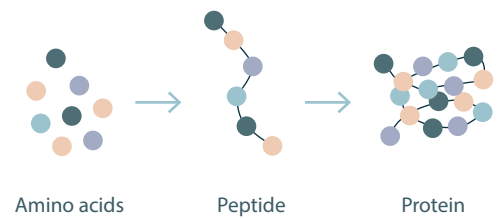


# PROTEIN DIET

It can be confusing to know how much protein to eat and what the best sources are. This is a guide to help you find the optimum protein intake for your age, gender, weight, and activity level. Many high protein diets, from Paleo to Keto, have emerged in the last few decades. However, you do not need to eliminate food groups to have sufficient protein on your plate.

## Why protein matters:

Protein is an essential macronutrient, playing a crucial role in multiple systems in the body. It is composed of building blocks called amino acids that the body uses to build new proteins and function at its best. For example, amino acids help grow and repair body tissue, make hormones and brain chemicals, provide an energy source or maintain healthy skin, hair and nails.



## AN ADEQUATE AMOUNT OF PROTEIN INTAKE IS ALSO ESSENTIAL FOR THE FOLLOWING:



Helps us lose weight as it boosts metabolism and fat burning.



Improves body composition by increasing muscle mass and strength.



Promotes satiety and reduces cravings for snacks.



Maintains bone density and strength.



Supports the immune system to fight colds and flu.



Speeds recovery post-injury.



Prevents collagen loss for healthy joints, skin and bones due to ageing, and wear and tear.



Supports ageing by maintaining muscle mass and bone health when combined with exercise.

## HOW MUCH IS ENOUGH?

The Recommended Daily Intake is often referred to for required intake of all nutrients, however, following more recent research, it is accepted that these guidelines are a minimum to prevent disease and muscle loss. We now know that eating more than this amount helps lower the risks of common health conditions.<sup>2</sup>

**i** Protein intake varies with age, weight, height, and physical activity, as well as during illness, pregnancy, or lactation.

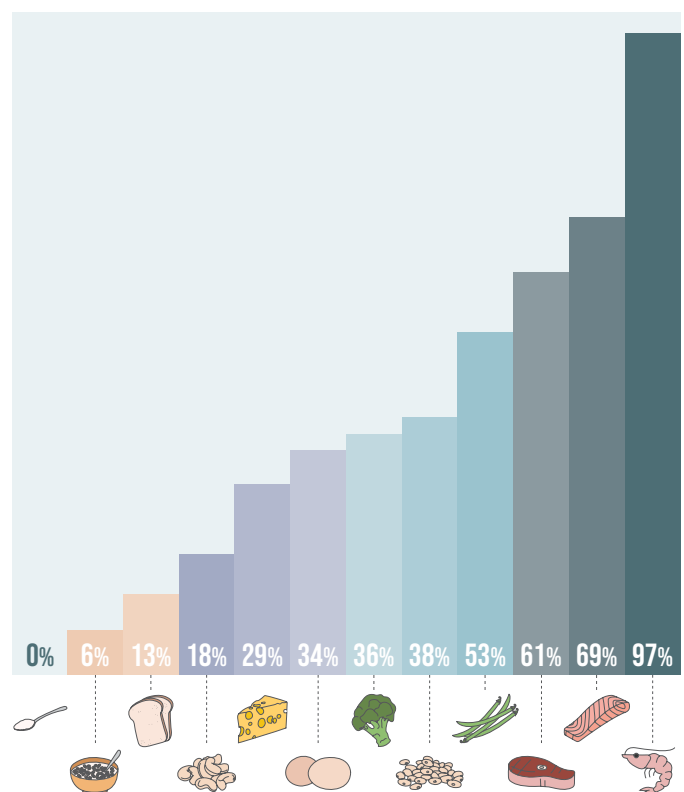
	RDI <sup>3</sup>	Optimum levels
<b>Children 1-3 years</b>	14g/day (1.08g/kg/day)	No current guidelines for optimal protein intake in the paediatric population <sup>4</sup>
<b>Children 4-8 years</b>	20g/day for a 20kg child (0.91g/kg/day)	31g/day for a 20 kg child (1.44g/kg/day) <sup>4,5</sup>
<b>Adolescents 9-13 years</b>	Boys - 40g/day (0.94g/kg/day) Girls - 35g/day (0.87g/kg/day)	Boys - 1.2-1.4g/kg/day <sup>6*</sup> Girls - 1.0-1.3g/kg/day <sup>6*</sup>
<b>Adolescents 14-18 years</b>	Boys - 65g/day (0.99g/kg/day) Girls - 45g/day (0.77g/kg/day)	Boys - 1.2-1.4g/kg/day <sup>6*</sup> Girls - 1.0-1.3g/kg/day <sup>6*</sup> Athletes - 1.3-1.8g/day <sup>7</sup>
<b>Adults 19-65 years</b>	Men - 64g/day (0.84g/kg/day) Women - 46g/day (0.75g/kg/day)	100g/d (1.6 g/kg/day when exercising) <sup>8,9</sup>
<b>Elderly &gt;65 years</b>	Men - 81g/day (1.07g/kg/day) Women - 57g/day (0.94g/kg/day)	Around 90g/day (1.2g- 1.5g/kg/day) <sup>9,10</sup>
<b>Athletes</b>		1.4-2g/kg/day <sup>8, 11</sup>
<b>Pregnancy</b>	60g/day (1g/kg/day)	1.2-1.5g/kg/day <sup>12</sup>
<b>Lactation</b>	67g/day (1.1g/kg/day)	1.7-1.9g/kg/day <sup>13</sup>

\*estimated data

## WHERE TO SOURCE YOUR PROTEIN FROM

**The best way to reach your daily protein intake is to start with one high percent protein-rich food everyday.**

- **Start at breakfast:** a great way to avoid the mid-morning slump is to start with an egg-based breakfast (eggs contain 34% protein) or a kefir smoothie topped with nuts.
- **Include protein-rich food at each meal:** with easy recipes such as a Buddha bowl based on chickpeas, lentils, tofu (38% protein) or a salad (based on fish, chicken breast or tempeh)
- **Snack on protein-rich foods:** almond butter, boiled egg or cottage cheese, for example
- **Top your salad** or roasted salmon steaks with nuts and seeds
- **Choose** kefir, Greek yoghurt or cottage cheese instead of cheese
- **Try pulse pasta** instead of the common wheat-based varieties



## FOODS TO FOCUS ON VS LIMIT

Not all protein sources are equal. Mixing some animal-based with plant-based protein foods is a great way to ensure you fuel your body with a wide range of nutrients:

### FOCUS ON

Lean meat (poultry, beef, lamb, pork, goat, kangaroo) – great sources of iron and vitamin B12.  
1 serve = 100g raw

Fish and shellfish provide additional omega-3 for brain health, smooth skin and inflammation.  
1 serve = 100g raw

Eggs, a complete protein profile inside the shell.  
1 serve = 2 large eggs

Legumes such as beans and lentils provide fibre to ensure optimal bowel function and digestion.  
1 serve = 150 g cooked

Nuts and seeds are rich in vitamins and minerals and promote satiety. 1 serve = 30g

Fermented dairy provides probiotics to maintain the gut eco-system and support weight management, healthy bowel movements, and the production of critical vitamins. 1 serve =  $\frac{3}{4}$  cup yoghurt

Vegetables are rich in flavonoids and minerals to prevent oxidative damage and reduce the risk of many chronic diseases

### LIMIT

Processed meat (bacon, salami, sausage) - they contain high concentrations of nitrates and nitrites, detrimental to gastrointestinal health<sup>1</sup>

Non-fermented dairy if you are sensitive to dairy.  
1 serve = 1 cup milk

Sweetened yoghurt can contain up to 20g of sugar per 100g pot

Cheese, high in saturated fat and salt – prefer Greek yoghurt or cottage cheese (more protein and less fat). 1 serve = 40 g hard cheese or  $\frac{1}{2}$  cup ricotta

Protein analogues (vegan sausages, burger patties) are high in sodium, and highly processed

### FUN FACT

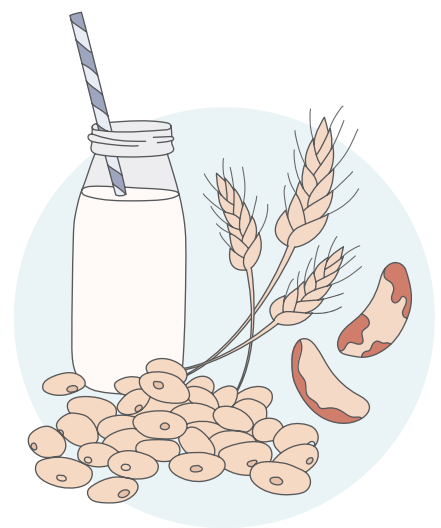
The amino acid composition of the egg has been used as a reference for evaluating protein quality, given the great balance in its essential amino acid content.<sup>1</sup>

### A note for vegetarians and vegans

Some plant-based protein sources are low in specific essential amino acids. Wholegrains, nuts and seeds are low in lysine, while legumes are low in sulfur-containing amino acids cysteine and methionine. Vegans should ensure they add legumes to wholegrains to achieve a complete amino acid profile.

A vegetarian diet focussed on low processed food options such as eggs, dairy, legumes and wholegrains, can supply adequate protein and amino acids.<sup>14</sup>

Industry has developed plant analogues to animal-based foods that are comparable in their protein content. As highly processed foods, limit them when you cannot choose wholefoods like legumes, grains, nuts and seeds.



## CREATE YOUR PROTEIN-RICH MEAL

Alternate plant-based and animal-based protein for a complete nutrient profile.

CHOOSE A PROTEIN	CHOOSE A FAT	ADD SOME VEGETABLES/FRUITS	ADD OTHER FORMS OF CHO (OPTIONAL)
<input type="radio"/> 2 eggs (12g) <input type="radio"/> 120 g salmon (25g) <input type="radio"/> 6 large prawns (8g) <input type="radio"/> 100 g beefsteak (29g) <input type="radio"/> 120 turkey or chicken breast (20g) <input type="radio"/> ½ cup cottage cheese (11g) <input type="radio"/> ½ cup Greek yoghurt (11g)	<input type="radio"/> 1 tbsp extra virgin olive oil <input type="radio"/> 2 tbsp almond butter (6g) <input type="radio"/> 30 g feta (4g) <input type="radio"/> 2 tsp butter <input type="radio"/> 1 small handful of nuts (5g) <input type="radio"/> ¼ cup cottage cheese (10 g)	<input type="radio"/> 1 cup spinach (3g) <input type="radio"/> 1 cup cooked kale (2.5g) <input type="radio"/> 2 tomatoes <input type="radio"/> ½ cup of sweet corn (2g) <input type="radio"/> 100g mushrooms (3.6g) <input type="radio"/> 100 g broccoli (2.4g)	<input type="radio"/> 1 slice sourdough whole bread (3 g) <input type="radio"/> 1 cup of quinoa (8g) <input type="radio"/> ⅓ cup of brown rice (2.7g) <input type="radio"/> ½ cup buckwheat (11g) <input type="radio"/> 1 taco shell
<input type="radio"/> 1 cup of lentils (18g) <input type="radio"/> 1 cup of chickpeas (16g) <input type="radio"/> ½ cup edamame (15g) <input type="radio"/> ¾ cup tofu (17g) <input type="radio"/> 1 cup canned red kidney beans (13g) <input type="radio"/> 1 cup tempeh (31g) <input type="radio"/> 1 cup quinoa (8g) <input type="radio"/> 1 tbsp nutritional yeast (5g)	<input type="radio"/> 1 small handful of nuts (5g) <input type="radio"/> 30 g chia seeds (4g) <input type="radio"/> 1 tbsp of tahini (3g)	<input type="radio"/> ½ cup soybean sprouts (4.5g) <input type="radio"/> Tomato, fennel, zucchini, pumpkin, carrots <input type="radio"/> Berries <input type="radio"/> Papaya	

## TYPICAL PROTEIN MEAL PLAN FOR AN ACTIVE, HEALTHY ADULT WOMAN

**Breakfast:** Frittata with 2 eggs, mushrooms, capsicum, tomatoes and spinach

**Lunch:** Salad with salmon, green beans, tomatoes, anchovies, sweet potatoes

**Dinner:** Turkey breast with roasted broccoli and edamame

**Snacks:** almond butter on 1 slice of sourdough bread

**Total protein = around 100g**

### Vegetarian:

Curried tofu scramble with capsicum, nutritional yeast, rocket

Falafel salad with green lentils, tahini, coriander, cumin, coconut yoghurt, mixed greens, sauerkraut and quinoa

One pan tempeh and vegetables with broccoli, edamame, cauliflower, capsicum, spinach

**Total protein = around 100g**

**Caution** – Protein intake is not equivalent to protein absorption. If you experience symptoms such as reflux, bloating or fullness after meals, check with your natural medicine practitioner to ensure that the amino acids from your protein-rich food are being absorbed.