

Chapter 12

Nutraceuticals: An Approach Towards Safe and Effective Medications

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ABSTRACT

Nutraceutical is a unique grouping of two words, nutrition and pharmaceutical, which describes a food or food product that regularly provides health and medical benefits, including the prevention and cure of various diseases. Chemically, nutraceuticals contain a range of bioactive elements classified as polyphenolic compounds, isoprenoids, minerals, amino acid derivatives, carbohydrate derivatives, fatty acids and structural lipids, prebiotics, and probiotics. The majority of nutraceuticals have numerous beneficial and healing effects without any kind of side effects that keep their attention towards the consumer. The demand for nutraceuticals was increasing slowly due to a high risk of toxicity or adverse effect of drugs. Consequently, in such circumstances, nutraceuticals prove a safer approach for health management. Meanwhile, a few challenges were hindering the fame of nutraceuticals like lack of standardization and awareness, high pricing, marketing, and supply. This chapter mainly emphasizes the recent role of nutraceuticals in human health and its status in other nations.

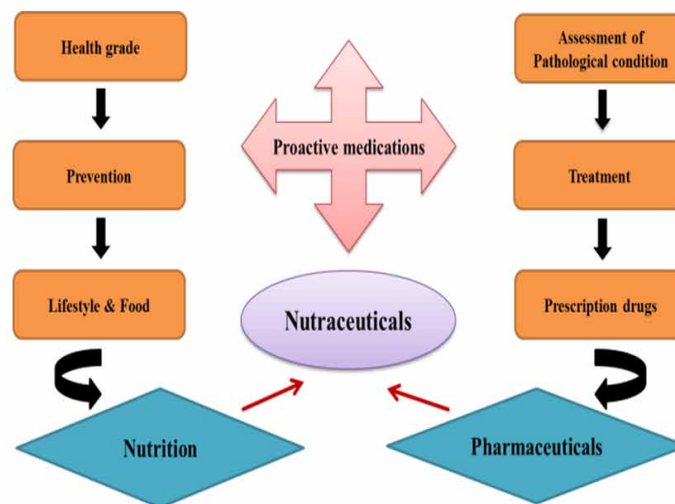
1. INTRODUCTION

Scarcity of healthier foods was expanding gradually due to the population, pollution and adulteration in food items. All these factors create a great risk to human health and vegetation and raising a question in front of us how can we riddle out from this problem? The way of using grains has also changed with evolution in time. Natural foods have resulted in the deficiency of essential nutrients in human beings specifically due to modification in traditional methods used such as polishing of grains leads to loss of

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essential nutrients and fibers that are very much required for the proper functioning of a healthy body. Along with this, the overall consumption of refined sugar and processed foods has also increased.

Figure 1. The major properties of nutraceuticals



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