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### Processing strategies on food tablets

Recently, the potential efficacy of the bioactive phenolics from natural sources has been the focus of great attention owing to their health benefits to human health for reduced risk of coronary heart problems and selected cancers. Food tablets as dietary supplements, and/or fortified foods, food by-product based food powders may be great value-added products for getting healthy bioactive components. Nutraceutical food tablets has been prepared by direct compression method through selected tablet machines and has been manufactured according to established prescription methods. The functional constituents of the foods or some preferable functional foods must be standardized as the nutraceutical product and generate under good manufacturing practices (GMPs). Primarily, a nutraceutical or selected food must be detected for "non-toxic food constituent strategy" by advanced toxicity analyses, then it must be detected and analyzed in terms of health benefits including disease treatment and/or prevention. Food tablet is described as unit dose, temper evident, solid preparations including one or more active ingredients or whole food powder. Patient and/or consumer demand, routes of drug delivery, oral utilization capacity, the flexible design of dosage forms as technical manufacturing parameters has been considered; also the bulk density (g/ml), the tapped density (g/ml) as pre-compression parameters have been confirmed while thickness (mm), hardness (kg/cm<sup>2</sup>), % weight variation, % friability, % *in-vitro* drug release as post-compression (parameters have been carried out as physiochemical properties. The powder blend has been thoroughly mixed with talc and magnesium stearate and compressed into a 300-400 mg tablet using single rotatory punching machine based on tablet processing strategy. Among the trial /serial tablet formulations; "mesir effervescent tablet" could be more efficacious owing to majorly cinnamaldehyde (as v/v) whereas "black mulberry effervescent tablet" could be more beneficial due to the presence of morusin and apigenin phenolic anticarcinogenics and also "mandarin peel effervescent tablet" could be salutary because of its naringenin and hesperidin flavonone phenolic bioactives. In this keynote workshop presentation content, the innovative and conventional food tablet processing strategies has been given with discussed chemical characterization, functional properties, their unique bioactive features, antioxidative, anticarcinogenic reports of above- mentioned developed tablets.

### Biography

Ozlem Tokusoglu has completed her PhD at Ege University Engineering Faculty, Dept of Food Engineering at 2001. She is currently working as Associate Professor Dr faculty member in Celal Bayar University Engineering Faculty Department of Food Engineering. She performed 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 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, and third book Food By-Product Based Functional Food Powders by CRC Press, too; She also published three national books entitled Cacao and Chocolate Science and Technology, Special Fruit Olive: Chemistry, Quality and Technology and Frying Oils Science and Technology. She organized and/or administered as Conference Chair at many conferences and congress in various parts of USA and Europe.

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