 8.1 g of protein.
- **Soy yoghurt (plain)**: 125 ml ≈ 1 small/5 tbsp, 5 g of protein.
- **Soy drink (unsweetened & fortified)**: 200 ml ≈ 1 glass, 4.8 g of protein.

**Soy is a high-quality plant protein** as it contains a good balance of essential amino acids & tends to be well digested by our body.

**How much protein is in pulses**

- **Black eyed beans**: 80 g = 5–6 tbsp, 7 g of protein.
- **Red kidney beans**: 80 g = 5–6 tbsp, 6.9 g of protein.
- **White beans**: 80 g = 5–6 tbsp, 6.9 g of protein.
- **Green peas (frozen)**: 80 g = 8 tbsp, 4.4 g of protein.
- **Chickpeas**: 80 g = 4 tbsp, 6.2 g of protein.
- **Lentils**: 80 g = 5–6 tbsp, 6.4 g of protein.

Soaking dry pulses prior to cooking helps to improve their digestibility.

**3 ways of cooking dry pulses**

- **Lupin**: 40 g = 4 tbsp, 6.6 g of protein.
- **Green peas (frozen)**: 80 g = 8 tbsp, 4.4 g of protein.

3. Soak in water overnight then drain, rinse & cook in fresh water.
4. Boil, cool & drain then boil again in fresh water.
5. Cook them in a pressure cooker.

*all values refer to pulses boiled from dried*
How much protein is in seeds

- **Hemp seeds**
  - 10 g ≈ 1 tbsp
  - 3 g of protein

- **Pumpkins seeds**
  - 30 g ≈ 1 handful
  - 7.7 g of protein

- **Pumpkin seeds**
  - 10 g ≈ 1 tbsp
  - 2.4 g of protein

- **Almonds (whole)**
  - 30 g ≈ 1 handful
  - 6.4 g of protein

- **Flax seeds**
  - 10 g ≈ 1 tbsp
  - 2.2 g of protein

- **Cashews**
  - 30 g ≈ 1 handful
  - 5.3 g of protein

- **Pistachio (roasted)**
  - 30 g ≈ 1 handful
  - 5.1 g of protein

- **Walnuts**
  - 30 g ≈ 1 handful
  - 4.4 g of protein

- **Sesame seeds**
  - 10 g ≈ 1 tbsp
  - 1.8 g of protein

- **Hazelnuts**
  - 30 g ≈ 1 handful
  - 4.2 g of protein

- **Chia seeds**
  - 10 g ≈ 1 tbsp
  - 1.6 g of protein

- **Pecans**
  - 30 g ≈ 1 handful
  - 2.8 g of protein

- **Macadamia nuts**
  - 30 g ≈ 1 handful
  - 2.4 g of protein

- **Sunflower seeds**
  - 10 g ≈ 1 tbsp
  - 2 g of protein

How much protein is in cereals & whole grains

- **Seitan (grilled)**
  - 50 g ≈ 2 thin slices
  - 11.5 g of protein

- **Pasta**
  - 110 g ≈ 4-5 tbsp
  - 6 g of protein

- **Quinoa**
  - 110 g ≈ 7-8 tbsp
  - 5.2 g of protein

- **Oats**
  - 40 g ≈ 4 tbsp
  - 5.2 g of protein

- **Spelt**
  - 110 g ≈ 5-7 tbsp
  - 5.1 g of protein

- **Brown rice**
  - 110 g ≈ 4-5 tbsp
  - 4 g of protein

- **Breakfast cereals (fortified)**
  - 35 g ≈ 3-4 tbsp/1 handful
  - 3.4 g of protein

- **Breakfast cereals (bran flakes)**
  - 35 g ≈ 3-4 tbsp/1 handful
  - 2.5 g of protein

All values refer to boiled cereals & whole grains.

Look for fortified cereal-based products to help increase your intake of B-vitamins, iron, vitamin B12 & calcium.

Pair your plant-based meals with vitamin-C rich foods. It will help increase your iron absorption from pulses, whole grains & other vegetable sources!

Cereals & legumes are a great match: include them both to optimise your intake of essential amino acids!

Values used in this factsheet were adapted from: McCance and Widdowson’s Composition of Foods Integrated Dataset & EuroFIR food composition database.