

# TECHNOLOGICAL ASPECTS OF THE ADDITION OF SEVERAL TYPES OF HYDROCOLLOIDS IN BREAD

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**Abstract:** In this research, the hydrocolloids xanthan, alginate, cellulose and guar gum were used in breadmaking. The rheological properties of dough and the properties of loafs supplemented with hydrocolloids were analysed. At low levels of gums the properties of dough and loafs weren't change so much but at high levels of gums the rheology of dough were change dramatically as the properties of loafs. The gums which form very viscous solutions, xanthan and alginate increased very significant the development time and stability of dough. At 3% and even 5% of gums added the breads properties were slightly improved but at 10% hydrocolloids the porosity and elasticity of crumb decreased at unacceptable levels, porosity at about 80% and elasticity under 80%. The breads volume decreased from 290 ml/100 g of control sample to 175 and a00 ml/100 g for samples with 10% xanthan and respective alginate.

**Keywords:** bread, dietary gums, xanthan, guar, alginate, carboxymetilcelullose

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