# SPECIAL REPORT:

# DEBUNKING 5 MOST COMMON PLANT PROTEIN MYTHS

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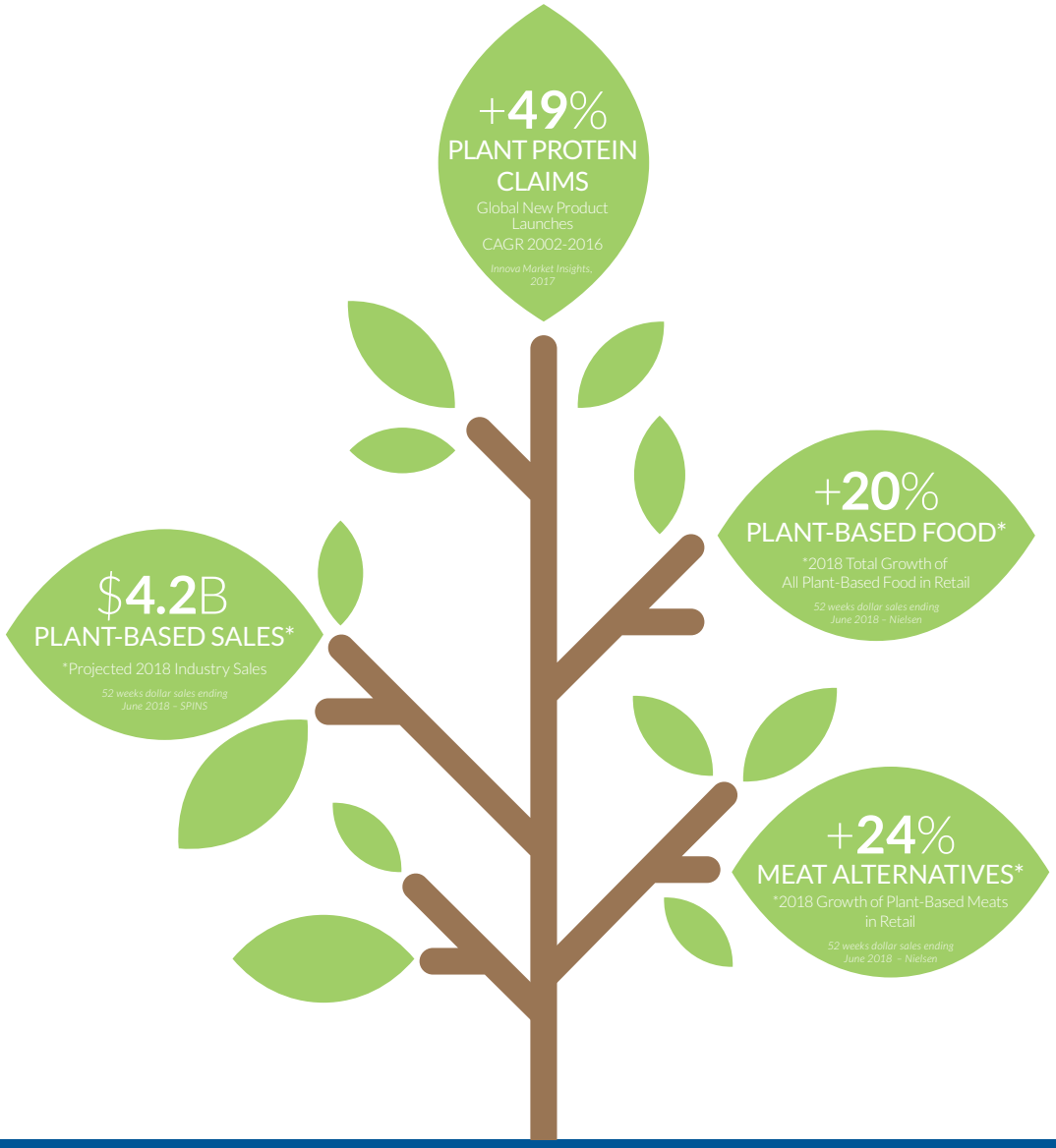
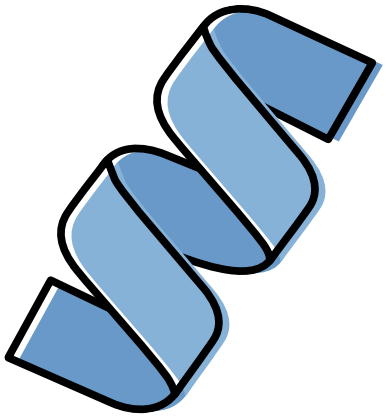
Proteins are an essential nutrient for optimal health. Known as the body's building blocks, proteins are made up of individual amino acids linked together and broken down in the body to support a number of bodily functions, including the development, maintenance and repair of muscles and tissues. There are 21 amino acids, with 9 essential amino acids that must be obtained from the diet because the body cannot produce them.

A recent report by Nielsen shows the tremendous **20% retail sales growth** of **plant-based foods** reaching **US$3.3 billion** within the last year.[1] With plant-based options becoming more popular, the issue of what makes a quality protein comes into question. We shed some light into this debate as we reveal the most common myths surrounding plant proteins. By understanding consumer objections, brands will be better equipped to communicate the benefits of plant-based proteins resulting in potential business sales.



## Plant-based diets don't offer sufficient protein

myth 1

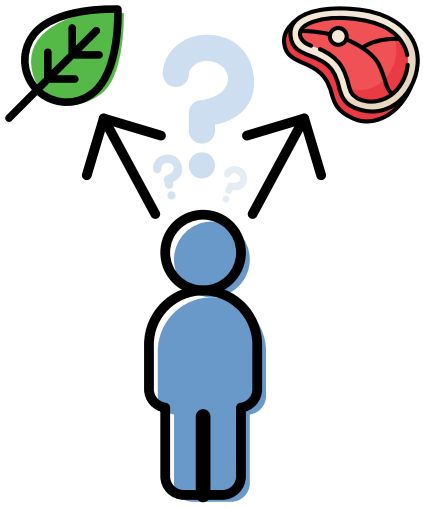


Complete proteins contain each of nine essential amino acids in sufficient amounts required for growth. Individual plant proteins are considered incomplete because they don't contain sufficient quantities of all nine essential amino acids. Eating different varieties of plants provide all essential amino acids in adequate quantities and hence make the combined protein complete. This misconception of "incomplete" plant proteins is based on an old understanding of what makes a "quality" protein. As the preferred method of measurement, the Protein Digestibility-Corrected Amino Acid Score (PDCAAS) is the most understood and widely accepted qualitative approach that measures the quality of a protein. However, using the PDCAAS as the benchmark of measurement leads people to believe that plant proteins are nutritionally inferior.

The reality is that eating a variety of plant-based proteins throughout the day can supply enough of the essential amino acids that is needed, while also offering additional nutrients.[2] Additionally, the human body has the ability to combine amino acids from multiple sources. Therefore, "incomplete" plant proteins are still broken down into its component amino acids and stored until they are needed. As more research of plant proteins continue, our understanding and perception of their nutritional benefits will continue to evolve. For these reasons, plant-based proteins are a valuable source of quality protein that can fulfill daily nutritional needs.

## Plant-based proteins are nutritionally inferior to animal-based proteins

myth 2



The idea that plant proteins are "inferior" is based on the myth that plant proteins are "incomplete" and lack sufficient protein. Rather, plant proteins offer a wide variety of amino acid profiles. As long as a variety of plant proteins are consumed over the course of a day, plant proteins can provide the necessary amounts of all nine essential amino acids.

In comparison to animal proteins, plant proteins also provide additional nutrients such as antioxidants, soluble and insoluble dietary fiber, minerals and vitamins. Plant proteins also help maintain stable blood sugar levels and healthy cholesterol.[3] Studies have shown that people on vegan or vegetarian diets have lower incidences of chronic diseases.[4] Also, plant proteins offer a variety of options for vegans, vegetarians and people on special diets such as those with dairy and/or gluten allergies. And with the health halo surrounding plant-based foods[5], plant proteins are perceived as an overall healthy alternative to animal proteins.

## You have to get your daily intake of complete protein in one serving

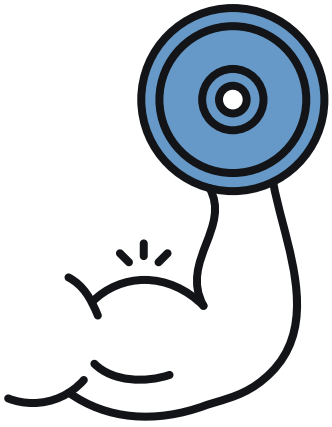
myth 3

It's a common misconception that you need to consume your daily protein intake at one meal. This notion is tied to the old belief that you need to load up on protein every 2-3 hours for protein synthesis (i.e. the body's process for building muscle). The body actually functions on a 24-hour cycle meaning that the protein you consume throughout the day plays a role in developing muscle.

Many countries recommend a daily intake of protein. For example, the U.S. Food and Drug Administration recommends consuming 50g of protein based on a 2,000 calorie diet throughout the day. What's important to note is that the recommendation is based on a daily intake; not every 2-3 hours. As mentioned earlier, eating a variety of plant-based proteins throughout the day can supply enough of the essential amino acids that you need. The key to remember here is that you'll get the combination of amino acids your body needs throughout the day as long as you're eating a varied and healthful diet.

## Animal protein is the only protein that helps you build and gain muscle

myth 4



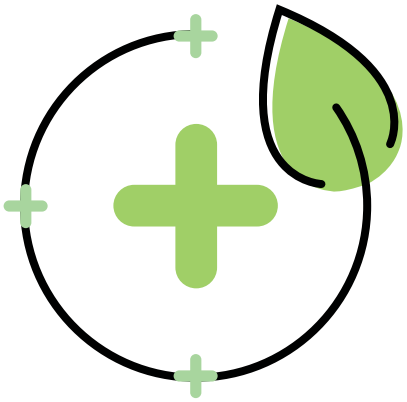
The perception that plant-based protein doesn't build muscle as effectively as animal-based protein is flawed. You don't need animal meat in order to build muscle "meat". Plants proteins offer the same amino acids available in animal-based proteins, albeit in different proportions. In fact, a recent study published in the American Journal of Clinical Nutrition found that both plant protein and animal proteins benefit muscle health equally.[6] Additionally, antioxidant-rich plants are one of the best protein sources due to their alkaline-forming abilities helping combat inflammation caused by exercise, reducing stress and helping recover faster from training.[7]

Moreover, it's been found that a ton (or excess) of protein isn't required to effectively build muscle. Recent studies show that a daily intake of ~20-25g protein is sufficient for building muscle; any excess protein doesn't enhance protein synthesis but is rather lost to oxidation or is potentially stored as fat.[8]

## Plant-based proteins need to be combined for a quality source of protein at the same time

myth 5

Also known as the complementary protein myth, this false claim is also built on the argument that plant proteins are "incomplete" and therefore are of substandard quality. It's the practice of combining plant-based protein sources (e.g. rice and beans) all at once in order to achieve a complete protein.



However, this theory is no longer widely accepted. Health organizations such as the Academy of Nutrition and Dietetics[9], the USDA Center for Nutrition Policy & Promotion[10] and the Canadian Heart and Stroke Foundation[11] have stated that eating a variety of plant-based proteins over the course of a day provides your body with the essential amino acids it needs. Simply put, what matters more is that a variety of plant-based options are consumed on a daily basis.

# IN SUMMARY

As consumer interest grows, plant-based proteins will continue to gain larger market share. Part of the challenges that brands face include overcoming common misconceptions about plant proteins. By understanding these myths, brands will be better equipped to communicate the value of plant proteins versus less expensive animal-based proteins. This will help attract a wider audience of consumers and fuel the growth for demand.

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