Nutraceutical Formulations and Challenges

Nutraceuticals are a unique product category with various synonyms that are used internationally. Nutraceuticals create an open environment for new products that promise novel solutions to health-related issues. Nutraceuticals will play an important role in future therapeutic developments. Medicinal plant research should be focused on to produce useful healthcare products (phytomedicines/nutraceuticals/food supplements/conventional drugs) from medicinal and food plants for human welfare. Nutrients in the form of small solids or droplets improve bioavailability. However, there remain numerous barriers to successful implementation of cost-effective manufacturing processes. The four most important factors in the supply chain of any product and in particular the food industry are (1) price, (2) quality, (3) quantity, and (4) consistent supply. It is very important to lower the cost of production and keep production costs, storage costs, shipment costs, and other related costs at a minimum so that there can be a higher return when the product is sold in the market. It is important to keep manufacturing and the related price low since there are a number of other factors and costs that come into play before the final product is released into the market. Apart from quality control and packaging, research and development is a huge cost that needs to be spread over the lifetime of the product for a company to recover costs and be profitable in the long run. We will be talking about all these different factors and also the various criteria that would make the supply chain of a functional food successful.