

Functional Food: What Are They? and Why Are They So Popular?

Pongsak Rattanachaikunsopon* and Parichat Phumkhachorn

Department of Biological Science, Faculty of Science, Ubon Ratchathani University, Thailand

***Corresponding Author:** Pongsak Rattanachaikunsopon, Department of Biological Science, Faculty of Science, Ubon Ratchathani University, Thailand.

Received: September 20, 2018; **Published:** October 25, 2018

Nowadays, functional foods' market is growing very rapidly [1]. The global market size of functional foods is about 150 billion US dollars. This number is expected to climb up to about 250 billion US dollars in the next 5 to 6 years (Figure 1) [2]. Many people may wonder what functional foods are and why they are so popular. The term "functional foods" was first used in Japan in 1980s. Since then, functional foods have been explained by many different definitions; however, they share the same core meaning. Collectively, functional foods are foods on a regular basis supplemented by specific ingredients that provide health benefits [3,4]. Examples of functional foods are probiotics supplemented yogurt, omega 3 fortified bread, antioxidant incorporated bread and glucosamine enriched milk. The supplemented ingredients can be either substances naturally found in foods but in low level or those naturally absent in foods. A number of supplemented ingredients have been used in functional foods industries such as carotenoids, fibers, fatty acids, minerals, plant extracts, probiotics, vitamins, and others (such as phytochemicals, enzymes, and antioxidants) [5]. Among them, dietary fibers are expected to take the largest market share of about 8 billion US dollars in the year 2019 (Figure 2) [6].

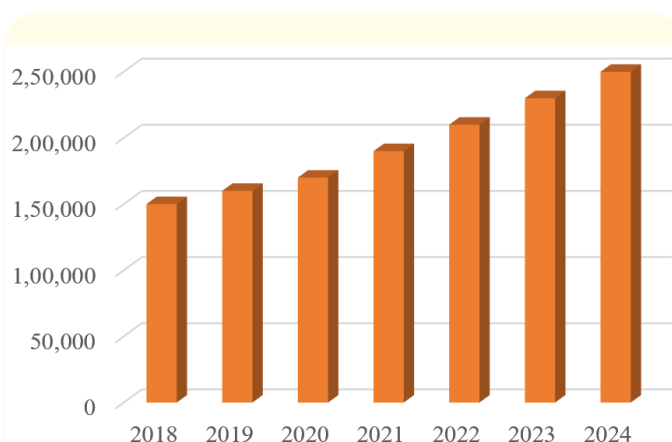


Figure 1: Estimated global functional foods market revenue through 2024 (USD Million). (Adapted from <https://www.grandviewresearch.com/industry-analysis/functional-food-market>).

Figure 2: Estimated global functional ingredients market share in 2019. (Adapted from <https://www.technavio.com/blog/global-focus-health-and-wellness-driving-sales-bioactive-ingredients>).

There may be numerous factors responsible for the popularity of functional food; but, two major ones seem to be health concern and marketing. At present, consumers have a total control of what they want to eat for their health. Through research reports, advertisement and many more media, functional foods are not only known for their health promotion but also for their disease prevention [7]. For examples, cholesterol-lowering soluble fiber β -glucan, phytochemicals and soy protein have been claimed to reduce the risk of coronary heart disease [8], cancer [9] and osteoporosis [10], respectively. Therefore, functional foods have become hope of people who demand for healthy and disease-free life. Some people are willing to design their own eating styles that match their personal needs. However, this may be thought to cause too much trouble for others. Commercialized functional foods come in to play and have the latter group of people as customers. The health concern of the customer side and the profit concern of the business side have synergistic effect to make functional foods market grow rapidly and continuously as shown in Figure 1.

As functional foods market grows, not all of them on the market today are genuinely proven by sufficient scientific data to have health benefits as claimed. Moreover, it must be emphasized that functional foods alone cannot do tricks for good health. Many more factors such as exercise and personal hygiene also take major parts for healthy and disease-free life.

Bibliography

1. Vergari F, *et al.* "An overview of the functional food market: from marketing issues and commercial players to future demand from life in space". *Advances in Experimental Medicine and Biology* 698 (2010): 308-321.
2. Functional Foods Market Analysis by Product (Carotenoids, Dietary Fibers, Fatty Acids, Minerals, Prebiotics and Probiotics, Vitamins), By Application, By End-Use (Sports Nutrition, Weight Management, Immunity, Digestive Health) And Segment Forecasts, 2018 To 2024.
3. Kaur S and Das M. "Functional foods: an overview". *Food Science and Biotechnology* 20.4 (2011): 861-875.
4. Shandilya UK and Sharma A. "Functional foods and their benefits: an overview". *Journal of Nutritional Health and Food Engineering* 7.4 (2017): 3-5.
5. Wensing J and Broring S. "Functional Ingredients: Market Research". In: K Othmer (edition). *Encyclopedia of Chemical technology. John Wiley and sons USA* (2018).
6. Global Focus on Health and Wellness is Driving Sales of Bioactive Ingredients (2015).
7. Adefegha SA. "Functional foods and nutraceuticals as dietary intervention in chronic diseases; novel perspectives for health promotion and disease prevention". *Journal of Dietary Supplements* 15.6 (2018): 977-1009.
8. Othman RA., *et al.* "Cholesterol-lowering effects of oat β -glucan". *Nutrition Reviews* 69.9 (2011): 299-309.
9. Wang H., *et al.* "Plants against cancer: a review on natural phytochemicals in preventing and treating cancers and their druggability". *Anti-Cancer Agents in Medicinal Chemistry* 12.10 (2012): 1281-1305.
10. Bawa S. "The significance of soy protein and soy bioactive compounds in the prophylaxis and treatment of osteoporosis". *Journal of Osteoporosis* 2010 (2010): 891058.

Volume 2 Issue 11 November 2018

© All rights are reserved by Pongsak

Rattanachaikunsopon and Parichat Phumkhachorn.