

QUALITATIVE DETECTION OF BROMIDE POTASSIUM BAKERY PRODUCTS

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Introduction. Bread is one of the most important and most used products in the daily human diet. Due to the fact that in the world as never before, the question of food security of the population becomes very important and the need to monitor producers of food product which obtain excess profits added to their products substances that reduce the price and increase its output. Often this process is accompanied by a significant reduction in product quality and that is the most dangerous, the risk to the health and lives of consumers.

One of these substances is potassium chromate (E 924th). Potassium bromate is added to baking products for looseness products and bleaching flour. This dietary additive is dangerous for health and life of consumers. It can cause cancer, and etc.

Aim. The aim of this investigation is to get data about presence of potassium bromate in bakery products and improving existing methods of determination of this additive in food products, in particular the development of limit-test to help determine exceeding the allowable content - 75 ppm of potassium bromate, which has the properties of a mutagen in baking products according to the World Food and agriculture organization (FAO).

Materials and methods. We investigated samples of the most popular types of bread - namely, white troughs, bread threaded, bread from a private bakery. Quality of potassium bromate in the baking goods determined by the method of iodometry. A minimal allowable concentration - 75 ppm, which may be present in these products according to the World Food and Agriculture Organization (FAO) World Health Organization Expert Committee on Food Additives (JECFA) determined by spectrophotometric method.

Results and discussion. The optical density of the solutions of the samples was - 0.425 at a wavelength of 556 nm in bakery products that were studied, and did not exceed the permissible concentration of potassium bromate according to the World Food and Agriculture Organization (FAO)).

Conclusions. Qualitative research of the potassium bromate presence in samples showed that content of this dangerous carcinogen additive does not exceed the allowed level according to the World Food and Agriculture Organization (FAO).