

Habit-based success • **Protein power**

Healthy And Loving Life.

Welcome

to our Habit Series - a brief introduction to the wonders of protein

The secret to success is consistency - making slight changes to your lifestyle to make your goals more easily achievable. Our habit series will look at a few tweaks you can make to accelerate your success.

Our first booklet is on protein, and why it's so essential for building muscle, but also keeping your body going in general.

Enjoy!

The Hall Training Team

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Protein power

Protein! A word you're ceratinly used to seeing and one that you're going to hear a lot more of, but why is this? The word 'protein' comes from the Greek word 'proteos' meaning 'first one' or 'of most importance'. Of the three macronutrients we consume, protein is the one we really focus on at Hall Training.

Generally speaking, protein is known for its ability to help build muscle mass. Although this is true, it's important to understand that protein does far more than this...

What is protein?

Protein contains 4Kcals per gram and is made up of small compounds known as amino acids (AA). There are

around 20 AA in total, all playing important roles in our body.



Protein is
vital for us both
structurally and functionally.
It's what our muscle, hair and nails are
made up of, even bone is comprised of
50% protein!
Functionally, protein helps to:
Detoxify the liver
Support the immune system
Make us feel full
Regulate blood sugar
Support weight loss
Improve recovery rates

How much do I need?

This depends, based on your activity levels, goal and weight however, initially we would recommend that you consume protein with each meal.

Females around 20-30g and for males around 30-40g per meal.

How much protein is in a steak?

As a general rule you can assume most protein foods such as poultry, fish and red meats are between 20-25% protein so if you were to eat a 150g steak you would consume around 35g of protein.

Take a look at the following page, which outlines food groups and their protein content.



Improve mood

Provide us with energy

Game and wild meats

Foods such as ostrich, venison and wild boar contain one of the highest levels of protein, at about 25%. They also have the the added benefit of providing a high amount of omega 3s and a lower fat content than traditional red meats.



Red meats

Red meats such as beef and lamb can contain as much as 25-30% protein depending on the cut and type. Steak and minced beef have a higher percentage of protein than lamb or pork. They are also a great source of zinc, iron and creatine, but also one of the fattiest sources of protein.



Poultry and fish

At around 20% protein and with a high water weight, these protein sources contain very little fat or carbohydrate, making them very lean sources of protein and ideal for people wanting to lose weight.



Eggs and dairy

A great alternative to meat and ideal for vegeterians. Providing around 18% protein, they provide a good source of calcium and B vitamins. You also have the benefit of choosing both low or high fat options when it comes to dairy protein.



Plant based proteins

Provide the lowest amount of protein, ranging between 10-15%. They are, however, the only protein source that provides both carbohydrates and fibre, with a recent study showing consumption of plant-based proteins was associated with a 12% lower risk of death from heart disease.



Supplements

Supplemented protein, such as whey, contains the highest proportion of protein, but it should not be used as a substitute for food. Instead, call upon them to help get in additional protein as and when required, i.e. after training or to help bump up your protein intake.





Whey-ing up the options

One of the most frequently asked questions we get is "do you recommend protein shakes and if so, which one should I buy?"

Protein shakes can be great and they certianly have their place. After-all there's plenty of evidence showing the benefits of protein in aiding

muscle growth, repair and recovery. However, it's not so much the timing of protein that's important but more the amount we're consuming.

At Hall Training we begin by setting your own protein targets to hit each day. However, sometimes this can be tricky. One way we help to encourage more protein into the diet is through the aid of protein shakes. Used as a supplement only, we recommend our clients to have protein shakes either after a workout, as an on-the-go snack or mixed in to your daily smoothie or porridge pot as means of helping you to eat more protein.

However, with so many out there (all with odd looking names), which one should you go for?



1 Concentrate

Concentrate is the cheapest and is around 80% protein. Contains the highest level of lactose but also immunoglobulins. Slowest to absorb but mixes well.

2 Isolate

Isolate is around 90% protein and is 99% lactose free, so is not an issue for those intolerant to dairy.

3) Hydrolysate

Hydrolysate is around 90-95% protein and totally lactose free. It's absorbed by the body the fastest and has the added benefit of containing digestive enzymes. It is the most expense of the three



What is whey?

The type of protein we generally recommend is known as whey protein. Whey protein is one of two major proteins found in cow's milk, with about 20% of the protein found in raw milk being whey protein. It's produced during the process of making cheese, which starts when certain enzymes are added to milk. causing it to separate out into several constituent parts. One of the parts is called curds. The curds are used to make cheese. leaving behind whey protein in the liquid portion. This liquid whey is then pasteurised and dried into a powder ready for processing.

The processing

Processing is the last stage and it's this that will produce the finished product and type of protein. In total there are three:

- 1. Concentrate
- 2. Isolate
- 3. Hydrolysate

Concentrate

Whey protein concentrate tends to be the most widely consumed and common form of whey. It's about 80% protein, 5% carbohydrates and 3-5% fat. It is by far the cheapest of the three and the best tasting, as it contains more fat and carbohydrates. However, it also has a much higher lactose level so may not be great for people who are lactose intolerant. It also contains immunoglobulins that help to support the immune system.

Verdict - 4/5 Cheap, great tasting and mixes very well. Does contain lactose and quite often leaves people feeling bloated when consumed in high amounts.

Isolate

Whey protein isolate is the most 'pure' form of whey protein, containing 90% protein and barely any fat. It's great for people who are lactose intolerant as it contains little to no lactose. As it's a much 'purer' product than whey concentrate, it tends to be more expensive.

Verdict - 5/5
Has a Ligher protein content and suitable for those intolertant to diary.

Hydrolysate

Whey protein hydrolysate has been broken down into much smaller particles which allows it to be digested and absorbed much faster in the intestines. This reduces the potential for allergic reactions.

It has the highest protein content, at 95% protein, and contains little-to-no fat or carbohydrates.

As it's pretty much pure protein it has a bitter and acidic taste and tends not to mix very well; best used in smoothies

Verdict - 3/5 Pre-digested so easy on the gut. However, it doesn't taste great and is the most expensive.

Whey To Go

Our top 5 recommendations

Bio-Whey (geneticsupplements.co.uk)

Impact Whey (myprotein.co.uk)

Pro-Isolate Zero (geneticsupplements.co.uk)

Vegan Blend (myprotein.co.uk)

PES Select Protein (predatornutrition.com)



Healthier and happier is waiting...





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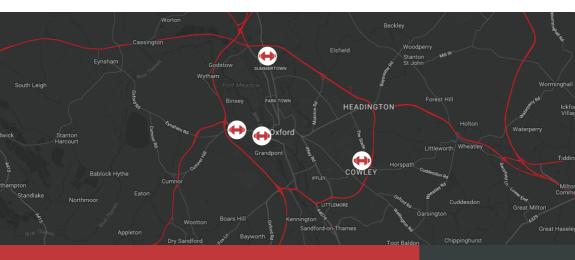
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