

BLOG.SQD

WHEY vs CASEIN

Post workout recovery routines and protein shakes have gone hand in hand since...well since always.

Supplementing your diet with protein can be a great way to help you achieve the results you want, and most people's go to supplement is a Protein shake.

But what's the benefits?
Is there only 1 type?
Will it help you reach your goals faster?
What's the right shake for you?
Can everyone take protein shakes?

The two most popular proteins available from supplement stores are whey and casein.

Both Whey and Casein are high-quality complete proteins rich in branched-chain amino acids (BCAAs) making them a great tool for muscle growth and repair.

What are BCAAs?

Muscle protein is made up of 9 essential and 11 non-essential amino acids. Essential amino acids can't be synthesised by the body and need to be included in your diet.

The 3 essential amino acids known as BCAAs are leucine, isoleucine and valine. Leucine is an exceptionally important BCAA as it acts as the signal that switches on the process of building muscle within the body.

BCAAs tend to be found in high protein foods but can also be taken as a supplement to help increase the body muscle protein synthesis rates. These increased rates will result in the likelihood of faster muscle gain and shorter recovery times.

Whey is much higher in Leucine content than Casein protein. As Leucine is one of the most beneficial BCAAs required for muscle growth and recovery, taking whey after a workout can help in preventing excessive muscle breakdown and in promoting muscle synthesis.

What is Whey?

Whey is a high quality source of protein. It's found within cows milk and depending on how it is processed will provide either Whey:

- Isolate
- Concentrate
- Hydrolysate

The difference between the 3 variations is mainly the differing levels of fats and carbohydrates. Concentrate tends to have slightly less protein with more fats and carbs whereas Isolate and Hydrolysate are more processed to get a higher level of protein and lower level of fats and carbs.

Which one is best for you will usually come down to your individual goals and macronutrients. Remember, these are supplements, not replacements. So depending on



the rest of your daily nutrition intake will alter which and how much of the protein supplements you will need.

What is casein?

Casein protein is also found in cow's milk and is well known for having a slower digestion rate than Whey. The benefit of this slower digestion rate is a slower, more prolonged release of the important amino acids. This of course means a slower prolonged release of Leucine, that amino acid we discovered helps with muscle growth and recovery.

Casein is commonly taken as a pre bedtime shake. Personally i'm not someone who likes to ingest too much too close to bedtime, but if you're happy to, Casein supplementation can reap huge benefits.

So...Whey vs Casein?

Whey and Casein are both found in cows milk. Casein actually makes up 80% of the protein in milk, while Whey makes up the other 20%. They are both beneficial for recovery and both provide a good amount of BCAAs...so why do i have to choose?

Both Whey and Casein are complete proteins, meaning they contain the essential amino acids your body can't make on their own. The main difference as we found out was the digestion rate. Due to the digestion rates a simple rule of thumb could be, Whey promotes muscle growth, while Casein prevents muscle breakdown.



In short...don't choose, take both. Using both types in combination with each other at different times of the day can theoretically increase muscle growth whilst also preventing muscle breakdown. The one thing to always always consider is these are supplements. Food is always the preferred choice, but if your needs exceed your ability when it comes to food ingestion, supplements are here to help.

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