

## USAGE OF WHOLE-WHEAT FLOUR AND BRAN FOR MAKING MACARONI PRODUCTS

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In recent years, the consumers are becoming more and more interested in the food that contains dietary fiber which is very useful for the health. It includes dietary fiber of grain products as well. Functional properties of these substances are mainly related to stimulation of the gastrointestinal tract and cardiovascular system: they regulate the cholesterol exchange through sorption and excretion of bile acids which affect carbohydrate metabolism (diabetes prevention) and others. The diet of modern person is depleted by dietary fiber and, in the average, it contains 5 grams of it. when the dose is 23 - 30 g.

Nowadays, domestic scientists and technologists are working out how to use all the valuable and useful substances that were taken away within grain processing procedure in our healthcare. The most appropriate and effective way is to use the peripheral parts of the grain (bran) and whole wheat flour. The advantage of grain products usage is preserving native properties of grain dietary fiber, a possibility of complex use of plant products and also their low cost.

Macaroni are those promising products which can enrich the diet with dietary fiber.

We have developed macaroni products made of whole wheat flour and also products with 15-25 % addition of wheat bran. We have defined the content of dietary fiber in raw products and calculated it in macaroni products. It has been found that whole wheat flour contains 2.4 % of fiber, 7.81 % of hemicellulose, 1.24 % of lignin. consequently, altogether there is 11.45 % of fiber and, respectively, there is 6.12 %. 30.87 %. 1.40 %, and so. together, there is 38.39 % of fiber in bran. The defined bran dosage provides the same content of dietary fiber in macaroni products.

All products have good organoleptic characteristics. Its thickness is reduced, and acidity and the quantity of solids passed into cooking water increase.

Thus, macaroni products made by means of adding wheat bran and whole wheat flour have acceptable organoleptic and physical and chemical indicators of quality, however in order to reduce the production costs it is considered to be more reasonable to produce products using whole wheat flour.

**KEY WORDS:** macaroni products, whole-wheat flour, dietary fiber