PROSPECTS FOR THE USE OF SEA KELP IN TECHNOLOGY OF PASTRY PRODUCTS

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Lack of basic components in the diet of the Ukrainian, especially iodine, leads to various pathologies and diseases (thyroid dysfunction, which causes delayed mental and physical development of children, neurological cretinism, blurred vision, deaf, hypothyroidism, infertility, miscarriages, mortinatality , increased infant mortality, atherosclerosis, arrhythmia, increased pressure of mental function in children and adults, increased sensitivity to radiation exposure).

One of the ways to improve the nation's health is the use of functional nutrition products, including pastry products (cakes) as a part of daily intake.

To enrich pastry products use different iodine supplements of organic and inorganic origin are used today.

The objects of study is selected additives - Fucus vesiculosus and Ascophyllum nodosum - refined sea kelp with average particle sizes - 0.5 mm from the basin of the White Sea (Solovetsky Islands) production SevPYNRO, Arkhangelsk (Russia).

Dosage carriers are performed at the rate of 30% of the daily requirement of iodine (45 mg) in 100 g fortificated cake (1 pc) according to the level of iodine uptake of these products and the loss of basic element of the technological process of manufacturing products.

Kelp powder with average particle size - 0.5 mm, hydrated for 10± 5 minutes at a temperature of 40 ± 5 ^{o}C was taken for research.

The effect of selected additives on biochemical and structural and mechanical processes in the semifinished product, organoleptic and physico-chemical parameters of quality, nutritional value and hardening of finished products were studied.

It was investigated that the addition of marine brown kelp Fucus vesiculosus and Ascophyllum nodosum to cupcakes does not affect the quality of finished products and can improve micronutrient composition and extend the shelf life of muffins.

So, on the basis of studies prescribed dosage processing products seaweeds supplements Fucus vesiculosus and Ascophyllum nodosum, that allow to get high quality pastry, extended shelf life and a guaranteed content of organic iodine (45mkh/100 g product).

KEY WORDS: pastry products, by-products seaweeds, optimal dosage, loss of iodine quality.