Studies on shelf stable microwaved ready-to-eat snacks from spent animal meat of different species

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There is imperative need to develop low fat, high protein shelf stable meat products, due to lack of cold chain facilities across the country and can also be an effective way for utilization of spent (culled) animal meat which is tough and hard to cook by usual cooking practices. Hence this study was conducted to develop good quality, highly acceptable, nutritive and shelf stable ready-to-eat meat based snack from meat of different species viz., chicken, sheep, goat, pig and buffalo. Meat improves protein quality and microwaving instead of frying reduces fat % in snacks. Chicken, chevon, mutton and pork based snacks were selected based on the results of sensory attributes for further detailed studies on physicochemical characteristics and proximate composition. Mutton had significantly (P<0.05) higher values for product yield and pH, pork had significantly (P<0.01) higher value for expansion% and chicken had significantly (P<0.01) lower value for water activity. Chicken based snacks had comparatively lower values for redness, yellowness and chroma. Moisture, protein, fat and ash % of snacks from selected species were in the range of 4.69±0.39 to 5.28±0.24, 12.94±0.34 to 13.85±0.23, 0.73±0.21 to 1.23±0.28 and 4.44±0.25 to 5.04±0.37, respectively. Based on the scores of sensory attributes, physico-chemical characteristics and proximate composition, snacks prepared from mutton were found to be the best.

Biography
Somesh Kumar Meshram has done B.V.Sc. & A.H. – College of Veterinary Science and Animal Husbandry, MHOW (M.P.) achieved 25th rank in all India entrance exam for ICAR-JRF. M.V.Sc. in Livestock Products Technology - Indian Veterinary Research Institute, Izatnagar, Bareilly (U.P.). Ph.D. pursuing in Livestock Products Technology - Indian Veterinary Research Institute, Izatnagar, Bareilly (U.P.).

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Milk and milk products as a vehicle for fortification

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Milk in its natural form is almost unique as a balanced source of man's dietary need. The various steps in processing and storage have a measurable impact on some specific nutrients. Milk also provides a convenient and useful vehicle for addition of certain nutrients to man's diet. Most of the milk intended for human consumption is heat treated to prevent public health hazards. These industrial processes destroy some nutrients, especially the vitamins naturally present in milk. Nutrients that are lost during processing, however, can be replaced through fortification of milk. Some of the nutrients fortified for milk and milk product are Vitamin A and D, β- Carotene, calcium and iron, poly unsaturated fatty acid, Vitamin C, iron, copper and zinc. When two or more vitamins are added to a food product at the same manufacturing stage, this is commonly done in the form of premix; which is a homogeneous mixture of desired vitamins in a dry powder form or as blend; a homogeneous mixture of desired fat soluble vitamins in an oily form. One of the problem encountered with the vitamins, is their limited stability in presence of heat, humidity and oxygen. In-order to improve the stability of these vitamins, a coating technology known as Microencapsulation has been developed. Components such as bioavailability of commercial preparations, nutrient-nutrient reaction, nutrient-matrix interaction, shelf-life and packaging process consideration, cost factor safety factors must be considered while fortification of milk and milk products with the desired nutrients.

Biography
Shilpa Yatnatti has completed her M.Sc. in 2009, at Food Science and Nutrition department, UAS, GKV, Bangalore and her research topic was ‘Nutrition garden by School Children and its impact on nutrition knowledge and dietary practices of school children. Currently she is the Ph.D Scholar of the same university.

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