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Bread without flour and yeast

Bread is a product of daily food for millions of people who inhabit the planet Earth. In the world there are many kinds of bread recipes and manufacture. The raw material for the manufacture of bread, depending on national circumstances and individual preferences is grain cereals such as rice, wheat, barley, maize, sorghum, buckwheat, and others.

In most civilized countries the main raw material for the manufacture of bread is wheat, annual consumption is in the world is on average 58-68 kg per capita.

Whole wheat contains, in addition to protein and starch, a complex of B vitamins, vitamin E, PP, fiber and essential trace elements for human body. Lipids are also valuable in wheat germ.

The most popular bread in Ukraine, as in the world, is white bread, which is baked with refined flour milling high-grade wheat and which tastes great.

The most important characteristic of a loaf of bread is not a good taste.

Mankind has improved the manufacturing process of grinding wheat to remove him for bread white flour, starch is presented biologically inferior fibrinous protein and a small fraction of that from a palette of biologically valuable substances generally contain wheat. And in order to make white flour tasty and attractive, but bad for health product.

When making sprouted grain bread easily processed in a homogeneous mass and is used instead of the traditional flour. To add a homogeneous mass of yeast and lactic yeast, cinnamon, various natural flavors, depending on the recipe and personal taste. Mixing left for some time for fermentation and then baked in a traditional oven or steam. This is how it looks about the manufacturing techniques of bread without flour without yeast in cases where fermentation using thermophilic cultures is not baking yeast and natural lactic ferments (crops or wild populations).

By the way, experts in nutrition are not unfounded express reservations about the safety for human health use in the manufacture of bread baking modern cultures thermophilic yeast. The first loaf of bread, mankind has made it to the natural leavening and baking yeast in the case appeared relatively recently.

When fermentation among natural lactic ferments homogenized mass of sprouted grains, which are much rarer than traditional batch baking, it is characterized by processes occurring enzymatic mineralization of complex compounds of grain. The process of hydrolysis of proteins and starch, decreased pH, activated processes release organically bound minerals such as iron, zinc, magnesium, continues to degrade to release phosphorus, phytic acid, increasing the amount of vitamins and minerals available to accumulate natural flavoring substances and so on. As a result, increasing the total food (biological) worth of bread.

Stressing the recipe for white bread with just flour without yeast, and based on the research of many authors can claim that is made in this way the bread is the most useful for human health of all known varieties of bread from corn flour and wheat. Useful properties it even more enhanced if it is not baked in a conventional oven at temperatures above 200 ° C, under a stream of hot steam, the temperature is below 100 ° C. Since the latter remains much more useful properties of bread and there are no conditions for the reaction Mellarda, which resulted in bread produced dangerous health neurotoxin and carcinogen acrylamide.

The taste of bread with sprouted grain much better than traditional flour. In fact it is 100 % natural organic product without preservatives, artificial dyes and fragrances. For making bread used repeatedly washed and germinated seeds not only wheat, but also many other cereal and legume crops such as rye, barley, spelled, millet, lentils and others. No comparison with modern traditional bread in which to improve the marketability and reduce the cost of production.

In the department of the genetic basis of plant breeding Plant Breeding and Genetics Institute (Odessa) initiated a special program to create varieties of wheat and barley using special process for the production of sprouted grain bread without flour without yeast.

This work is done in conjunction with a private production company «UkrEkoHlib « (Golubev A.V.), which is the only successful company in Ukraine with the production of sprouted grain that paved its way to the commercial market bakery Kyiv.

At the present Ukrainian market of bakery trend is also observed sickly appearance of food from sprouted wheat. Production of bread from sprouted grains we are engaged in small private firms that are unable to compete with large industrial giants or afford expensive advertising their own products.

In addition, this production is associated with the technical problem of lack of adapted batch process equipment for conditioning grain to germination and proper germination and subsequent manufacturing process from sprouted grains. Technology of production of sprouted grains we do at the present level never explored nor developed. Manufacturing is facing a big problem of food laboratory evaluation of characteristics of the final product.

Literature:

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