



## PROTEIN 101 - The Very Basics

To kick things off, let's cover a topic highly talked about whenever nutrition is brought up.

### **PROTEIN!**

Protein has definitely been the most talked about macronutrient in the past decade, seemingly with every product adding extra protein to it in a bid to make it 'healthier' or appeal to the ever-growing fitness and health market.

Whilst protein is absolutely essential to our survival, as our bodies cannot internally produce 9 of the 20 amino acids required for various biological processes, the commercial world hasn't quite been as clear and concise when telling us how much protein we need and the best sources available for it. In this article we hope to put to bed some of the myths and misconceptions about this important macronutrient and make things clear for you to plan your own protein requirements.

### **Why do we need protein?**

Simply put, protein helps to rebuild and repair cells in our bodies. That's pretty much it. Anything from our skin, muscles, organs, hair, nails and even hormones have protein as a component. If we don't have an adequate daily intake of protein then these cells will remain damaged and not function to the best of their ability. However, I'm sure you're not reading this because you are that interested in the role of protein, but more about how it can help with building muscle, losing fat and performing/recovering better. So let's get more into that shall we.

### **Protein requirements for the every day athlete.**

Various research has shown us that the amount of protein required is different depending upon the physical activity of each individual. Amounts between 1.3g per kilo of body weight per day (g/kg/day) and 2.3g/kg/day for males are required. What this means is if you have an office job and go to the gym 3 times per week for a resistance training session, you would only require the lower limits of protein intake. On the flip side, if you had a very physically active job like a police officer, train 3-4 times per week and live an active lifestyle, then aim towards the higher end of those ranges.



For example a 85kg male who was extremely active would have:

$$85 \times 2g = 170g \text{ of protein}$$

It is important to take into consideration what this particular male's goals are. If he wants to train for performance, for sport, or to just feel healthier and better then this amount will be more than enough. However, if he is trying to reduce body fat, he may benefit from slightly increasing his protein intake to the 2.3g/kg/day. The reason being, protein has incredible muscle sparing effects, therefore, if his aim is to lose body fat, he will want to hold onto as much precious muscle as possible so that he will remain lean and strong as body fat is reduced.

The general idea of 'more is better' that us humans love to think is simply not needed here. This is why products that haphazardly add protein in them as a marketing tool are not needed. Sure, some protein products can be extremely helpful in aiding recovery and as a convenience tool, but at the end of the day they are there to supplement your diet and you can easily meet your individual protein requirements via regular food.

### **Sources of protein**

There are a huge number of sources of protein to choose from. It's important that we try to vary our source intake as much as possible as each source will contain a different constituent amino acid profile, meaning the amino acids will be in different ratios or some sources not containing certain AA's altogether. It is also noteworthy that although the top plant/dairy based protein sources have as much as the animal sources, the amino acid profile (which amino acids are present in each food) will differ greatly, with plant-based sources often missing some of the essential amino acids completely.

List of good protein sources below.



**Meat:** Beef, Lamb, Venison , Goat, Pork, Rabbit/Hare, Veal

**Seafood:** Anchovy, Bass, Catfish, Carp, Cod, Eel, Flounder, Grouper, Haddock, Halibut, Herring, Mackerel, Pollock, Salmon, Sardine, Snapper, Sole, Swordfish, Tilapia, Trout, Tuna

**Shellfish:** Clam, Crab, Crayfish, Cuttlefish, Lobster, Mussel, Octopus, Prawn, Oyster, Scallop, Shrimp

**Poultry:** Chicken, Duck, Goose, Ostrich, Pheasant, Pigeon, Quail, Turkey

**Dairy & Eggs:** Eggs, Milk, Greek Yohurt, Cottage Cheese, Cheese, Whey Protein

**Beans & Peas:** Black Beans, Black-Eyed Peas, Chickpeas, Falafel, Kidney Beans, Lentils, Lima Beans (Mature), Navy Beans, Pinto Beans, Soy Beans, Split Peas

**Processed Soy Products:** Tofu, White Beans, Bean Burgers, Veggie Burgers

**Nuts & Seeds:** Almonds, Cashews, Hazelnuts, Mixed Nuts, Peanuts, Peanut Butter, Pecans, Pistachios, Pumpkin Seeds, Sesame Seeds, Sunflower Seeds, Walnuts