

Getting Whey-Hearted: A Review Responding to Myths about Protein, Specifically Whey

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ABSTRACT

Whey protein is the number one supplement being used by body builders and athletes today to reach their fitness goals. Whey protein is gaining its popularity even if there are some myths regarding whey protein. Whey is a milk protein that has become extremely popular in recent years. One of the main reasons for its popularity is the fact that whey protein has been linked to muscle building and increased strength. Most body builders do associate real gains with whey protein supplements. Even though the benefits of using whey protein are pretty clear, there still exist some myths about this supplement. Whey protein is the best-selling product in sports nutrition. It sets the standards for other products in this category and is, therefore, worth examining. Whey protein supplements were once considered just an alternative for bodybuilders to help them get that ripped body. However, the scenario has changed over the years as more and more research shows that this is not only a useful supplement for those trying to shed unwanted fat in a shorter period, but also for your overall health, if you are already living a healthy lifestyle. Safety is the major concern of people when they look into the whey protein supplements. They want to know the possible adverse effects of this supplement, especially in relation to health issues. Whey protein supplements contain the same amino acids that are found in meat, including leucine, isoleucine and valine. Whey is a by-product of cheese that is extracted from milk. It's kind of like candy to body builders since it provides body mass and muscle gain. It looks like slimy, white blobs. It

tastes like chalk. And that's just what's left in the cup once you've scooped out the liquid gold that is whey protein.

Key words: Whey, Supplements, Protein, Myth

INTRODUCTION

Nutritional supplementation is becoming increasingly popular, but with that popularity comes a slew of protein fallacies. It's not unusual to see high-profile celebrities and athletes endorse commercial protein drinks and snacks, which is an incredible growth of our culture as more people aspire to get and stay in shape.

Protein supplementation is one of, if not the most popular, types of post-workout nutrition. However, as the popularity of these items grows, so does the circulation of unfounded information and misinformation about the risks and dangers of using them.

Protein is very popular as a dietary supplement, especially among fitness fanatics. However, because of its widespread use, incorrect protein beliefs are easily spread. In both consumer and commercial circles, there are many misconceptions about protein and protein supplements. It is critical to have a thorough understanding of how proteins work. Unfortunately, shoddy science, overhyped supposition, and the Internet have made it easy for profiteers to construct false protein narratives, posing a risk to both the

nutritional supplement industry and the end user.

Protein is a topic on which everyone has an opinion, and there are many myths about it. As a result, sifting the truths from the nonsense can help you make better decisions about your personal diet and protein intake.

Myth 1: According to one myth, the body cannot tolerate a high protein diet. The maximum amount of protein the human body can absorb in one sitting is 30 g, and any protein consumed above 30 g is simply wasted.

The RDA guideline for protein is 0.8 grams per kilogram of bodyweight per day. If you're 190 pounds (86 kilogrammes), you'll need roughly 69 grammes of protein every day.

Lifters and athletes who are concerned about their performance or appearance require more protein than the RDA recommends. So it's a myth (and a joke) that the RDA protein recommendations are adequate for individuals performing strenuous physical activity.

For certain people, the RDA protein recommendations are too low. Those suggestions were never meant for people looking to improve their performance, maintain their muscle mass, or add muscle mass. In fact, consuming more protein may help with a variety of health problems, including obesity, type 2 diabetes, osteoporosis, heart disease, and muscle wasting.

The RDA guideline reflects the minimum daily needs of protein required to maintain short-term nitrogen balance in healthy, moderately active people. The amount of nitrogen entering the body (from dietary protein) versus the amount leaving the body is referred to as nitrogen balance. Because protein is 16 percent nitrogen, it's frequently employed as a metric of protein balance.

As in the case of a hunter (or the early man), most of his calories comes from the animals that he hunt down. If he

manages to get a big kill, he will surely eat the flesh as per his hunger, and will not consider the "30g mark".

Final note: If you want to enhance muscle growth, you need to limit muscle loss and increase protein synthesis. Research suggests that rigorous training, enough calories, and, most importantly, high protein diet can help you do this. As a result, meals with more than 30 grammes of protein will become the norm. The body will undoubtedly make good use of all that protein.

Myth 2: Protein powders are steroids.

This is a prevalent misconception. True, large-scale studies have looked at the components of a variety of dietary supplements and discovered unwelcome substances in the mix. Supplements have been found to include a variety of chemicals, including stimulants like ephedrine and caffeine, in 13 different nations. Anabolic steroids such as methandienone (a testosterone precursor) and nandrolone metabolites have been found in other research. Others have been identified as synthetic anabolic steroids such as stanozolol, boldenone, turanibol, and oxandrolone.

Furthermore, the supply of tainted supplements came from only five countries, with the United Kingdom accounting for approximately 19% of the total (the same as the amount from the USA).

This myth is mostly based on some manufacturers fraudulently (and illegally) adding steroids to gain maximum results for the user without considering side-effects.

Myth 3: After a workout, fast digesting proteins must be consumed within a 30-min window

It is undeniable that both fast and slowly digested proteins help athletes. When it comes to muscle building, both quick and slow proteins are beneficial. Proteins that enter the bloodstream quickly have been proven to greatly enhance protein synthesis in studies. Proteins that enter the

bloodstream slowly have a considerable inhibitory effect on protein degradation, even in little amounts.

By using a combination of proteins that exhibit both fast and slow properties one should be able not only to jump-start protein uptake into muscle cells during a grueling workout, but also ensure that protein synthesis is jump started and that protein break down is kept at a minimum during the hours following their workout. For optimum anabolic benefit, consume a fast protein before exercising and a slow protein afterward.

In conclusion, claiming that a "quick" protein is superior to a "slow" protein is incorrect. To change protein metabolism in favour of net protein deposition, both forms of protein should be employed strategically (i.e. muscle growth).

The total amount of protein consumed is more important than the time.

Myth 4: Protein supplements is placebo

Protein would have to be inactive in order to be a placebo. Protein, on the other hand, is required for survival. It's not like it's a placebo effect. On the effects of protein shakes, there have been numerous peer-reviewed scientific research. When scientific studies that aim to prove or negate the benefits of any substance (medicine, supplement, etc.) are peer reviewed, this means that they're scrutinised by other experts in the field to maintain quality standards and prevent any misinformation.

If a study has bias, it is frequently recognised and noted even before the study is accepted to begin.

To overcome the 'placebo effect,' researchers frequently compare protein supplements to another substance in order to establish or disprove their effectiveness. Researchers sometimes utilise a carbohydrate (such as maltodextrin or dextrose) that has about the same amount of calories per gramme as the protein for participants who get the placebo instead of the substance being evaluated. Keep in mind that 1 gramme of protein and 1 gramme of

carbohydrates have the same number of calories: 4. We may be confident that any change in protein metabolism will not be related to an increase in calories consumed, but rather to the specific substance ingested, as long as the carbohydrate and protein supplements used have the same mass.

Experiments have demonstrated that taking whey or casein protein supplements enhances lean mass and strength more than taking a placebo.

Myth 5: Protein from supplements is different than from whole foods.

Because it's easier to take supplements, all of the protein researches are on protein supplements [rather than whole foods]. This distinction between whole food protein and whey protein supplements is somewhat arbitrary.

Whey is a by-product of milk, which is a food.

Those who take protein supplements, especially plant-based protein supplements, should also include a lysine supplement in their diet. Despite the fact that lysine is the key ingredient that activates muscle protein synthesis, it is claimed that not all protein supplements contain it.

The greatest quality protein we can take comes from whole food proteins derived from animals.

For individuals who exercise, foods like chicken, meat, fish, eggs, and milk, as well as a variety of plant-based protein sources for vegans and vegetarians, should be part of a balanced and nutritionally optimum diet. These foods supply the essential amino acids needed to increase muscle protein synthesis and prevent degeneration.

Whole foods, on the other hand, aren't necessarily the most efficient or convenient way to consume high-quality protein. Many people avoid eating protein because they do not want to cook or eat complete foods. A supplement shake is the greatest option for folks who want a quick

and easy way to increase their protein consumption after a workout.

Additional nutrients in the form of fats and carbs can be found in whole food sources. As a result, while balancing a tight diet and guaranteeing the proper quantity of protein (without increasing fat and carbohydrate intake), people may frequently require a higher protein intake without worrying about extra carbohydrates, fat, or calories. People occasionally desire to boost their consumption of BCAAs and EAAs (essential amino acids) without adding extra fat, calories, or carbohydrates.

Protein from whole foods should be the primary source of protein ingestion. Supplementation, on the other hand, has a place for people who want to enhance their protein intake.

Acknowledgement: None

Conflict of Interest: None

Source of Funding: None

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How to cite this article: Manoj S, Shabaraya AR. Getting whey-hearted: a review responding to myths about protein, specifically whey. *International Journal of Research and Review*. 2021; 8(5): 497-500. DOI: <https://doi.org/10.52403/ijrr.20210560>
