

PROTEIN FACTS



Proteins are a part of every cell and tissue in our body. Unlike carbohydrates and fat, it is not an ideal form of energy and instead forms the basis of the muscles in our body which produces energy.¹ Protein is an essential dietary requirement for individuals who are physical active as it plays many important functions in the body such as: ²

- Makes up approximately 20 percent of all muscle tissue, which is actively used during exercise
- All enzymes in the body are proteins, which help drive chemical reactions such as the production of energy from carbohydrates and fats
- Helps to keep the body from becoming too acidic or too alkaline
- Proteins in the body's blood help to control water levels
- Helps to transport nutrients to cells

Since our bodies constantly recycle protein on a daily basis, we need to feed our body with good sources of protein to help replace those that break down. Good sources of protein include animal based sources such as meat, poultry, fish, eggs and cheese. For vegetarians, legumes (dry beans and peas), tofu, eggs, nuts and seeds are also good sources of protein.³ Below is a guide to help ensure you get the most optimal sources of protein in your diet to help repair and recover post-exercise.

Quality Protein Sources (based on 100g)

Source	Amount of Protein per 100g
Salmon	21.6g
Beef fillet steak	20.9g
Chicken breast (skinless)	23.5g
Turkey breast (skinless)	22.3g
Tuna steak	25.6g
Pork chops	19.3g
Almonds	21.1g
Pumpkin Seeds	28.8g
Sunflower seeds	23.4g
Soya beans	35.9g
Baked beans	9.5g
Eggs	12.5g
Tofu	12.1g
Cottage Cheese	12.2g

Source: How Much Protein 2009, 'How Much Protein', Viewed 16 March 2016,
<http://www.howmuchprotein.com/high-protein-vegetables.php>

The amount of protein recommended for individuals who are highly physical active is slightly higher than that recommended for the general public. For example the daily recommendation of protein to be consumed by people who are generally active is 0.8–1.0 g/kg of their body weight (a 60 kg person should eat around 45–60 g of protein daily). However sporting individuals involved in non-endurance events exercising daily for 45–60 minutes should try to consume between 1.0–1.2 g/kg of their body weight per day. Those individuals who are involved in endurance events and strength events exercising for periods longer than an hour performing strength activities such as weight should try to consume between 1.2–1.7 g/kg of protein of body mass.⁴ Use the below table as a guide to find out what your daily protein intake should be.

Group	Protein Intake (g/kg/day)
Sedentary men or women	0.8 to 1.0
Modern intensity endurance athletes (a)	1.2
Recreational endurance athletes (b)	0.8 to 1.0
Elite male endurance athletes	1.6
Football, power sport	1.4-1.7
Resistance training (early training)	1.5-1.7
Resistance training (steady state)	1.0-1.2
Female athletes	~ 15% lower than male athletes

Exercising approximately four to five times per week for 45-60 min

Source: Burke and Deakin, Clinical Sports Nutrition, 3rd Edition, McGraw-Hill Australia Pty Ltd, 2006

Protein is also essential for active individuals due to the combination of amino acids available in protein. Amino acids are the building blocks for all our proteins in the body and can be grouped into those needed in the diet (essential amino acids - Histidine, Isoleucine, Leucine, Lysine, Methionine, Phenylalanine, Threonine, Tryptophan, and Valine) and those that can be found in the diet but also can be made in the body (nonessential amino acids - alanine, arginine, asparagine, aspartic, cysteine, glutamine, glutamate, glycine, proline, serine and tyrosine).⁵ Most animal based sources contain essential amino acids. XS Sports Nutrition offers a range of products which contain quality sources of protein.

Overall protein supplementation is important for anyone who is physically active as it is essential for muscle repair and building, allowing you to best prepare your body for your next workout session. Get the protein your body needs to recover with XS Sports Nutrition.

References

1. ACSM 2015, 'Protein intake For Optimal Muscle Maintenance', viewed 16th March 2016, <https://www.acsm.org/docs/default-source/brochures/protein-intake-for-optimal-muscle-maintenance.pdf>
2. Keith ER 2002, 'Sports Nutrition For Young Adults' Viewed 16th March 2016, <http://www.aces.edu/pubs/docs/H/HE-0748/HE-0748.pdf>
3. ACSM 2011, 'Protein Intake For Optimal Muscle Maintenance', Viewed 16th March 2016, <https://www.acsm.org/docs/default-source/brochures/protein-intake-for-optimal-muscle-maintenance.pdf>
4. Better Health Channel 2015, 'Sporting Performance and Food', Viewed 16th March 2016, <https://www.betterhealth.vic.gov.au/health/healthyiving/sporting-performance-and-food>
5. Muth ND, 2015 'Sports Nutrition For Health Professionals', F.A Davis Company, Page 22-23