

Напряг 1. ІННОВАЦІЙНІ ТЕХНОЛОГІЇ ХАРЧОВИХ ВИРОБНИЦТВ ТА РЕСТОРАННОЇ ІНДУСТРІЇ

THE DEVELOPMENT OF GLUTEN-FREE FLOUR BLENDS

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In recent years, there has been a growing interest in gluten-free food products. This trend is driven by the increasing number of people suffering from celiac disease and gluten intolerance, as well as the rise in health-conscious eating habits. According to various medical studies and health authorities, autoimmune diseases affect approximately 5–8% of the world's population. For example, celiac disease is an autoimmune condition that occurs in genetically predisposed individuals after the consumption of gluten. It is estimated that about 1% of the global population has celiac disease, though the actual numbers may vary depending on the region and ethnic group. In some countries, like Finland and other Northern European nations, the prevalence may reach 2–3%. It is important to note that some autoimmune diseases are more common than others.

Multigrain blends can significantly increase the fiber content of foods, which helps improve digestion, stabilize blood sugar levels, and reduce the risk of cardiovascular diseases. Rice flour, which is gluten-free, makes it an excellent choice for people with celiac disease or gluten intolerance. It is easy to digest, making it beneficial for children and people with digestive issues. Rice flour provides carbohydrates that supply the body with energy, and it contains B vitamins and minerals like magnesium and phosphorus, especially if it is made from unrefined rice.

Buckwheat is naturally gluten-free, making it safe for people with celiac disease. It is rich in protein, B vitamins, and minerals (such as iron, magnesium, and zinc), and it also contains antioxidants. Buckwheat flour has a *low glycemic index*, which can be helpful for managing *blood sugar levels*.

The development and production of gluten-free multigrain flour blends create new opportunities for producers, expanding market reach and supporting economic growth in the industry. Thus, the creation of gluten-free multigrain flour blends represents not only a healthy alternative but also contributes to culinary diversity, economic development, and agricultural sustainability.