

12. ROLE REPLACEMENT OF WHEAT FLOUR WITH RICE FLOUR IN SPECIAL PURPOSE FONDANT

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The past two decades have seen a rapid increase in consumer demand for healthy foods, which has prompted recent research to find methods for production of healthy and functional foods. Rice is the main staple food for many countries, providing 20% of food energy supply in the world. It is not only a significant source of energy but a good source of B vitamins (thiamine, riboflavin and niacin). According to its amino acid profile, rice has high contents of glutamic and aspartic acids, lysine being the limiting amino acid. Due to its low prolamin content and hypoallergenic character, insipid taste, low sodium content and high content of easily digestible carbohydrates, it has become a cereal especially suitable not only to prepare gluten- free food but also special diets.

The current range of dishes in the restaurant business establishments is constantly expanding. However, very often after the appearance of new dishes, their inventors do not offers using alternative raw materials but immediately are engaged in developing new dishes. Ever increasing demand among different consumer groups restaurant services becomes creating various desserts. Relevant today is the use of alternative methods of fondant preparation. In addition freezing-cream ganache, it's possible to immediately prepare a homogeneous dough, it is needed only to choose the right temperature and baking time.

During the research it was decided to develop a recipe of white fondant consisting of rice flour, cocoa butter and condensed milk. Replacing wheat flour with rice flour allows to use this type of confectionery products for patients with celiac disease, due to the fact that protein of rice flour does not contain gluten - a protein that causes a toxic reaction in patients with celiac enteropathy. For biological value protein (7-10%) and high starch content (66-70%), rice flour ranks first among other cereal flours. Rice flour is a good thickener, has a high ability to swelling, is the

source of a wide range of natural trace elements, vitamins and minerals such as sodium, potassium, zinc, magnesium, phosphorus; vitamins B1, B2, PP; amylopectin, a significant amount of starch, easily digestible by the human body; a small amount of fiber (1%); mono- and disaccharides (0.4%). In rice flour there is silicon, which promotes the metabolic processes in the human body. In addition, it contains a large amount of biotin, which has an important medical and biological significance. Rice flour is used in the treatment of chronic enterocolitis and cardiovascular diseases. Therefore, it is reasonable to conduct experimental research and development of technical documentation for new types of fondant dessert with alternative raw materials.

References:

1. [Electronic resource]. - Access: «<http://uapatents.com/4-82998-skladshokoladnogo-fondanu.html>»