

Nutraceuticals 2018: Pharmaceutical to Nutraceutical: Paradigm Shift in Healthcare Industry - Dilip Ghosh- Nutriconnect.

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It is generally accepted worldwide that modern pharmaceuticals will remain out of reach of many people and “health for all” may only be materialized by the use of adequately assessed nutraceutical/phytomedicinal products. The human has been using food bioactive and/or herbal medicine for healing purpose from the beginning of human civilization. In recent times, use of herbal medicine for healthcare has increased steadily all over the world although it was neglected for decades by Western societies. However, the gaps in relation to the safety, claimed efficacy, and quality of herbal products used as herbal medicine, nutraceuticals, health foods, and cosmetics are being realized and addressed by many companies in their product development framework. The combination therapy of pharmaceuticals and food bioactive in disease prevention and treatments is one of the most discussed topics in recent time.

The transition of the pharmaceutical industry from its traditional business model is ongoing and interesting to see how their next blockbuster molecule could be derived through different routes. It is proposed that the industry is challenged with three interrelated tipping points referring to what the industry sells (service models vs. therapies), to whom (mass markets vs. niche), and how it should organize itself (making connections vs. integration). The transition from current ‘high-risk, high-margin’ business model to ‘low cost high volume’ nutra business model is dependent on many factors and also advised to move into less regulated markets like animal and consumer health.

The healthcare industry is undergoing functional and structural changes from a ‘fee-for-service’ to

‘value-based’ services at a national level in various countries. This movement is currently experiencing renewed impetus as several food components are being employed as medicines, either directly or as pro-drugs such as secondary plant molecules (polyphenols), fibers, friendly bacteria, essential fatty acids, and probiotics. Furthermore, several drugs are derived from natural products including those to which humans have been exposed via diet. Indeed, it is sometimes difficult to distinguish between bioactive molecules termed ‘drugs’ and other substances classified as ‘nutrients’. It is well understood classic pharmacotherapy can also be accompanied by adjunct treatments with nutrition-derived remedies that are often able to decrease the doses of medicines and/or lessen their side effects.

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Nutraceutical / phytomedicinal products. Humans have used food bioactives and herbal medicine for healing purposes since the beginning of human civilisation. Recently, the use of herbal medicine for healthcare has increased steadily all over the world after having been neglected for decades by Western societies. However, the gaps in relation to the safety, claimed efficacy, and quality of herbal products used as herbal medicines, nutraceuticals, health foods, and cosmetics are being recognised and addressed by many companies in their product development framework. The combination therapy of pharmaceuticals and food bioactives in disease prevention and treatments is one of the most recently discussed

topics. A unique example is ezetimibe, which is used together with lifestyle changes—diet, weight loss, exercise—to reduce the amount of cholesterol and other fatty substances in the blood.

The transition of the pharmaceutical industry from its traditional business model is ongoing and it will be interesting to see how their next blockbuster molecule could be derived through different routes. It is proposed the industry is challenged with three inter-related tipping points referring to what the industry sells (service models vs. therapies), to whom (mass markets vs. niche), and how it should organise itself (making connections vs. integration). The transition from the current 'high-risk, high-margin' business model to 'low cost, high volume' nutra- business model is dependent on many factors and businesses are advised to move into less regulated markets like animal and consumer health.

Companies have started to look for alternatives to the blockbuster philosophy, which is simply diversification. For example, Pfizer and Merck have followed diversification into their new business areas—the 2009 acquisitions of Wyeth and Schering-Plough, respectively, have consolidated their market position. The acquisition of Wyeth has allowed Pfizer to gain a foothold into the nutraceutical market, whose infant nutritionals have brought revenues of €1.4 billion for 2010. A clear trend here is the move into delivering not just treatments, but outcomes. An example of outcome management is Novo Nordisk's Changing Diabetes, which provides support such as specialised training for healthcare professionals, support for diabetes patient organisations, free blood sugar screening services, and equipment for diabetes clinics.

The present model of nutraceutical or medical food industry is pharma-driven. It emphasises the cure for diseases or ailments for their customers in the sick care sector. To be successful, the focus of the nutraceutical model must shift from the illness to the wellness domain—i.e. preventive and promotional

aspects. In the nutraceuticals domain, peripheral opportunities also exist for managing chronic lifestyle diseases and ailments.

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