Supplementation



Supplementation involves taking additional nutrients, like vitamins or minerals which are commonly used to support muscle development, energy levels, and overall athletic performance.

Supplements are mainly used to meet the recommended level of nutrients your body needs for optimal training and muscle mass.

The main supplements that are essential for athletic training are protein powder, creatine, Glutamine and Omega 3 but they cannot replace the food components in the diet, it's important to find the balance between food and supplementation according to your goals and to your training level.

The beneficial health effects, average requirements and doses associations for creatine, omega 3, Glutamine and protein are detailed below:

PROTEIN

The rule-of-thumb ratio is **2,2 gram per Kg. of body weight per day**.

Using that formula, let's just say you are a **80 Kg** guy, you are going to need about **180 gr** of protein each day. However this ratio depends from one person to

180 gr of protein each day. However this ratio depends from one person to another regarding their activity level*Some studies advise a ratio between **2,64g to 3,3g** of protein per body weight*

CREATINE

If you're training hard with the goal of building muscle, you need **5 grams of daily creatine** for optimal benefits.

• OMEGA3

Omega-3 has been shown to be effective in the prevention and reduction of risk of cardiovascular disease. While it may not have a direct effect on muscle growth, omega-3s are important. We need the recommended dose of about **1.8 grams per day** of the active ingredients, EPA and DHA.

GLUTAMINE

Glutamine is a constituent of protein, and it's very helpful for muscle repair and growth. The effective dose of glutamine is 10 gr/daily.

• The diffrence between food and supplements

The difference between food and a supplement is that supplements **compensate** for nutrient deficiencies. They're not the primary form of nutrition. They are intended to assure adequate intakes of nutrients.

Food is "any nutritious substance that can be consumed to maintain life and growth." The fundamental difference is that food is intended to be the primary source of beneficial nutrients for the body and a supplement compensates or "supplements" dietary deficiencies of essential nutrients.

Food sources can be plants or animal. Some supplements can be purely chemical. Food is typically thought of as naturally occurring or prepared ingredients for dietary consumption, where supplements are processed products. A supplement can come in capsule form, powder form, liquids like fish oil, or food such as protein bars. Supplements can contain individual nutrients or several.

Conclusion

To supplement or not to supplement, that's the question we try to answer here. We limit our debate to creatine, Omega-3, glutamine, and protein, all of which have beneficial associations in the athletic training world. Getting the correct amount of these nutrients from food alone is difficult if not impossible in some cases because that requires overeating in most cases. Some foods, if overconsumed, can have harmful effects. Consuming the amounts of protein required to get these nutrients would also be very expensive. Supplements are cheaper and convenient as well.

Generally speaking, if you're unable despite your best practical efforts to get all the essential nutrients you need by your intake from foods, then yes, supplements are probably worth it.