



46. Functional Mutton Nuggets Incorporated with Walnut Kernels

Type: Mutton product

Date:

Patent: NA

Name of Inventor

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Description of Technology

Red meat including mutton is being associated with certain negative attributes viz; cardiovascular diseases like hypertension, colon cancers etc. Locally available natural sources like walnuts being rich sources of functional ingredients can be exploited for their functional role by incorporating in meat products. Mutton nuggets containing Walnut Kernel Paste (WKP) were developed and evaluated for its quality on the basis of different physico-chemical, proximate and sensory attributes. 15 % of WKP in the formulation was found as the optimum level for the manufacturing of functional nuggets without compromising with the quality of the product. The product was packed in LDPE bags and stored at $4\pm 1^{\circ}\text{C}$ for 21 days during which the samples were evaluated at regular interval of 7 days duration for various physico-chemical, microbiological and sensory quality parameters. The WKP improved the functional value of the product as depicted by enhanced anti-oxidant potential (increased DPPH-RSA) and lowered TBARS values. The values of microbial counts were within acceptable limits up to day 21 of storage period. Hence walnut kernels were efficiently incorporated in mutton nuggets for improving functional value without affecting its storage stability.



Impact

- Enhancement of the functional value of red meats.
- No deleterious effect on the sensory attributes and/or the emulsion quality.
- Improved shelf life
- Omega 3 fatty acid rich food.

Commercial Applicability

- Locally available natural sources of food additives could be exploited at commercial level.
- Incorporation of walnut kernels (15%) is a technologically viable option
- Premium nuggets could be made.