Development and assessment of quality characteristics of fortified chicken nuggets prepared by replacement with cabbage

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Value added ready to eat processed meat products like chicken nuggets are getting popularity day by day due to changing lifestyle, rapid urbanization, working people and well recognized nutritional value as well as availability of poultry meat. Fortification with high fiber sources like cabbage can enhance functional properties of such meat products. Chicken nuggets were prepared by the replacement of minced chicken meat with 10, 20 and 30% of finely minced cabbage and stored at refrigeration temperature for evaluation of sensory, physico-chemical and microbiological qualities on 0, 3, 6, 9 and 12th day of storage. The pH increased in highly significant (P<0.01) manner with increasing percentage of cabbage, whereas TBA, FFA, total plate count, yeast and mould count showed no significant (P>0.05) difference between control and treatments, but increased significantly (P<0.05) with the progression of storage period. There was no coliform and Salmonella count observed throughout the storage period. Among all the three treatments and control, chicken nuggets containing 20% of cabbage obtained the highest scores for sensory evaluation, all the sensory scores decreased significantly (P<0.05) on 9 and 12th day of storage. All the treatments were well accepted for 9 days under refrigeration within the acceptable limits. So it can be concluded that chicken nuggets can be well fortified with high fiber and vitamin containing cabbage upto 20% and can be helpful to prevent various life style diseases.

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