EVALUATION OF THE QUALITY OF VEGAN SAUCE WITH THE ADDITION OF MULTIFUNCTIONAL COMPOUNDS

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The modern rhythm and lifestyle of people, especially in large cities, have led to an imbalance in the diet. It is supersaturated with easily digestible carbohydrates and saturated fats of animal origin. At the same time, the population suffers from a deficiency of essential fatty acids, vitamins, minerals, dietary fiber and phospholipids. Conducted studies by numerous authors have proven the physiological activity of beta-glucans and its beneficial properties. Products containing beta-glucans have a wide range of technological properties. They retain moisture, stabilize the texture, exhibit preservative and antioxidant properties, help retain flavor and preserve the color of products. They suppress appetite due to the feeling of fullness and exhibit sorption properties.

The aim of this work was to develop a mayonnaise-type vegan sauce enriched with beta-glucans, since the modern market is full of proposals, but the number of vegan sauces is limited. For this study, four samples were prepared containing beta-glucans from 0% to 0.3% of the total mass. The organoleptic and physico-chemical parameters (solids content, pH, total acidity and viscosity) of sauces enriched with beta-glucans were obtained and studied. The result showed that by increasing the content of beta-glucans, the samples had a lower pH and higher acidity compared to the control sample. A tasting was carried out, the best samples of the obtained samples were identified. It has been established that beta-glucans obtained from processed wine yeast has a good water-retaining capacity, thereby reducing the water activity in the samples and, accordingly, increasing the food safety of the developed sauce. The addition of yeast-extracted red wine beta-glucan had a significant effect (p<0,05) on the color parameters of the resulting sauce. The lightness (L value) of the samples was higher with increasing concentration of beta-glucan than the control sample. The introduction of the developed recipe for a vegan sauce enriched with beta-glucans into production will expand the range of products for special nutrition. This product not only has improved consumer characteristics, but can also be used for people with egg allergies.

Keywords: beta-glucan, functional foods, dietary fiber, vegetable raw materials.

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