Edible Bird Nest Industry Conference 2014
25-26 November 2014, Putrajaya

DEVELOPMENT OF DOWNSTREAM PRODUCTS FROM EDIBLE BIRD NEST

Prof. Dr. Abdul Salam Babji

School of Chemical Sciences and Food Technology, Faculty of Science and Technology,
Universiti Kebangsaan Malaysia, 43600 Bangi Selangor, Malaysia
daging@ukm.edu.my

Edible bird nest (EBN) is one of the unique creations by God to be explored by human being. It is used to prepare a gelatinous soup dish, popular among the Chinese community all over the world. Theses nests are built by swiftlet species from 90 % to 95 % saliva and 5 % to 10 % feathers and dirt. There are more than 24 species of swiftlet distributed around the world, but only a few produce nests that are deemed 'edible'. The glycoproteins, a major component of EBN has unique properties related to claims of health, vigour, beauty and cure for all illnesses. As glycoprotein and sialic acid are major components of EBN, research and food product development on EBN focused on the effects of micro-particulates and enzymatic hydrolysis processing steps undertaken to explore the 'bioactive' peptides and glycopeptides in relation to the functional properties. This paper reviews past researches and explores the potential of enzymatic hydrolysates and isolated peptides in EBN extract as nutraceuticals in relations to their antioxidative and anti-hypertensive properties. Optimizing edible bird nest into food products to improve the variety, quality, taste and availability were carried out, resulting in value added products such as ready to drink beverages, yogurt, meat patties, ice cream, noodles and chocolates incorporated with EBN. An innovative product in the form of Bioactive Swiftlet Nest Capsule was also formulated as a natural antioxidative and anti-hypertensive supplement.