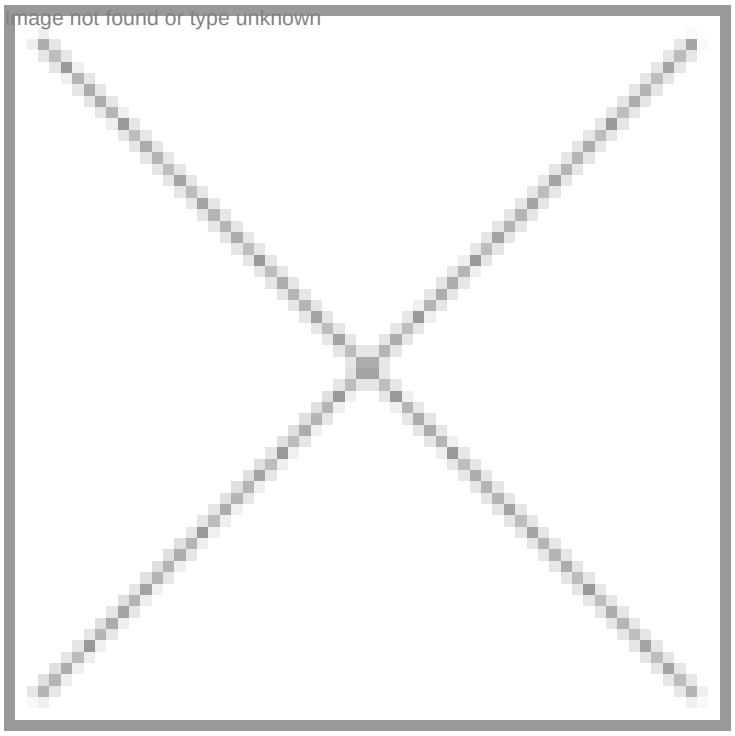
BioSpectrum the business of Bio & Health Sciences

Indian healthcare industry needs a change

11 May 2012 | News



Drsmarta By **Dr Raja B Smarta,** founder and managing director, Interlink Marketing Consulting, India

The healthcare industry in India needs a shift from the current reactive healthcare system instituted by pharmaceuticals to a more proactive healthcare system that defends the patient and gives way to provide proactive and preventive care. In India, preventive care is not as effective as it could be.

Basic Indian healthcare model is built around general practitioners, specialists, and hospitals who are waiting for sick people to come to them. As the entire segment has become market and environment focused and patient centric, being just a provider would not lead the way forward.

Innovation in biotech

Biotechnology, in recent times, is widely employed in nutraceuticals to make food better, safer, inexpensive, and tastier. The food technologists are researching various tools to increase the volume of vitamins and minerals in foods which can help eliminate certain ailments, and provide several health benefits.

The ingredients must be delivered to the customer in a form that tastes good, is stable, and bioavailable. However, many ingredients sensitive to the manufacturing process have their own unpleasant flavors or colors or adversely affect product stability. The food industry has begun to invest in innovative delivery technologies to overcome these problems. These delivery systems also have the potential to reduce the costs associated with food processing. The last five years have seen the pharma and biotech industries shift their business models from internally-focused research and development to external â€œopen networkâ€? models.

The overarching business model for the food industry is evolving into something that more closely resembles the hierarchical

structure of biotech in which networks, contract research organizations, in-licensing, and acquisition play a greater part in product development.

Nutraceutical biosimilar companies will need to overcome numerous hurdles. The technologies need to be developed in such a way that it would be able to make molecule as close as possible to the innovator's molecule with similar safety and effectiveness. The successful biosimilar companies will be those that get a headstart in resolving practical issues in India.

Products
Algae-based products are categorized in polysaccharides, carotenoids, and vitamins and minerals.

Polysaccharides, mainly from the brown and red seaweeds, are used to produce agar, alginate, agarose, and carragheenan. Carotenoids are derived from ÃŸ-carotene and astaxanthin while vitamins and minerals are derived from chlorella and spirulina.

Majority of phytochemicals that are important nutraceutical ingredients are poorly soluble by the human body. Thus to overcome these, nanoemulsion technology is used to entrap the compound of interest into a food matrix, for example, the Ubisol-Aqua delivery system technology from Zymes.

Other products including biliproteins, vitamins, amino acids, sugars, and sterols too have great potential in nutraceuticals through biotechnology. EID Parry nutraceuticals, Yakult Danone (India), Advanced Enzymes Technologies, Tata Chemicals, and Sami Labs are few organizations working in the space of biotechnology applications in nutraceuticals.

About the author

Raja B Smarta is the founder and managing director of Interlink Marketing Consulting, a leading business and performance consultancy for entrepreneurs and corporates for pharmaceuticals, nutraceuticals, and healthcare companies. Having spent over 43 years in pharmaceutical and health sciences industry, he has many brands to his credit in pharmaceuticals.