

Getting Your Daily Protein

The general daily protein recommendation is 0.8 grams of protein per kilogram of body weight, per day. For example, this equates to approximately 56 grams for the average, sedentary male who weighs 70 kg (i.e. 70 × 0.8 = 56).

If you are more active or are growing/pregnant/unwell/aged 70+, you may require more than this amount (approximately 1 - 1.8 grams of protein per kg of body weight).
Before you go out and buy a protein powder to supplement your protein intake, it is best to look at boosting daily food sources of your protein first.

It is important to have small amounts of protein-rich foods throughout the day, in your breakfast, lunch, dinner and any snacks you may have:

- Dairy products (e.g. goat's cheese, milk, kefir, ricotta cheese yoghurt), eggs, tofu, nuts/seeds or legumes included as part of your breakfast
- Animal protein (e.g. eggs, seafood, poultry, red meat), lentils, dairy products or nuts/seeds as an element in your lunch
- Seafood, red meat, poultry, lentils, beans, tofu/tempeh dairy products or nuts/seeds included with your dinner meal
- Snacks that are made with nuts/seeds, legumes, eggs or other protein-rich ingredients

Why is protein important?

Protein literally hold us together and makes our bodies run.
Even the hardest muscle in the body, the heart, is made up of protein.
Protein can help us stay full, focused and keep our moods stable.



What is protein?

Protein in our food supplies our body with amino acids.
These amino acids are used by the body as 'building-blocks' to:

- Create cells of the immune system & allow prompt and effective tissue healing
- Produce neurotransmitters that influence mood, memory, sleep and regulate digestion
- Create 'enzymes'. These enzymes act to regulate every metabolic action in our bodies
- Produce hormones, such as insulin and neurotransmitters (i.e. serotonin)
- Operate the detoxification processes of the liver
- Maintain our muscle, connective tissue, cells and the 'architecture' of our body

Essential Proteins: Animal vs. Plant Protein

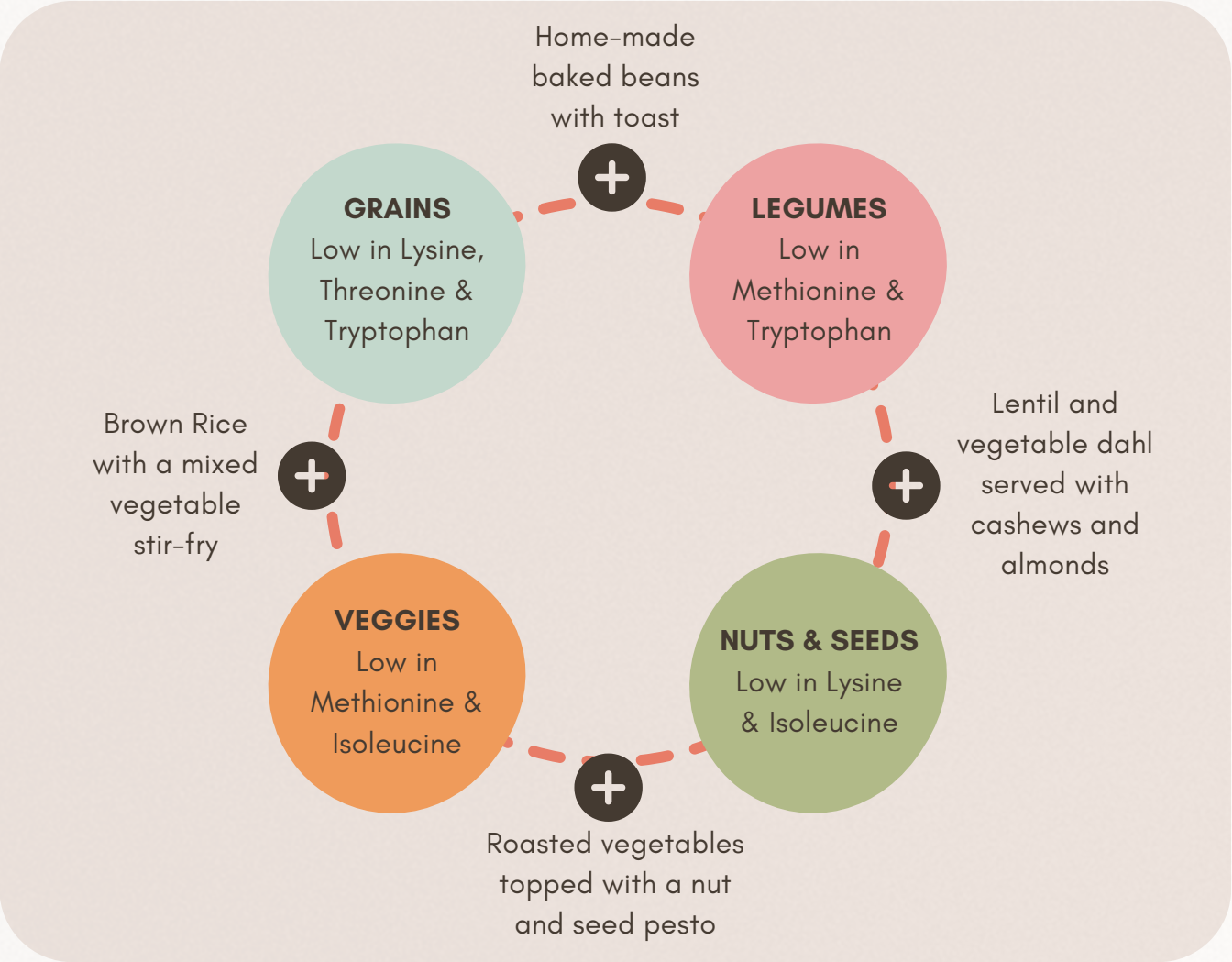
Of the twenty standard amino acids, ten of these are considered **'essential'** - which basically means that you need to get these ten amino acids from your diet because the body is unable to create them.

A protein food that contains all of these ten essential amino acids is referred to as a **'complete'** protein.

Animal sources of protein are all complete proteins, therefore this does make them a good source of protein in the diet. This does not, however, mean you cannot get your protein and essential amino acids from a plant-only diet. It just means you may need to be a bit more mindful of planning your meals and **combining your proteins** (see chart on next page) if you are vegan.

e.g. Mix a grain (like brown rice) with a legume (like beans), or add some cashews to a veggie stir-fry and serve it with some rice. This is explained in further detail in the vegetable proteins section.

Combining Plant-Protein



Good Digestion of Protein

Although animal proteins are complete proteins, and do contain all ten essential amino acids, there can be many issues with **digesting** these proteins.

Proteins need to be broken-down into individual amino acids and this relies on proper digestive function.

Unfortunately, many people may not have the ability to break down animal protein very well.

Signs of Poor Protein Digestion

- Reflux, heartburn or bloating and/or burping after a protein rich meal
- Fatigue or sleepiness after eating a protein rich meal

Poor protein digestion can be caused by eating excessively large portions of meat or as a result of poor digestive function; i.e. low stomach acid or digestive enzymes, not enough chewing of these protein foods or the use of stomach-acid lowering medications (e.g. Nexium or other PPI medications).

Vegetable Proteins

Beans, legumes, vegetables, nuts, seeds and grains are still good protein sources, even though they are 'incomplete' and do not contain the same optimal amino acid profile as protein from animal sources.

When you combine plant-based protein sources from different botanical families together (e.g. legumes, veggies and grains) then you can 'complete' the protein, as the essential amino acids lacking in one of these foods will be there in higher amounts in the food from the other family.

What does this all basically mean?
If you get creative in the kitchen and combine different types of plant-based foods together at each meal, every day, you should not need to rely on plant-proteins exclusively to get your daily protein requirements.
This also applies to snacks - i.e. eat little bits of different foods, every day.

Variety in your daily diet is the key. Add some of the following foods in your daily menu to get extra protein and keep your body strong and running at its best.

Nuts & Seeds

- Nuts and seeds range in protein content, and contain between 18 and 25 grams per 100 grams.
- Because of their high healthy fat and fibre content, nuts and seeds will also keep you feeling full. This is why they make a great snack.
- Good nut choices are macadamias, almonds and walnuts.
- Good seed choices for protein are hemp seeds and pumpkins seeds.



Eggs

- Eggs contain 12 grams of complete protein per 100 grams.
- This equates to approx. 6 -7 grams protein per egg.
- Eggs, although not suitable for vegans, can make a good protein source for vegetarians.
- The protein naturally containing in eggs is considered a **'perfect protein'**; meaning the amino acid profile in this food is **ideal** for meeting human nutrition requirements.



Quinoa

- The protein in quinoa is as close to being 'complete' as a plant-protein can get. 100 grams of quinoa provides 14 grams of protein.
- Quinoa is actually a seed, not a grain. It is gluten-free and can be used as you would rice. You can also use quinoa flour in baking.
- Make sure you rinse quinoa really well before cooking
- Quinoa seeds are coated with saponins (i.e. these saponins are what make the water look soapy when rinsing) and these can upset sensitive tummies.



Chickpeas

- Chickpeas contain 13 grams of protein per 100 grams.
- Chickpeas are full of fibre and make a great base ingredient for many meals and snacks. You can sneak chickpeas into almost any dish, i.e. curry, salad, burger patty, casserole, soup, dip.
- Chickpeas are the main ingredient in hommus dip.



Green Vegetables

- While leafy green vegetables may not contain large amounts of protein, they still do provide you with amino acids and can contribute to your daily requirements, along with other vital vitamins, minerals and phytonutrients.
- Look at some of the largest and strongest animals we have on our planet (e.g. a gorilla). These animals live off minimal animal protein (e.g. the Gorilla eats 5% insect protein and the rest is from green leaves).



Lentils

- Lentils provide 18 grams of protein per 100 grams.
- Lentils contain fibre and can provide the body with slow-releasing energy.
- Soak lentils overnight and then rinse well before cooking.
- Split peas also contain good amounts of protein.



Are proteins used as a fuel source?

Protein-based foods supply the body with energy, although the protein is not directly used as a source of fuel by the body.

Amino acids can be converted into glucose and then be used for energy, but this process only happens when there is not enough carbohydrate or fat in the diet.

Because protein is so essential for survival of the human body, using protein as a last resort for energy production is an in-built protective mechanism.

Protein Tips

Some tips for getting more quality protein in your diet and using it well

- Aim to get 20 - 25 grams of protein in your main meals
- Aim to get 5 - 15 grams of protein in your snacks
- Choose reasonable amounts of quality, pasture-raised meats and combine these with a variety of fresh, whole fruits and vegetables (see the plate diagram above).
  If you are vegan/vegetarian, learn to combine different plant proteins together to get a more rounded amino acid intake.
- Remember that fish and seafood are also complete proteins that additionally contain a healthy fat profile (i.e. omega 3 fatty acids).

Optimise your digestion of proteins by following these three rules

Chew your food well

Eat in a relaxed environment

Use bitter tasting foods/herbs

Some Quick Protein Breakfast Ideas

Protein-Boosting Breakfast Ideas

- Add yoghurt and a sprinkle of mixed seeds and nuts to oats/buckinis/buckwheat groats etc.
- Spread some hommus onto a slice of toast with some avocado, sliced tomato, cucumber etc. If you are game, try adding some sardines.
- Home-made baked beans on toast.
- Use cottage cheese to make breakfast veggie fritters or pancakes.
- Spread nut butter on toast, instead of jam.
- Make a smoothie and add hemp seeds and other nuts and seeds. Also add some kefir or yoghurt.



Egg & Veg Omelette

Use 3 eggs (yolk + egg white). Whisk in a bowl. Add 1/4 cup cottage cheese

Chop up: 1 spring onion, 5 brown/button mushrooms, 1/4 red capsicum, 2 broccoli florets and a handful of baby spinach.

Cook these in a frying pan in a little ghee/olive oil.

Add the eggs and cook until you are able to flip omelette over.
When egg is cooked through, serve with some goat's feta if you wish.

APPROXIMATE PROTEIN CONTENT: 26 g

Protein Rich Pancakes

Add ½ cup cottage cheese or ricotta cheese, ¼ cup oats, 2 eggs + 1 tsp. vanilla extract in to a blender.

Add a little maple syrup for sweet pancakes. Process until smooth.

Put a pan with a little butter on medium heat and fry each pancake until golden on both sides.

Serves 1 and provides 24 grams protein.

APPROXIMATE PROTEIN CONTENT: 25 g





Some Quick Protein Meal Ideas

Protein-Boosting Lunch or Dinner Ideas

- Salmon, mackerel or sardines/ or falafels with salad in a wrap served with hommus
- Make a satay sauce with nut butter to add to your stir-fry vegetables and tofu
- Tempeh, meat or fish with veggies in a stir-fry - add some seeds and nuts and serve with quinoa
- Lentil or meat bolognaise served with buckwheat pasta spirals and a side salad/steamed leaty greens
- Chickpea/lentil dhal with pumpkin, zucchini and spinach. Served with a dollop of yoghurt/kefir and some almond flakes.
- Vegetable frittata with salad
- Make green pea and ricotta fritters
- Add beans and legumes into salads, soups and casseroles

Basic Dahl

- 3 cloves of garlic- minced
- 1 small onion - chopped
- 5 cm piece of ginger- minced
- 1 small red chili pepper- finely chopped (optional)
- 1 tbs coconut oil
- 1.5 teaspoon turmeric powder
- 1.5 teaspoon curry powder
- 1.5 teaspoon cumin powder
- 1 teaspoon ground black pepper
- 1 x 400g can of diced tomatoes
- 2 cups washed red lentils
- 6 cups water or vegetable stock

Heat the oil in a large pot over medium heat.
Add the garlic, onion, ginger and chili pepper before cooking for 5 minutes until onion is softened. Add spices and stir well. Cook for another 1-2 minutes.

Add washed and drained lentils, diced tomatoes, and water or stock. Stir before covering to cook over low/medium heat for 30-35 minutes until lentils are soft and the dhal has the consistency of porridge, add more water as necessary.

Serve topped with a dollop of plain yoghurt and chopped coriander. Serve with quinoa.



Some Quick Protein Snack Ideas

Protein-Boosting Snack Ideas



- Trail mix of nuts and seeds - a small handful
- Boiled egg
- Fresh fruit with greek yoghurt and seeds
- Chia pudding
- Hommus dip with veggie sticks
- Seed crackers toped with ricotta/cottage cheese and sliced tomato and avocado or smoked salmon
- Nut butter spread on celery sticks or apple slices

Chocolate Chia Pudding

- 1/4 cup cacao powder or unsweetened cocoa powder
- 2 Tbsp maple syrup
- 1/2 tsp ground cinnamon
- 1 pinch sea salt
- 1/2 tsp vanilla extract
- 1/2 cups almond milk or coconut milk for creamier texture
- 1/2 cup chia seeds

To a small mixing bowl add cacao, maple syrup, cinnamon, salt, and vanilla and whisk to combine.

Then add milk and whisk until smooth.

Add chia seeds and whisk once more to combine.

Cover and refrigerate overnight, or at least 3 hours.

It may also be helpful to give the mixture an extra whisk/stir once it has been in the refrigerator for 30-45 minutes.



Falafels

- 1 cup chickpeas (cooked/canned)
- 1/4 cup parsley
- 1/4 cup pumpkin seeds
- 1 tablespoon chickpea flour (besan flour)
- 1 tablespoon green onion, finely sliced
- 1 teaspoon ground cumin
- 1/4 teaspoon paprika
- 1/4 teaspoon sea salt
- 1/4 teaspoon ground coriander
- 1 garlic clove, crushed

Add the chickpeas to the bowl of a food processor. Pulse.

Add all the remaining ingredients, and pulse again.

Roll into tablespoon sized balls - you should have approx. 10.

Bake on a tray with baking paper for 18-20 minutes in 1800C oven, turning halfway through so that the falafels brown evenly.

