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**Applying of enzymatic additive as improver of macaroni products  
from wheat flour**

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**Introduction.** Traditionally macaroni products produce from semolina and have high quality. But in some countries, Ukraine is amongst, there is a deficiency and high cost of semolina. So practically all output of macaroni products is from wheat flour. Besides there is a range of macaroni products from wheat flour (fast cooking, products that don't need cooking and others). So, finding new ways of improvement such products quality is an important task. Authors have researched the possibility of applying of xylanase enzymatic additive with complex gemicellulase and lipolytic activity.

**Materials and Methods.** Different kinds of wheat flour including of poor quality of flour have been investigated; enzymatic additive xylanase with additional lypolitic activity by declarative activity 1701 XylIH (it corresponds to such enzyme activity that liberates from xylane reductive groups are equivalent to 1 micromole of xylose per minute at 30 degrees centigrade in standard conditions by meanings of hydrazide method). It was added to the dough in quantity of 0,001 – 0,002 % to the mass flour. Structural and mechanical characteristics of semi products were investigated at Brabender's farinografe. Structure of macaroni dough was characterized as friability (determined after mass of dough fraction with different size of crumbs). Also pressing speed and capacity of press were measured. Quality indexes of macaroni products were determined by standard methods. The speed of macaroni drying was investigated by weighing of drying products per time period. Forms of water state in macaroni dough were researched by meanings of differential thermal analysis.

**Results and discussion.** Different dosage of additive and its influence on structural and mechanical characteristics of macaroni dough have been investigated. It has been installed that addition of enzymatic additive stabilizes structure of dough and reduces its water absorbing ability. Effect of improving was stronger in case of dosage 0,001 % to the mass of flour. Adding an enzymatic additive promotes dough with large-sized crumbs that according with reduction of water absorbing ability encourage increasing of pressing speed and capacity of press.

It has been installed that macaroni products with additive have higher speed of drying in general period and at the end of drying they give water more slowly. It obviously connected with dough microstructure. Differential thermal analysis has been shown that enzymatic additives doesn't influence to the water redistribution in dough.

Macaroni products with improver have more smooth surface, quantity of microcracks reduces and they became more firm. Additionally, cooking properties improve; particularly products have bigger volume after cooking and have white (not grey) color.

So, enzymatic additive is recommended in production of macaroni from wheat flour in quantity 0,001 % to the mass of flour for quality improving.

Keywords: macaroni products, wheat flour, enzymatic additive, improvement of quality

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**ProPraline - Structuring and Processing for High Quality Pralines**

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A greyish coating on the surface of the chocolate and cracks causing the filling to seep out are two main issues for many chocolate manufacturers.

In October 2008 the EU funded project ProPraline started with the aim to reinforce small and medium-sized enterprises (SME) within the confectionary industry. Of Europe's 2000 chocolate