

COOKED PRODUCTS OF POULTRY COMBS AND SUBSTANTIATION OF THEIR SHELF LIVE CAPACITY

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The aim of the work it is described herewith has been set as substantiation of possibility and expediency of using poultry combs as food raw materials. According to the plan of research, physical and chemical parameters of combs of chickens and roosters were determined and shelf life prediction substantiated.

The study of the physical and chemical composition, the quantitative content of the main microelements, the amino acid composition was carried out in the laboratories of IFR NAAS according to generally accepted methods and instructions in the industry. The object of research was a poultry by-product, namely the combs of hens and roosters, obtained at the domestic poultry processing facilities of Private Enterprise „Ular” in Lviv region and „Magrok” Ltd in Dnipro city (both - Ukraine).

Results of the research showed that combs of chickens and roosters had characteristic properties high water content, a significant part of which (up to 75%) is in a bound state, low fat content. The pH value was close to neutral.

The amino acid composition was also determined. A high content of hydroxyproline and proline was revealed (5.0 and 1.1 times, respectively, more than in the meat of chickens of the first category), which indicates the presence of a significant amount of connective tissue proteins in the combs. In combs, a high content of macro- and microelements was found in comparison with the meat of chickens of the first category: the content of iron is 15 times more, zinc – 2 times, chromium – 112 times. No limiting amino acids were found in chicken combs.

A technological scheme for the processing of poultry combs at poultry processing enterprises is proposed. The amino acid and microelement composition of the said raw materials was also analyzed from the point of view of nutrient adequacy. It is concluded that cooked poultry combs are nutritious and technologically acceptable meat products. Since the formulation of these products includes cooked muscle and collagen-containing meat raw materials, they are a typical example of perishable products of meat processing enterprises. To scientifically predict safe storage periods of the cooked combs mathematical modeling methods shall be applied incl. the method of a full factorial experiment.

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