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Proteins: The Shining Star

Protein is gaining its popularity amongst consumers and the protein market is growing at a skyrocketing speed. Consumers are well aware of their needs for sufficient protein in daily diet and understand that protein's health claims are beyond muscle health. Food and beverage manufacturers use whey protein as the protein source of choice for product innovations by adding the fractionated concentrates and isolates of proteins into the food (Dairy Management Inc., 2010). They may even combine different types of protein sources to maximize the taste, texture and product costs.

Protein has become the key driver of most innovation with more healthy propositions. It is a powerful ingredient that could be incorporated into a wide range of applications including nutrition and energy bars, ready-to-drink beverages, smoothies, beverage mixes, meal replacements, cereals and yogurt (Dairy Management Inc., 2010). This provides opportunities for consumers to spread their protein intake throughout the day.

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Global Demand for Protein on the rise

According to Mordor Intelligence (2017), the global production of whey protein has amounted to 240 million MT in 2014 and is expected to increase by 3.5% annually. The Global Whey Protein Market was valued at USD 6.1 billion in 2016 and is projected to reach USD 9 billion by 2022, at a CAGR of 7.6% during the forecast period from 2017 to 2022. The rising applications of whey protein coupled with growing global demand for dairy-based products, paediatric foods and dietary supplements for the elderly, personal care and sports nutrition have dramatically draw an increased popularity of whey protein consumption among all populations (Mordor Intelligence, 2017; Transparency Market Research, n.d.).

Another source reported supportive evidence that dietary supplement dominates 60% of the global whey protein market in the application segment. This growth is mainly attributed to increased interests in health, wellness, fitness, sports and nutrition in the younger population (Zion Market Research, 2016). Other factors that drive the global demand of whey protein include the growing emphasis on ready-to-drink and performance-boosting products along with the advancements in technology that give rise to high quality and versatile product varieties such as pharmaceutics, bakery and confectionary (Mordor Intelligence, 2017).

The protein content is often boosted by incorporating a protein isolate, concentrate or hydrolysate into protein food and beverage innovations. They are highly-refined and processed forms of protein source that provide a concentrated source of protein (Mintel, 2014).

Protein does more than muscle building

Protein is becoming more than solely a recommended part of meals or a staple for muscle building. It has been bridge-linked to satiety and hunger management, stimulating the product innovations in weight management concepts such as meal replacement slimming built on protein (Mintel, 2014).

Nowadays, protein consumption is no longer only for workouts but to power up our days. Eating more proteins at breakfast can start the day with a sustained feeling of fullness in the morning. Proteins help

keeping hunger by enhancing satiety or feeling full thus reducing the urge to snack between meals. In addition, proteins help steady blood glucose levels as well as helps control the brain signals for hunger (Duyff, 2017).

Protein plays important roles as vital macronutrient in supporting a healthy immune system, repairing the body's cells, building and repairing muscles, optimizing bone mineral density and maintaining glucose homeostasis (Romotsky & Bonci, 2012; Dairy Management Inc., 2010).

The power of whey proteins

Whey protein is one type of protein found in milk that can be used as a protein supplement and useful for hitting targeted daily protein goals. It is a fast-digesting protein that initiates the onset of amino acids rapidly in our bloodstream (Maughan & Burke, 2012). Whey protein is separated and purified by using various techniques to obtain different concentrations of it. Whey protein has a myriad of benefits as it provides high levels of branched and essential chain amino acids (Shankar & Bansal, 2013). It is also easily digestible and safe to consume by lactose-intolerant people as virtually all lactose compounds have been removed by filtering technique (Brant 2005).

By having a superior nutritional quality, whey protein is ideal as a post-workout recovery drink due to its immediate effect on digestion and metabolism. It can be absorbed faster compared to other forms of proteins necessary to increase muscle protein synthesis used to break a fasted state (Rai & Bai, 2014; Dunford & Doyle, 2011; Wilkinson et al., 2007).

Protein, the new 'life partner'

High protein diet has become a trend especially for growing children, elderlies, athletes and weekend warriors. Food manufacturers are increasingly pumping up the protein content of their fortified or functional food and beverages as protein health halo is continuously shinning on. The demand and acceptance of protein-containing products are increasing as health-conscious consumers are becoming more aware of the benefits of protein in the diet. Protein sparkles as a hot benefit whereby it is not only

for bulking up but also enhances satiety. We no longer consume proteins just for the workout but to fuel up our days. Good quality of whey protein has also been claimed to increase fat loss which help in weight management.

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