Utilization of coarse grains for formulation of value added snacks

SHILPEE GUPTA AND VIRGINIA PAUL

The present study was carried out with the objectives to prepare *Pua* by incorporating bajra flour and soy flour, to assess the acceptability of developed product and to find the nutritive value as well as analyze elements by LIBS. The bajra flour, wheat flour and soy flour were mixed in the ratio of 10:80:10 (T₁), 20:70:10 (T₂), 30:60:10 (T₃) and 100 per cent wheat flour (control). Sensory analysis indicated that value added snacks were liked very much by the panelists. Nutrient analysis indicated that highest moisture and ash content was found in *Thalipeeth*. Protein content is similar in almost all four products showing highest in *Gatta* while highest carbohydrate, iron, calcium content and energy was found in *Laddo* followed by *Pua*, *Gatta* and *Thalipeeth*, respectively because of addition of jaggery as an ingredient in *Laddo*. Finally, fat content was maximum for *Laddo* and *Pua* followed by *Thalipeeth* and *Gatta*. This may be due to addition of Ghee in *Laddo* and deep frying of *Pua*. Elements detected from LIBS spectra for the developed products were carbon, hydrogen, nitrogen, calcium, iron, sodium, and magnesium. Therefore, it can be concluded that bajra flour in combination with wheat flour and soy flour can be successfully incorporated for the development of nutritious products.


**Key Words** : Coarse gram, Value added product

Address for correspondence :

SHILPEE GUPTA, Department of Food and Nutrition, Halina School of Home -Science, Sam Higginbottom Institute of Agriculture, Technology and Sciences, ALLAHABAD (U.P.) INDIA
E-mail: shilpeeg21@gmail.com

Associate Authors :

VIRGINIA PAUL, Department of Food and Nutrition, Halina School of Home -Science, Sam Higginbottom Institute of Agriculture, Technology and Sciences, ALLAHABAD (U.P.) INDIA
E-mail: vpaul17@gmail.com