

## **RESEARCHES ON THE USE OF SPIRULINA IN THE PRODUCTION OF FLOUR PRODUCTS**

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The study includes a documentary survey of the main categories of cereal products, their flours and dyes used as a raw material in the production of flour products. There are presented the technologies for the production of cookies, methods of obtaining the flour and the possibilities of using natural dyes and spirulina in the food industry. This research is aimed at the manufacture of bakery products for people suffering from gluten intolerance, and correspond to the following requirements: to be gluten-free, absence of allergic factors, characterised by nutritional principles necessary for correction of metabolism disorders, accessible price and high quality. For the manufacture of gluten-free bread were performed the following: use of rice and soriz flours, which are gluten-free; determining the optimal dose of the flour used for development of the manufacturing network; describing technological stages and parameters examining the properties of dough and bread.

Nowadays more and more people are suffering from gluten intolerance. Gluten comprises the proteins contained in wheat, oats, barley and rye. The proteins contained in these cereals are toxic for the people suffering from gluten intolerance. The treatment includes complete exclusion of gluten from the diet and replacement of the cereals containing this element with products obtained from gluten-free cereals.

The recipe of gluten-free products may include corn flour, potato flour and starch, buckwheat flour, rice flour and flour from other vegetables and pseudo-cereals like soriz. These raw materials do not have a gluten fraction to provide the essential protein network, that is why several problems may appear when processing the dough.

In order to avoid such problems, several treatments applied to raw materials may be used in order to modify the proteins by use of enzymes or other linkage products.

The aim of this study is to obtain bread from rice and soriz without gluten for the consumers suffering from celiac disease. In order to create a uniform matrix for the starch granules, gelatinization of at least a part of the rice and soriz flour is applied, to obtain a chain for the flour left.