НАУЧНИ ИНСТИТУТ ЗА ПРЕХРАМБЕНЕ ТЕХНОЛОГИЈЕ

Научни рад категорије М21а

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Non-wheat cereals have become popular in the diet due to their nutritional benefits, but their application is limited by properties of their proteins. Some of these flours can be conventionally processed, but the final products are not of acceptable quality. Modification of physico-chemical properties of non-wheat flours by dry heat and extrusion represent the alternative process which can transform the flours into an adequate raw material for the bakery and confectionery industry. The aim of this study was to determine the type and extent of physico-chemical changes in modified flours whose mixtures were used successfully for bread production. Extrusion had stronger influence on chemical composition of flours than dry heating, especially on the content of fats and phenolic compounds. Extrusion also increased starch digestibility due to complete gelatinization process, making it almost equal for all flours. On the other hand, protein digestibility depends mostly on botanical origin of flour.