



ANALYSIS OF THE CONCEPT AYURVEDIC NUTRACEUTICALS WITH SPECIAL FOCUS ON CHILD CARE

¹ C M Arjun, Assistant Professor, Dept. of Swasthavritha, Govt. Ayurveda College, Pariyaram, Kannur

² M. Smitha, Medical Officer, Govt. Ayurveda Dispensary, Malappattam, Kannur

Kerala.

ABSTRACT:- Nutrition may be defined as the science of food and its relationship to health. It can be classified into human nutrition, clinical nutrition and public health nutrition which deal with individual humans, therapeutic and community aspects respectively. Nutrition is the cornerstone of socio economic development and nutritional problems are not just medical problems, but are multifactorial with roots in many other sectors of development such as education, demography, agriculture and rural development. According to Ayurveda, nutrition forms the basis for etymology of human body. Although the concept of nutraceuticals is gaining popularity more recently, its roots can be traced to the ancient Indian system of medicine.

“Nutraceutical” is a portmanteau of the two words- “Nutrition” and “Pharmaceutical”. The term was coined by Stephen L De-Felice, the Founder and Chairman of the Foundation of Innovation Medicine in 1989¹. Nutraceutical is defined as a food or part of food which in addition to its normal nutritional value, provide health benefits. It can be fortified food product that not only supplements the diet, but also prevents disease and promotes health. Such supplements cannot be recommended by doctors in case of a person suffering from an illness or disease. Nutraceuticals are represented for use as a conventional food or as the sole item of meal or diet. A wide range of such preparations have been shown to impose crucial roles in immune status and susceptibility to certain disease states. The newer concepts in nutrition such as epidemiological assessment of nutritional status of communities, nutritional and dietary surveys, nutritional surveillance, nutritional and growth monitoring, nutritional rehabilitation, nutritional indicators and interventions are collectively known as nutritional epidemiology. Ensuring nutritional security is a challenge for India because of its large population and high levels of undernutrition and poverty. If the citizens are well nourished, that will effectively contribute to the successful development of the nation. With the ensurement of consumer protection from the part of government and market support, sustainable growth of nutraceutical industry can be assured.

As per Food Safety and Standards Act, 2006, food is classified as follows:

1. Novel foods
 2. Genetically modified foods
 3. Irradiated foods
 4. Organic foods
 5. Food for specially dietary use
 6. Functional foods
- Nutraceuticals

7. Health supplements

This makes it very clear that nutraceuticals are a part of the food segment and it should not be considered as a form of pharmaceutical or drug formulation.

Food is considered as Brahma in Upanishads. Kashyapa opines that Anna is Mahabhaishajya. The Ayurvedic classic texts contain numerous references regarding the implication of nutritious recipes in various disease states. Vedic literature recounts the importance of food. Almost all Upanishads of Krishna Yajurveda, such as Kathopanishad, Kenopanishad etc. starts with a common version which signifies the universal dietetic regimen prevalent in ancient enlightened civilization. Our Ayurvedic text, Charaka Samhita accepts food as key determinant of health and disease. Manusmriti also describes about the significance of food and mentions about some instructions to be followed by the upayoktha. Bhavaprakasa is a dedicated text on nutrition and prophylactic nutritional interventions. Descriptions regarding functional foods and novel recipes are available in texts like Charucharya and Vaidyajeivanam. Kshemakuthuhala, Bhojanakuthuhala etc also contain methods of preparation of different food recipes. The unique principle behind the concept of preparation of an Ayurvedic nutraceutical is Swasthya samrakshana.

“That cha nithyam prayunjeetha swasthyam yena anuvarthathe

Ajathaanam vikaranaam anutpathikaram cha yath”²(Cha Su 5/13)

Nutraceutical analysis of an Ayurvedic preparation should cover two aspects- promotive (protective) and preventive. Logical utilization of food provides the following benefits according to Ayurveda:

“Varnaprasadam souswryam jeevitham prathibha sugham

Thushti pushti balam medha sarvam anne prathishtitham”³ (Cha Su 27/350)

Complexion, clarity, good voice, longevity, genuineness, happiness, satisfaction, nourishment, strength and intellect are all conditioned by food.

NUTRACEUTICAL ANALYSIS OF SOME AYURVEDIC YOGAS

In Ayurveda, we find various preventive and promotive measures beneficial for the development of a growing child. Important among them are lehana yogas described by Kashyapa, that are semi-solid preparations given to children. Lehana does not cure disease, nor to be given for any disease conditions. It tones up different developing systems of the body. Many a time the mother may not get a complete and wholesome diet containing all six rasas to ensure in her milk all requirements for the development of the child. Lehana yogas are beneficial in such situations but cannot be considered as a milk replacement. The drug is selected depending on prakriti and need in child and may be given well mixed with ghrutha and madhu in an emulsion form. Drugs selected for lehana karma are brahmi, mandukaparni, shatapushpa,, nagabala, shatavari, chitraka, triphala, trivrut, danti etc⁴. The appropriate combination can effectively be converted into suitable nutraceutical form with ghritha and madhu as the base.

Similarly **Balavilwadi modaka** is a complementary food which provide nutrition to the child in addition to breast milk. Improper nutrition during weaning and post weaning period is the root cause of malnutrition in children. The ingredients of the modaka are balavilwa phala majja, laja sakthu, sarkara and ela⁵. It is a rich source of carbohydrate, protein and energy and also increases the digestive capacity of the infant.

In the textbook of Bhavaprakasa, certain recipes which have health promoting benefits like brumhana and balya properties are explained. Wheat flour (samitha) fried in ghee, put into milk and added with sugar followed by the addition of lavanga and maricha when the mixture solidifies is an excellent nutraceutical preparation called **Lapsika**. Similar recipes like polika, sevika, ksheerika, hareesha, angarakarkati which are highly nutritious are also described in the same context. Such preparations readily provide energy and build up the body⁶.

Vidarigandhadi churna mentioned in Yogaratnakara, Karshya adhikara can be modified into an ideal palatable preparation for correcting underweight, preferably in children. The ingredients of the formulation are Vidarikanda, yava, godhuma, madhu, sarkara and ghrutha. \

Sasankakirana mentioned in Ashtanga Hridaya is a candy like nutraceutical advised in Greeshma rithu. It is a vataka prepared with taleesa churna, karpura and sugar candy and has high palatability too⁷.

Malarinchi is a folklore preparation extensively in use in different parts of Kerala. It is prepared with Ardraka swarasa, laja churna, ela and sithopala, thus ideally obtained in granule form. This nutraceutical preparation is mainly given in children in conditions like agnimandya

CONCLUSION

The type of food which we consume and the dietary pattern are closely interlinked with the occurrence of non communicable diseases. The food systems have undergone dramatic changes in the past decades and Indians are becoming unhealthier due to the popularization of Western food culture. Consumption of fast foods and junk foods has led to the occurrence of diseases related to nutritional deficiencies. In such a situation, the quote of Hippocrates, “let food be thy medicine” become relevant and leads to a proposition that, why not try some food remedies rather than taking medications. The effort should focus mainly on the budding population, through proper health education and awareness about healthy food habits. At the national level, there has been a wide range of responses but the predicament is insufficient formulation and implementation of intergrated policies. Good health and nutrition can be ensured in children during school age by incorporating certain ayurvedic preparations in nutraceutical forms through School Health Nutrition Programmes

REFERENCE

1. Ekta k kalra. Nutraceutical-definition and introduction. The AAPS JOURNAL. 2003;5(10): 27 - 28.
2. R.K.Sharma, Bhagwan Dash. *Caraka Samhita*. Reprinted ed. Varanasi. Chowkhamba Sanskrit Series Office; 2009, page no: 110
3. R.K.Sharma, Bhagwan Dash. *Caraka Samhita*. Reprinted ed. Varanasi. Chowkhamba Sanskrit Series Office; 2009, page no: 565
4. Dr. Dinesh K.S. *Kaumarabhrtya Updated*. 2nd ed. New Delhi. Chaukhambha Publications; 2010, page no: 64
5. Commentary by Cheppat Achyutha Variyar. *Ashtanga Hridaya, Utharasthan*. 15th ed Devi Book Stall. Kodungallur; 2011, page no: 21
6. . Prof kr srikantha murthy. Krtannavarga. In: Srikantha murthy (ed.) Bhavaprakasa of Bhavamisra. Varanasi: Chowkhamba Press; 2016. p. 421 - 423.
7. Dr. T. Sreekumar, MD(Ay), PhD. *Ashtanga Hridaya, Sutrasthan-1*. 2nd ed. Thrissur. Publication Department, Harisree Hospital, Mannuthy; 2008, page no: 93