Science Symposium on Smart Eating – Harnessing Innovative Approaches and New Technologies for Health and Sustainability, April 23, 2019, Kuala Lumpur, Malaysia

Innovation for Aging Population

A Multi-Discipline Approach for Innovative Functional Food

Biography

Dr. Dunyaporn Trachootham is Assistant Professor at Institute of Nutrition, Mahidol University, Thailand. She is also currently the Secretary of the Curriculum Committee for Master Program in Toxicology and Nutrition for Food Safety. Dr. Trachootham’s research focuses on safety and efficacy of functional food for elderly population. Her research contribution has earned her an Award of Outstanding Nutrition Research from Thailand Congress of Nutrition. Furthermore, she serves as an assessor for Thai Food and Drug Administration (FDA) to evaluate the safety of dietary supplements, novel food and genetic-modified plants and the scientific integrity of health claims. Recently, she received the 2019 ILSI Malaspina International Scholars Travel Award (MIST) award. Dr. Trachootham obtained a Ph.D. in Biomedical Sciences (Pharmacology) at University of Texas Health Sciences Center at Houston, USA and a B.Sc. in Dentistry at Mahidol University, Thailand. She completed her postdoctoral fellowship in Cancer Biology from MD Anderson Cancer Center, Texas, USA, and received a graduation certificate in Nutritional Sciences for Health Professionals from Tuft University, USA. She also received training for safety assessment of genetically modified (GM) food from National Center for Genetic Engineering and Biotechnology, and novel food from Thailand Risk Assessment Center.

Abstract

Several countries in South East Asia are in aging society and moving toward aged society in the near future. Concomitantly, the incidence of non-communicable diseases (NCDs) is growing exponentially. Therefore, research and development of functional food suitable for elderly population is extremely critical. The major challenge of such task includes how to balance the combination of optimum texture, nutrient composition, functionality and sensory perception. A multi-disciplinary team is required to perform research and development of functional food.

In this talk, I will provide an example of interdisciplinary research for the development of Nutri-jelly and Nutri-PEITC jelly. Over thirty scientists from universities, private companies and public sectors joined our research team and overcame the challenges together. Bridging information from food sciences, nutrition, toxicology, pharmacology and clinical sciences is the key to the success of these products. This talk is devoted to His Majesty the King Bhumipol (King Rama IX), who is our center of inspiration in this multidisciplinary team. A suggestion to meet the needs of future smart-eating concept would be to make “standardized” diet available for general people; and “personalized” diet available for people with special needs.