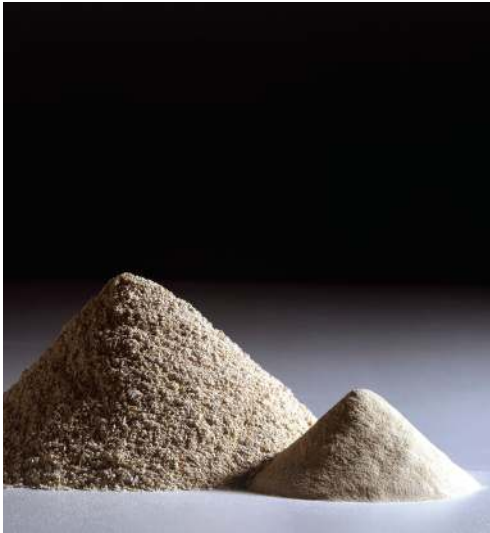


Let's talk about...



# Whey and Casein Protein



## Key Facts

- One of two high-quality proteins found in milk
- Very well-absorbed and utilized by the body
- Rapidly available for use during and immediately after exercise

## Key Benefits

- Helps build and repair body tissues
- Provides energy and stamina
- Satisfies hunger and gives a feeling of fullness
- Contains a large proportion of branched chain amino acids, which have an integral role in protein synthesis and muscle metabolism

The whey protein family is highly bioavailable, meaning it is well-absorbed by the body. Because it contains all 20 essential amino acids, whey, like soy, is considered a “complete” protein.

Cows' milk contains tens of thousands of proteins that can generally be categorized into two families: whey and casein. Although both are high-quality proteins, each behaves very differently within the body.

Whey protein is digested quickly, so its amino acids (known as the “building blocks” of protein) are readily available for use both during and immediately after exercise.

Whey and casein are rich in three amino acids that are particularly important for athletes: leucine, isoleucine, and valine. Known as “branched chain amino acids” or BCAAs, these three valuable amino acids help support lean muscle mass and promote muscle recovery.

To generate a more sustained release of amino acids, rapidly digested whey is often paired with casein, the more slowly-digested protein found in milk. This blend of whey and casein creates a feeling of fullness and helps deliver amino acids to create a rapid and sustained muscle-building state.

Whey proteins can be purified from milk to various degrees. Whey protein concentrate contains about 85% protein, and has most of the lactose sugar, fats and cholesterol removed. A further purification produces whey protein isolate, which contains over 90% protein.

## Did You Know?

*Cottage cheese is a great source of casein protein, with 28 g per cup. It also has a low glycemic load and is low in fat.*