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## GLUTEN CONTENT INFLUENCE ON RHEOLOGICAL BEHAVIOR OF STARCH-GLUTEN NETWORKS

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### Abstract

The aim of the study was to investigate rheological properties of starch-gluten networks and to point out the influence of different gluten contents. As ingredients, only salt, distilled water, native gluten and wheat flour with low gluten content were used for the dough preparation. The main fraction (85%) of wheat flour protein is gluten. Native gluten consists of gliadins and glutenins essential for the rheological behavior of the network. It is very important to clarify the importance of gluten content on the overall rheological behavior of the final product because the texture and consumer acceptance of the product depends on it. All the investigations were performed on an Anton Paar, Physica MCR 501 modular rheometer, using parallel-plate geometry for gels. The thermal behavior of the networks is specific for various gluten contents.

*Key words:* gluten proteins, rheology, starch, temperature dynamic tests

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