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8. Application of poultry secondary processed products on the example bile

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Introduction: Recently the meat industry has made a significant progress in the development of science, technology improvement, technology, production and scientific organization of labor.

Resources and methods: Under the present-day conditions in the process of bile production with the use of intensive technologies the essential operation is to prepare and store bile, which is made of many components, very different in their physical and chemical properties. The purpose of the work is to optimize the composition of bile using a variety of factors. The research will provide a conclusion for the use of bile as a medicinal resource.

Results: Bile is collected after sorting organs of different types of poultry. Depending on the purpose bile can be preserved by freezing, drying or condensation, and adding formalin or sodium hydroxide.

Bile preserved by formalin can be stored up to 6 months at the temperatures above 10° C, while bile preserved by sodium hydroxide can be stored the same period in not cooled rooms.

Bile is a secret of glandular cells of the liver of vertebrates, which is released into the intestine. Specific components of bile are bile acids and bile pigments such as bilirubin and bileverdyn.

Bile of poultry is used for the production of medicine, as well as for the production of purified bile acids, bacteriological nutritional medium, synthesis of some steroid hormones and for technical purposes.

A very important role in digestion is given the bile acids. It is established that many soluble or insoluble substances in water, such as fatty acids, can pass through animal membrane only after wetted by their bile.

Higher fatty acids, cholesterol and other lipids are partially soluble in water when there is bile or selected bile acids.

It is proved that medicine containing bile acids has various biological effects notably they normalize digestion, inhibit growth, reproduction of certain microorganisms and neutralize certain bacterial poisons.

Production of a number of gastrointestinal disturbance drugs, liver diseases drugs is based on these bile poultry properties. These drugs include: holenzim, alohol, holohol, bile medical, bile acids. Last ones are the raw material for the synthesis of steroid hormones of the adrenal cortex group.

The laboratory of poultry processing of Institute of Food Resources carries out physico-chemical studies to determine the mass fraction of cholic acid in chicken, duck and goose bile.

Conclusions : The meat industry has an opportunity to comprehensively recycle raw materials and produce not only food, but also other products – fodder and organomedicine for drugs and various types of raw materials for other industries.

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