

*25th International Symposium on Analytical and Environmental Problems***NUTRITIONAL PROFILE EVALUATION OF THE GLUTEN-FREE BREAD OBTAINED FROM FLOUR MIXTURES WITH HIGH NUTRITIONAL VALUE****Stoin Daniela^{1*}, Lavrik Ilya Petrovich², Jianu Călin¹, Velciov Ariana – Bianca¹, Moigrădean Diana¹, Popescu Sofia¹**

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Abstract

The aim of this study was to obtain and to characterize some gluten-free flour mixtures with high nutritional value by partially replacing rye flour (RF) with flax flour (FF) and millet flour (MF) and to evaluate the nutritional profile of gluten-free bread obtained from these mixtures. RF was replaced by 10%, 20%, 30% and 40% FF and MF, respectively. The determinations made for studied flour, flour mixtures and gluten-free bread samples were the following: moisture content, protein content, ash content, fat content, fiber content and total carbohydrate content. The gluten-free bread samples studied were obtained by the direct method. According to the results regarding the physico-chemical composition of the flours and M1 ÷ M4 flours mixtures, it can be appreciated that all these mixtures are suitable to be incorporated in gluten-free bread according to the established substitution amount, because the obtained results highlight their superior nutritional profile. The results obtained regarding the physico-chemical composition of the studied bread samples show the superior nutritional profile of all four bread samples (BM1, BM2, BM3 and BM4) compared to CB.

Keywords: *flour mixtures, high nutritional value, gluten free bread, nutritional profile*