



VETERINARY SANITATION OF FISH MEAT QUALITY ASSESSMENT OF ASPECTS

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Received: 1 st November 2022	This article presents the results of evaluation of the quality, marketability and suitability for consumption of fish meat put on the market, using the methods of veterinary and sanitary expertise.
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INTRODUCTION. The extensive reforms being carried out in our republic are aimed at agriculture and as one of the important areas, they are directed to the development of measures to ensure food safety, develop the fishing network and increase the efficiency of cooperative fish farming.

In the decision of the President of our Republic "On additional measures for the further development of the fishing industry" on the rapid development of the fishing industry in the Republic, increasing the volume of fish products with the introduction of modern and innovative methods, regulating the industry a number of legal documents have been adopted and measures are being taken to ensure their quality and thorough execution. Tasks have been given to increase the volume of production and bring it to a higher level of quality.

Taking into account the above, the nutritional value of fish meat released to the markets, veterinary-sanitary control during fish meat processing, veterinary sanitary expertise of fish meat in infectious diseases, veterinary sanitary expertise of fish meat in invasive diseases, development of methods of expert assessment of sausages and canned products made from fish meat, scientific its justification in research is an urgent issue.

To provide the population of the republic with food products and to expand production opportunities in animal husbandry and its industries. During our research, we study such tasks as taking steps to create an added value chain, as well as increasing the population's healthy eating culture.

MATERIAL AND METHODS. We conducted our research in the laboratories of veterinary sanitary expertise of Siyob Dehkan Market and the laboratory of veterinary sanitary expertise of the Samarkand State Veterinary Medicine, Animal Husbandry and Biotechnology University. First, fish meat from different batches was organoleptically examined and 6 samples were taken from the fish sold in the Siyob farmer's market and examined in the laboratory. According to A.M.Poluektova from the physico-chemical tests of freshness of fish in the laboratory, the essence of the peroxidase reaction is that under the action of the peroxidase enzyme, hydrogen peroxide quickly decomposes into water and oxygen. Oxygen oxidizes benzidine, a compound is formed, which combines with unoxidized benzidine to form a substance that changes from blue-green to brown. with metal salts, polypeptides, peptones and free amino acids are precipitated, the accumulation of volatile gases in meat, including hydrogen sulfide-hydrogen sulfide, often occurs during the decomposition of proteins in anaerobic conditions.

However, the conventional method of hydrogen sulfide detection is not very sensitive. The most accurate and good results are obtained when ground fish meat is heated to 50-52 °, determination of ammonia gases - free ammonia released from spoiled fish interacts with hydrochloric acid, which is a part of Eber's reagent, to form ammonium chloride which produces a white cloud that is clearly visible to the eye. Verification work was carried out using the above methods. Inspection work was carried out on the basis of "Special technical regulation on the safety of fish and fish food products" No. TP-19 of December 25, 2020 of the Uzstandart Agency.

RESULTS AND THEIR ANALYSIS. At the initial stage of our research, samples of fish meat taken from 6 batches at the Siyob farmer's market were examined and the following results were obtained. According to the results of the organoleptic examination, samples 1^a 2^b 5^e 6^m have a peculiar smell, a transparent mucous substance, without blood and foreign odors, the integrity of the grains is shiny, tightly attached to the body, the skin is elastic, without foreign spots, the color of the wound is reddish, the wound is the lids tightly close the wound cavity, the cornea is transparent, the muscle tissue is elastic at the cut site, tightly attached to the bones. Samples 3^c and 4^d were found to have signs of old fish, such as soft muscle tissue, easily separated from bones.

According to the results of the peroxidase reaction, the color of the extract prepared from samples 3c and 4^d suddenly changed to a jiggery color without the formation of a bluish color. If the reaction is negative, it means that the oxidation process is very fast in the injured person and it is possible to think about the high level of activity of the peroxidase enzyme coming through the blood. In the samples taken from the following batches, 1^a 2^b 5^e 6^m reaction is positive, we can see that a bluish color is formed and disappears after 3-4 minutes. If the peroxidase enzyme is active, the oxidation processes take place quickly and a number of oxidized substances are formed.

At the next stage of our research, reaction to polypeptides was carried out and the following results were obtained: in samples 1^a 2^b 5^e 6^m, the reaction was negative and we can see that the extract is clear. Extracts from samples 3c and 4^d produced a cotton-like precipitate. If the reaction is positive, it means that the products of the initial decomposition of the protein - polypeptides, peptones and free amino acids with heavy metal salts precipitated from the broth.

During our tests, we conducted reactions to determine the gases contained in the fish meat in the experiment. As a result of the conducted reactions, it was determined that the meat from samples 3c and 4^d contained hydrogen sulfide gas. Volatile gases were not detected in all other samples.

CONCLUSIONS. As it can be seen from the results of the research, it was found that the quality of the fish in 2 of the samples released for sale is low, outdated and unfit for consumption. The sale of such fish products is prohibited.

Systematic inspection of fish and fish products in markets by veterinary sanitary expertise is required.

All types of fish and products obtained from fish that are released for consumption must be subjected to veterinary sanitary inspection and the sale of unfit products must be prohibited.

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