Trends in Nutraceuticals

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**Nutraceuticals:**

- Food or food product that provides health and medical benefits, including the prevention and treatment of disease.
- Classified as:
  - Functional Foods
  - Dietary Supplements
  - Medical Foods
- To make these products the new trends of Research and Development are:
  - Pre, Probiotics, Synbiotics
  - Enzyme Blends
  - Herbal Extract
Transform: Evolution of foods

Growth

Nawtional Health Foods
Lesser Evil foods
Functional Foods
Supplements
Medicinal foods

Nutrition
Health Well Being
Protection / risk reduction
Prevention
Treatment

Time and Benefits
Nutraceutical market:


- 2002-2010 market growth was 4.4% CAGR (business wire London).

- The world nutraceuticals market is set to experience steady growth of 4.9% p/a to 2017, at which point is expected to be worth over $180 billion.

- Europe, Japan and US leading the market and holding 85% of the market share.

- Major trends in the market are:
  - Functional foods
  - Dietary Supplements
  - Medicinal foods
  - Cosmeceticals
  - Sportsecuticals
  - Nanoceuticals
Drivers and the challenges:

**Growth Drivers**
- Ageing population
- Lifestyle
- Increasing health consciousness
- Increasing trend towards preventive therapies & alternative medication
- “Natural and organic” trends
- Increasing preventive health care spending
- Fast emerging R&D
- Increasing awareness by companies through their marketing efforts.
- Increasing animal nutrition awareness

**Challenges**
- Absence of good science behind the products.
- Awareness of health benefits of new trends (probiotics and enzymes).
- Good delivery mechanism for optimum benefits

**Nutraceutical a Winner**
Stakeholders for Functional Food market:

Consumers
• More health conscious
• ‘Natural’ self medication
• Ageing population

Government
• Rising healthcare costs
• Regulatory framework

Health Care Professionals (HCP)
• New discoveries in FF
• Promote healthy eating

Retailer/Marketers
• Search for growth opportunities

Rapid development of FF
Players in this market:

- Food Companies
- Biotech
- Pharmaceutical
- Supplement Companies
- Agriculture Companies

Health and wellness market
Nutraceutical Ingredients

![Graph showing the relationship between growth phase and market maturity for nutraceutical ingredients, including Omega-3, Prebiotic, Probiotic, and Vitamins. The graph is courtesy of Frost and Sullivan.]

Courtesty : Frost and Suvillian
PROBIOTICS & IMMUNITY

- Increased Lymphocytes
- Stimulates phagocytic activity
- Increase in viral killing cells
- Added immunity when taking antibiotics
- Protection of weakened immune systems.
- Approx 70% of the immune system is based from Gut
PROBIOTICS applications in food Industry.

- Dairy Industry for yogurts, cheese etc.
- Beverages.
- Ice creams.
- Capsules / Tablets/ Sachets as nutritional support.
- Breakfast bars.
- Special Infant dietary preparations.
- Energy Drinks etc.
- Poultry Feed/Fish Feed/Cattle Feed
Snap shot

- Privately owned, founded by renowned scientists from food technology and pharmaceutical Sc.

- **Vision of** “Prevention Vs Cure”.

- Manufacturing units and marketing Offices at Bangalore and Mysore INDIA.

- Functional since Q4 of 2009.
## Products:

<table>
<thead>
<tr>
<th>Probiotics</th>
<th>Enzymes &amp; Enzyme Blends</th>
<th>Herbal Nutraceutical</th>
<th>Animal Nutrition</th>
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<tbody>
<tr>
<td>• Yeast</td>
<td>• Alpha Amylase</td>
<td>• Standardised Herbal Extract with bioactive components</td>
<td>• Yeast:</td>
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<td>• Saccharomyces boulardii.</td>
<td>• Acid / neutral Protease</td>
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<td>Selenium enriched yeast.</td>
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<td>• Bacterial:</td>
<td>• Beta- glucanase</td>
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<td>Zinc enriched yeast.</td>
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<td>• Lactobacillus Sp.</td>
<td>• Cellulase</td>
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<td>Triprozyme -SB</td>
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<td>• Synbiotic formulations.</td>
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<td>• Lipase</td>
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All Enzymes are:
- Non GMO
- Fungal source.

- Certified Organic Herbal Raw Material.
- Soluble Fibers.

- Yeast:
- Selenium enriched yeast.
- Zinc enriched yeast.
- Triprozyme -SB
Triphase Current Engagements:

- Expertise in following domains:
  - Prebiotics, Probiotics and Synbiotic.
  - Enzymes and Enzymes blends.
  - Herbal Nutraceutical.

- Research and Development collaborations for functional foods - Sedna Nutra.

- IP creations for the Medicinal foods to increase quality of life for the patients.
  - Triphase Products.
Future trends: Personalized food

Nutri genomics

Food Genome

Human Genome

Biomarkers
Three key issues of nutraceutical technology:

For Companies:

• Establishment of scientific assessment standard for prevention of diseases.

• Establishment of assessment system for disease prevention by Clinical trials

For Govt. Bodies:

• Establishment of seamless system to transfer stage from basic research to industrialization.