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# QUALPHARMA

*Learning the roots*

## OVERVIEW OF **NIPAH VIRUS** OUTBREAK

**The 26 allergenic  
substances**

**Nutraceuticals:  
Latest Trend IN  
INDIA**

# NUTRACEUTICALS: LATEST TREND IN INDIA

## Introduction

Nutraceuticals, in different forms and formats always existed in the world. It is only in the late eighties or early nineties that an approach and understanding started evolving. **Dr Stephen De Felice**, Founder of **The Foundation of Innovation in medicine**, coined the term '**Nutraceuticals**' in 1989.

Nutraceuticals are considered as food or part of food that gives therapeutic benefits and claimed to prevent and treat disease. These products include isolated nutrients, dietary supplements, herbal products and processed foods. Presently over 500 such products are available with renowned health benefits. In future also there is a lot of scope in India for further growth of nutraceutical market.

## Indian scenario : Nutraceuticals

There has been an increasing consciousness about the health and looks of the Indian people for the past few decades. Consumers' modern-day lifestyles have immensely changed. Faster pace of life, stress of work-life balance, has been taking its toll on health and wellness. At the same time, access to media and information has allowed them to better understand latest developments in this space. Generally the current generation is

extremely conscious of food and beverages that are more natural, enhances energy in a holistic way and have a balanced diet.

## Wellness and Nutraceuticals

Wellness is broadly classified into -

- The first is **preventive** so that illness does not occur at all
- Second is **rejuvenation** where for most people the current work related stress levels are high.

Ingredients in the space of Nutraceuticals, which contributes to wellness are Vitamins and Minerals. Of Minerals, macrominerals are required in large quantities like Sodium, Potassium, Calcium, Magnesium, and Phosphorous whereas Microminerals like Zinc, Iodine, Copper, Selenium, Manganese, and Chromium small amounts.

Products that are broadly clubbed under nutraceutical is beginning to pick up speed.

## Indian Nutraceutical Trends

At present, the nutraceuticals industry in India is about USD 2.2 billion and is mainly focused in the southern region, followed by the eastern region with three major states of Andhra Pradesh, Tamil Nadu and West Bengal. Along with the growing healthcare industry in India there is an emerging trend in Fast Moving Healthcare Goods (FMHG) in India worldwide known as Nutraceutical, which are by definition,



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**“Nutraceuticals are natural or bioactive chemical compounds claiming to be health promoting and disease preventing products with some medicinal properties.”**

ingredients with human health benefits beyond basic nutrition. The Indian nutraceuticals industry is expected to grow at 20 per cent to USD 6.1 billion by 2019- 2020 due to rising awareness about health and fitness and changing lifestyle. However, dietary supplements, specifically herbal and dietetic supplements will form the greatest opportunity areas for Nutraceutical manufacturers, driven by growing demand from an evolving consumer base.

### Consumer Segments:

India represents a huge and vast market for Nutraceuticals as there is need for growth and development of children to perform well in academics and extra-curricular activities.

1. Younger Age-groups 15-25 are active targets due to very highly active life style and age groups 25-35 have specific needs due to increased stress in their daily activities.

2. Both Pregnant and lactating mothers are in need of high nutrition supplementation.

3. Age groups 60+ years are specially vulnerable to Diabetes, Bone related diseases and other ailments and needs special preventive protection through Nutraceuticals.

### Factors Driving Growth

There are wide variety of host factors which will drive growth of nutraceuticals. The most common are

- Awareness among the Consumers about the health problems
- Fitness intent which is increasing at a fast pace.
- Healthcare cost
- Low incidence of health insurance in India.
- High incidence of diabetes, hypertension, Cardio-vascular Osteo-arthritis, Osteoporosis etc.

### Urban Vs Rural:

The nutraceuticals market in India penetrated approx. 10% of the market. The penetration rate is high in Urban India at 22.51%, where as in Rural India it is merely 6.32%. India represents merely 2% of the global nutraceuticals market. Indian market is highly concentrated in South India followed by East India with leading top three states Andhra Pradesh, Tamil Nadu and West Bengal. Its gradually gaining ground in rural India with the recent penetration of life style diseases in rural India. Rural India occupy nearly one third of the market. With India's strong tradition of consuming natural healthy foods, the market of functional foods is likely to boom in the next five years. The highest growth is likely to be in sub categories such as energy drinks, enhanced shelf stable juices, probiotics, and omega fortified

foods and beverages.

Capsules: A suitable choice for consumers and manufacturers The shift toward capsule formulation is consumer driven. Consumers prefer dosage forms like capsules as they are easier to swallow. Capsules, especially liquid-filled capsules, are also considered to work faster and better. For nutraceutical companies, capsules make for an ideal formulation as it requires fewer excipients and manufacturing steps, enables faster development and offers foods and beverages, personalized to manage certain health conditions are the future of the functional health foods market. Dietary supplements targeted at women and children have a bright future. Preventive dietary supplements for diseases such as cancer, diabetes, obesity and arthritis are also much sought after. Further, India is opening up its market to foreign players. This could lead to healthy competition in this sector.

### Latest trends in nutraceutical formulations in India

Changing trends dosage forms among Nutraceutical ingredients have been treated as natural and healthy alternatives to allopathic medicines. One of the major challenges being faced by these products is the difficulty in formulating these products using the right dosage form.

Not only flavor and fragrance masking, the dosage forms stability of ingredients in the final product matters. Now a days consumers are seeking more variety and benefits from delivery methods besides traditional (tablet and capsule) technologies. Therefore the formulator needs to work much harder to meet increasing consumer demands. As the nutraceutical industries look to carve a niche of their own and create a differentiated product, an important trend is the growth and diversity of new dosage formulations. Traditional tablets are slowly replaced by capsules, particularly liquid-filled capsules. In addition, capsule formulations offer brand recognition in a crowded nutraceutical products market. One of the hottest trends in nutraceutical industry is use of innovative formulation for capsules.

Encapsulation technology has made a lot of progress allowing multiple ingredients to be encapsulated in a single capsule that provide superior protection of the ingredients through moisture protection, enhancing bioavailability, and targeted release of ingredients for maximum effect. Vantage Nutrition is one of the first companies in India that offers Liquid Encapsulation Technology (LET). The novel formulations allow nutraceutical companies to incorporate liquids, pellets, tablets and powders in capsules.

Advantages of novel liquid-filled capsules **are -**

- Patient-friendly dosage form
- Convenience: Ideal for lipophilic

compounds: Nutraceutical compounds, omega-3 fatty acids, phytosterols, carotenoids, have poor aqueous solubility. This is one of biggest challenges concerning nutraceutical companies, who need to invest in developing methodologies to formulate these lipid based nutraceuticals.

- Protection and taste masking of ingredients: also ideal for taste



and fragrance masking, an important consideration for some nutraceuticals like fish oils.

- Increased bioavailability: Liquid encapsulation can aid in improving bio-availability
- Brand life-cycle extension: Due to the novel and aesthetic dosage format, existing formulation can be re-introduced in a new attractive format that revitalizes the brand and helps extending the brand life.
- Stronger anti-counterfeiting: The high product differentiation also makes counterfeiting difficult. Thus, the latest trend of capsule innovation and manufacturing

technologies will undoubtedly help nutraceutical companies develop brands that boast of a differentiated dosage form that is preferred by nutritional supplement consumers.

### Conclusion

Nutraceuticals are considered much promising and are being tried to be implemented in national health program. It is also essential to conduct long-term clinical studies in order to scientifically validate the nutraceutical. The nutraceutical industry and market is expanding in India. India may become a sturdy marketplace for nutraceutical products.

Many international companies have established nutraceutical production facilities in India and this tendency is anticipated to rise additionally. Pharmaceutical firms are being converged with food producing firms to manufacture nutraceuticals this is another promising inclination that will hold on the future. Therefore the need and interest of these nutraceuticals is increasing day by day in our country and this will create a new era for research and development of new formulations which can be a boon to any developing country.

~ By Dr Sanjay Agrawal