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Nutraceuptides: A Potential Future in the Supplementary Food Sciences and Therapeutic Technology

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Health and disease management is a critical aspect of social and economic development in every part of the world. However, it is costly for a majority of people, particularly those living in the developing world to afford sound health care. Pharmaceutical products from plants have undoubtedly proven to be a potential source of alternative drugs from historical uses in various communities. In addition to these, plants have also a class which benefits the society by providing nutritious products. The combination of nutritious plants and pharmaceuticals from plants brought about the field of "Nutraceuticals" **[1].** On the other hand, nutraceuptides, a field that looks at products from the combination of pharmaceutical and nutritious plants with animal peptides and other secretions to manage health and diseases could provide a cheaper approach in the discovery of new drug and other therapeutic products. Already, there are some animals traditionally proving to be very good sources of nutraceuptides with one example being silk worm extracts and droppings; these are reported to have natural benefits as dietary supplements for people who have heart disease and general circulatory disorders. Extracts from silkworm act through the reduction of cholesterol in serum and dissolve vascular plaque **[2-4]**. Some Ayurvedic practices in the use of silkworm peptides has also been reported in Asia **[4].** In Central, Eastern and Southern parts of Africa, people consume insects from historical times for nutritional as well as pharmaceutical purposes. Some of the most common insects are: Some termites; *Porotermes adamsoni (Gang'a;* Chichewa language of Malawi*)* and *Coptotermes gestroi*, alates (English) or *Ngumbi* (Chichewa), are eaten as protein for a meal of carbohydrates in Malawi and are also used to enrich complementary foods from amaranth in Kenya. Different types of grasshoppers like *L. migratoria (Dzombe* and *Khwiya* in Chichewa), *Ruspolia differens* (*Bwannoni* in Chichewa and *Senene* in Swahili) are eaten for nutrition and the prevention of malnutrition conditions in Kenya, Uganda, Tanzania, Malawi and the DRC among other countries. Other parts of the world have also been reported to use insects for both nutrition and health management. In Cambodia, some edible spiders are combined with rice to bring about nutraceuptide properties as a fortifier **[5]**. Although these are taken in various communities, there are few studies that seriously focus on their potential drug properties and even so in combination with plants in the regions. Studying nutraceuptides may provide an economically viable approach to drug discovery as the animals are already consumed in communities with no reported adverse effects. Combining these with some known active plant extracts or/and fractions has a great potential to advance the management of health and diseases. As with any other new area of study, newer and better outcomes in terms of products and practices will be developed, perfected and embraced. It is being recommended in this opinion that the study of nutraceuptides encompasses traditional ways currently being used in various parts of the world, from which better integrative pharmaceutical innovations can be realized.

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