Food by-products based functional foods and powders

Food by-products in the food industry is characterized by a high ratio of product specific waste. Food by-products or food industry shelf-stable co-products such as liquid, pomace, or powder forms can be obtained from fruits, vegetables, meats, seafoods, milk and dairy, cereals, nuts, fats and oils processing; drying of by-products and converting them into powder offers a way to preserve them as useful and valuable products. Those above-mentioned by-products may be evaluated as a source of dietary phytochemicals including phenolic antioxidants, carotenoids, bioactive other polyphenols, dietary fibers, as a source of proteins, peptides and aminoacids, may be evaluated as extruded products. as a sources of collagen, gelatin, and as a sources of various food additive materials. However, the some of by-products can be utilized as compost for plants, can be used as animal feed, can be utilized as industrial materials. Nowadays, the potential utilization of the above-mentioned major components has been the focus of attention owing to their consumption imparts health benefits including certain types of cancer, reduced risk of coronary heart diseases. Chemoprevention is an active cancer (CA) preventive strategy to inhibit, delay or reverse human carcinogenesis using especially naturally occurring chemical agents. Dietary supplements and/or food fortification based on food by-product may be alternative for above-mentioned healthy constituents. This workshop presentation discusses food powders derived from food by-products and wastes as well as their chemical characterization, functional properties, their unique bioactive features, enhancing technologies, processing of food by-product powders and utilizations; each section of the presentation covers antioxidative, anticarcinogenic reports, pharmacological evaluations and clinical studies of nutraceuticals derivatives from food by-products. Dried powdery products derived from fruits and vegetables, meat, seafood, milk and dairy products, cereal by-products and wastes could be utilized in biological interactions, drug interactions, and pharmacological evaluations.

Biography

Tokusoglu has completed her PhD at Ege University, Engineering Faculty, Dept of Food Engineering in 2001. She is currently working as Associate Professor Dr faculty member in Celal Bayar University Engineering Faculty Department of Food Engineering. He was a visiting scholar at the Food Science and Nutrition Department/University of Florida, Gainesville-Florida-USA during 1999-2000 and as visiting Professor at the School of Food Science, Washington State University, Pullman, Washington, USA during April-May 2010. She has published many papers in peer-reviewed journals and serving as an editorial board member of selected journals. She has published the scientific edited two international book entitled Fruit and Cereal Bioactives: chemistry, sources and applications and entitled improved food quality with novel food processing by CRC Press, Taylor & Francis,USA Publisher, third book food by-product based functional food powders is in progress; He also published two national books entitled Ca- cao and Chocolate Science and Technology and Special Fruit Olive: Chemistry, Quality and Technology. She organized and/or administered as Conference Chair at many conferences and congress in various parts of USA and Europe.