



## NEUTRACEUTICALS

**Dr. Tanvi Singh\***

Associate Professor, Department of Kayachikitsa, Smt.Urmila Devi Ayurvedic College and Hospital, Hoshiarpur, Punjab.

**\*Corresponding Author: Dr. Tanvi Singh**

Associate Professor, Department of Kayachikitsa, Smt.Urmila Devi Ayurvedic College and Hospital, Hoshiarpur, Punjab.

Article Received on 21/04/2020

Article Revised on 11/05/2020

Article Accepted on 01/06/2020

### ABSTRACT

Polyphenols- Fruits, tea, cocoa, soya beans neutralizes free radicals. Saponins lowers down the cholesterol level. Probiotics such as curd improves the GI function. Phytoestrogens reduces menopausal syndrome and maintain bone health. Carotenoids neutralizes free radicals gives proper vision, helps to reduces cancer. The concept of Rasayana is unique in Ayurveda. Certain dravyas can be correlated with nutraceuticals. Their mode of action can well explained on the basis of its rasapanchakas. The rasayana dravyas gives nourishment to all seven dhatus. They are also having immuno enhancer property. Like Amruta, Amalaki, Haritaki, Yastimadhu etc.

**KEYWORDS:** Nutraceuticals, Rasayana, Food, Drugs, Herbs.

### INTRODUCTION

The term “nutraceutical” combines two words – “nutrient” (a nourishing food component) and “pharmaceutical” (a medical drug). The name was coined in 1989 by Stephen DeFelice, founder and chairman of the Foundation for Innovation in Medicine, an American organization located in Cranford, New Jersey.

The philosophy behind nutraceuticals is to focus on prevention, according to the saying by a Greek physician Hippocrates (known as the father of medicine) who said “let food be your medicine”. Their role in human nutrition is one of the most important areas of investigation, with wide-ranging implications for consumers, health-care providers, regulators, food producers and distributors.<sup>[1]</sup>

### Categories of nutraceuticals<sup>[2]</sup>

The definition of nutraceuticals and related products generally depends on the source. They can be classified on the basis of their natural sources, pharmacological conditions, as well as chemical constitution of the products. Most often they are grouped in the following categories: dietary supplements, functional food, medicinal food, pharmaceuticals.

A dietary supplement represents a product that contains nutrients derived from food products, and is often concentrated in liquid, capsule, powder or pill form. Although dietary supplements are regulated by the FDA as foods, their regulation differs from drugs and other foods.

Add to your diet so that each day, you get the desired amounts of vitamins and nutrients that are necessary for a healthy body. Dietary supplements are popular because many people don't believe they can get their required nutrients from food alone.

According to their generally accepted definition, functional food is a category which includes whole foods and fortified, enriched or enhanced dietary components that may reduce the risk of chronic disease and provide a health-benefit beyond the traditional nutrients it contains.

The first subgroup of nutraceuticals contains what are called functional foods. These essentially whole foods are supposed to do amazing things for the mind and body. For example, if you ever see an ad for a berry or other fruit or veggie that is considered a super food, this would be considered a functional food nutraceutical.

Medical food is formulated to be consumed or administered internally, under the supervision of a qualified physician. Its intended use is a specific dietary management of a disease or condition for which distinctive nutritional requirements are established by the medical evaluation (on the basis of recognized scientific principle).

This is where things get a little different. In addition to the functional foods that are natural, whole, and eaten like any other food, there are also medicinal foods, which are administered internally.<sup>[2]</sup>

Pharmaceuticals are medically valuable components produced from modified agricultural crops or animals. The term is a combining of the words “farm” and “pharmaceuticals”. Proponents of this concept are convinced that using crops (and possibly even animals) as pharmaceutical factories is much more cost effective than conventional methods, with higher revenue for agricultural producers.

### Potential health benefits<sup>[1]</sup>

Over the years nutraceuticals have attracted considerable interest due to their potential nutritional, safety and therapeutic effects. They could have a role in a plethora of biological processes, including antioxidant defenses, cell proliferation, gene expression, and safeguarding of mitochondrial integrity.

Therefore nutraceuticals may be used to improve health, prevent chronic diseases, postpone the aging process (and in turn increase life expectancy), or just support functions and integrity of the body. They are considered to be healthy sources for prevention of life threatening diseases such as diabetes, renal and gastrointestinal disorders, as well as different infections.

A wide range of nutraceuticals have been shown to impose crucial roles in immune status and susceptibility to certain disease states. They also exhibit diseases modifying indications related to oxidative stress including allergy, Alzheimer's disease, cardiovascular diseases, cancer, eye conditions, Parkinson's diseases and obesity.

### Ayurvedic approach in nutraceuticals<sup>[3]</sup>

The science of food and nutritionals in Ayurveda was so developed since Ayurveda has a unique concept in ahara which is not at all similar to modern view, but has a holistic approach including certain host factors, considering best in all medicines. The pathya-pathya, hithaahitha, sathmya-asathmya are based on individualistic approach. Apart from this rasayana is the most advanced form of preventive application specific to disease, age, climate etc which is similar to current nutraceutical practice. Since principles of both are complementary to each other and work together would yield better result especially in present era. Demand for quality of life has fuelled the ‘nutraceutical re revolution’ and seeking traditional or alternative beneficial products. The association of nutraceuticals with traditional medicine brings the long-standing consumer acceptance. The classical texts of Ayurveda are filled with scattered references on the implication of food products in various diseases. Ayurveda plays a great emphasis on the quality of nutritious food for (i) preventing the degenerative changes caused by ageing (Rasayana), (ii) post illness nutrition (Balya), (iii) enhancing the immunity (Vyahikshamatwa) (iv) maintaining the vitality (Vajikarana). Nutraceuticals and delivery systems (Ayurvedic approach) Supplementation of nutrients which improves the quality of ahara rasa, improving the

process of absorption in other words improving bioavailability of nutrients by handling digestive fire (agni), by improving proper assimilation of nutrients by cleaning the body channels (srothoshoushathva) and making the nutrients available for the tissue, by enhancing tissue utilization or tissue uptake of the available nutrients. This is very important for proper functioning of tissues with above four steps of circulation that leads to dhathu upachaya.

### Rasayana as a nutraceutical

Many of the rasayana drugs have nutraceutical action. Rasayana prayoga in an appropriate condition will give better result since it will work in the level of dhathu. The drug amalaki rasayana is used as traditional medicine since time immemorial for their unique properties like anti-ageing etc. So we can say rasayana drugs act at the sub cellular level. This can be compared with anti oxidant, regenerative, immune-modulatory, and adptogenic actions in modern parlance.

- Chyavanprashm (for general health and prevention of respiratory disorders)
- Brahma Rasayana (for protection from mental stress)
- Narasimha rasayana (vigor and vitality)
- Phala Ghrita (for reproductive health)
- Arjuna Ksheerpaka (for cardioprotection)
- Rasona Ksheerpaka (for cardioprotection)
- Shilajathu rasayanam (for diabetes mellitus)

### CONCLUSION

Pathya kalpana covers all the nutritive values as it provides food having all the six tastes thus help in maintaining the panchabhoutika nature of the body. It also makes the food pleasurable thus acting over both body and mind. So Pathya Kalpana should be incorporated in our daily diet regime to achieve the basic objectives of Ayurveda. Although Nutraceuticals have significant promise in the promotion of human health and disease prevention, health professionals and nutritionists, should strategically work together to plan appropriate regulation to provide the ultimate health and therapeutic benefit to mankind. Diet rich in nutraceuticals along with regular exercise, stress reduction and maintenance of healthy body weight will maintain health and reduces disease risk.

### REFERENCES

1. Dr Tomislav Meštrović, MD, PhD, Nutraceuticals, available from <http://www.news-medical.net/health/What-are-Nutraceuticals.aspx>
2. Nutraceuticals: What Are They and How Can They Help, Available from <http://www.doctorssupplementstore.com/nutraceuticals-what-are-they-and-how-can-they-help>, date May 25, 2015.
3. Dr Arun et al: Nutraceutical Applications In Ayurvedic Dietetics And Nutrition. International Ayurvedic medical Journal {online} 2016 {cited 2016 July}.