



## **49. Chicken Loaves Incorporated with Dandelion**

Type: Poultry meat product

Date:

Patent: NA

### **Name of Inventor**

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### **Description of Technology**

Broiler meat has a wider consumer acceptance among white meats because of its high biological value besides being low in saturated fatty acids. Moreover, it is preferred by health conscious consumers for it being a rich source of poly unsaturated fatty acids (PUFA) especially omega-3-fatty acids. Though, PUFA are desired for various health benefits but they are liable to oxidation during storage. This lipid oxidation is one of the major causes of spoilage of meat products. Although, synthetic additives have been widely used in the meat industry to inhibit the process of lipid oxidation as well as the microbial growth, but the growing concern among consumers about the use of such chemical additives has decreased their use. Consequently, search for natural additives especially of plant origin has notably increased. Locally available natural sources like dandelion being rich source of functional ingredients can be exploited for their functional role by incorporating them in chicken meat loaves. An investigation was thus, undertaken to evaluate the effect of incorporation of dandelion leaf powder and its extract on the quality and shelf life of chicken loaves. Dandelion leaf powder @ 1% and Dandelion leaf powder extract @ 10% level were found to be optimum levels for the development of functional chicken meat loaves as was confirmed by improved antioxidant potential (enhanced DPPH-RSA) as well as decreased TBARS value when compared to control product having no added dandelion. During the aerobic refrigerated ( $4 \pm 1^\circ\text{C}$ ) storage of these functional chicken meat loaves in LDPE bags, it was found that the products were fairly acceptable up to 21 days without any compromise in the quality of the product.



### **Impact**

- Enhancement of the functional value of comminuted meat products like chicken loaves
- No deleterious effect on the sensory attributes and/or the emulsion quality.
- Improved shelf life

### **Commercial Applicability**

- Locally available natural sources of food additives could be exploited at commercial level
- Incorporation of Dandelion powder (1%) or its aqueous extract (10%) is a technologically viable option.