48. Spent Hen Meat Patties Incorporated with Fenugreek

Name of Inventor
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Type: Poultry meat product
Date:
Patent: NA

Description of Technology

The development of comminuted meat products offers an important avenue for the profitable disposal of spent hens, which otherwise are considered as the by-products of egg industry. Spent hen meat can be substituted as a raw meat source for the production of value added products, which in turn will boost up the poultry industry. However, meat of spent hen may promote faster oxidation than broiler meat during processing and storage due to higher content of unsaturated fatty acids. The use of natural ingredients is being encouraged due to their increasing consumer acceptability, besides improving the shelf stability of food products. Being a potent source of functional ingredients, fenugreek has been exploited by food industry for the development of different functional products. The incorporation of fenugreek seeds as a powder or its extract in spent hen meat is a viable option for enhancing the overall functional value of less functional spent hen meat. Hence, the present study was designed to produce functional spent hen meat patties by incorporating fenugreek seed powder (FSP) and its extract (FSE). The results revealed that FSP at levels (0.5%, 1%, 1.5%, 2%) and FSE at levels (2.5%, 5% 7.5% and 10%) can be incorporated in spent hen meat patties while maintaining the various physico-chemical and sensory properties of the product. FSP at 1.5% and FSE at 10% level were found to be optimum levels for the development of functional spent hen meat patties. During the aerobic refrigerated (4±1°C) storage of these functional spent hen meat patties along with control in LDPE bags, it was found that the products could remain fairly acceptable up to 21th day without compromising with the quality of the product. FSP and FSE proved to be efficient sources of antioxidants because DPPH-RSA of the product was significantly increased and TBARS value significantly decreased. Besides, microbial counts (Total Plate Count, coliform count and Yeast and Mould Count) also decreased in functional spent hen meat patties.

Impact

- Enhancement of the functional value
- Improved sensory as well as shelf life characteristics of spent hen meat patties

Commercial Applicability

- Value addition of otherwise less valued spent hen meat
- Huge market potential for value added products.