

THE USE OF LENTILS IN THE COOKIES PRODUCTION

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Abstract:

Lentil flour is considered a stabilizer of weak flours through the supply of proteins, food fibers, by fortifying the food product with iron, molybdenum, B group vitamins. All of these contribute to increase the biological value of the product, lower the energy value, increase the shelf life of the finished product, reduce the consumption of wheat flour, and increase the quality of confectionery products.

The partial replacement of wheat flour with lentil flour improves the quality of cookies. The product acquires an original taste, smell and color, there is an increase in swelling capacity and a decrease in the cookie hardness, which is due to the composition and properties of lentil flour protein substances.

In this paper, results are presented regarding the substitution of wheat flour with lentil flour in concentrations of 1, 5, 10 and 15%, in the cookies recipe. The cookies quality was analyzed during the storage period of 35 days, at a temperature of 20-22°C and a relative air humidity of 78%. There is an increase in swelling capacity of about 10%, a 14% decrease in cookie hardness, and a 1-4% decrease in product humidity, during the first 10 days,. In the third week of storage, the cookies hardness increases, and the swelling capacity decreases, due to the changes in gluten proteins.

The analyzed quality indicators showed appreciable results for the sample with 10% lentil flour substitution.

Key words: *quality indices, flour substitution, hardness, legumes, lentils, proteins.*

Acknowledgments. The authors would like to thank the Moldova State project 20.80009.5107.09 *Improvement of food quality and safety by biotechnology and food engineering.*