Abstract

Title: Nutraceutical and Functional Beverages

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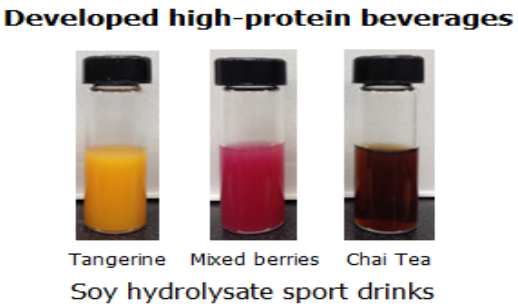
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Keywords: Nutraceuticals and functional foods, Health benefits, Bioactive compounds, Peptides, Protein beverage

I. Abstract Body (up to 250 words)

The market for nutraceutical and functional beverage was $71.5 billion in 2016 globally, and is projected to be $105.5 billion by 2021. This market growth is escalating since consumers are concerned about their health and interested in non-GMO, natural ingredients, low-calorie, reduced sugar/sugar free, antioxidants and stress relief, energy and sports drinks. To meet this demand natural and specialty products, relaxation to counter energy, beverages with bioactive nutraceuticals using fruits and vegetables blends have evolved. Anticancer, anti-hypertensive, and antioxidative effects of bioactives in fruit juices, probiotic fruit and yogurt blends and tea are in demand. The power of protein, hydrolysates and peptides represents relatively untapped opportunity and is moving into mainstream sports and energy, and seniors markets. A pentapeptide derived from rice bran in spray-dried orange juice with consumer acceptability demonstrated anti-cancer activity against prostate cancer and has the potential to serve as a functional ingredient that offers health benefits. High-protein beverages using a hydrolysate from non-GM soybean with three flavors [Chai tea (C), tangerine (T), and mixed berries (MB)] were developed. Beverages T and MB received highest sensory scores and very stable at refrigerated storage. These beverages have the potential for commercial application. Furthermore, we are developing novel and creative nano-encapsulated probiotics with non-GM soybean protein hydrolysates for intestinal health and better delivery of probiotics. This innovative, novel high-protein with incorporated probiotics will help expanding this non-GMO line to new food segments. For successful beverage development, nutrition, nutraceutical and functional profile with health benefits and economy need consideration.

II. Image:



III. Reference:

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IV. Biography:

Navam Hettiarachchy, an IFT Fellow, earned her Ph.D. in Biochemistry from the University of Hull, England. She was a faculty in Peradeniya Medical School, Sri Lanka. She was the Director of Food Science Program at North Dakota State University and now a University Professor in the Department of Food Science, University of Arkansas. In recognition of sustained excellence she has been highly recognized with numerous awards for her teaching, research, and service. She has 6 patents, 3 books edited or co-edited, 20 Book Chapters, and 155 journal articles and over 380 presentations and has been serving as an editorial board member of reputed journals

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