

## Designing of Food Products Enriched With Phytonutrients Assigned for Hypertension Suffering Consumers

**Authors :** Anna Gramza-Michałowska, Dominik Kmiecik, Justyna Bilon, Joanna Skrety, Joanna Kobus-Cisowska, Józef Korczak, Andrzej Sidor

**Abstract :** Background: Hypertension is one of the civilization diseases with a global scope. Many research showed that every day diet influences significantly our health, helping with the prophylaxis and diseases treatment. The key factor here is the presence of plant origin natural bio active components. Aim: The following research describes snack health-oriented products for hypertension sufferers enriched with selected plant ingredients. Various analytical methods have been applied to determine product's basic composition and their antioxidant activity. Methods: Snack products was formulated from a composition of different flours, oil, yeast, plant particles and extracts. Basic composition of a product was evaluated as content of protein, lipids, fiber, ash and calorificity. Antioxidant capacity of snacks was evaluated with use radical scavenging methods (DPPH, ABTS) and ORAC value. Proposed snacks as new product was also characterized with sensory analysis. Results and discussion: Results showed that addition of phyto nutrients allowed to improve nutritional and antioxidative value of examined products. Also the anti radical potential was significantly increased, with no loss of sensory value of a snacks. Conclusions: Designed snack is rich in polyphenolics, that express high antioxidant activity, helpful in hypertension and as low calories product obesity prophylaxis.

**Keywords :** antioxidant, well-being, hypertension, bioactive compounds

**Conference Title :** ICFAPE 2014 : International Conference on Food and Agricultural Process Engineering

**Conference Location :** Melbourne, Australia

**Conference Dates :** December 11-12, 2014