

Liquid activization while baking breads in breadmaker.

Vitaliy Borodin

Ganna Tsygankova

National University of Food Technologies,

68, Volodymyrska st., Kyiv, Ukraine,

tsgk.anna@gmail.com

Keywords: technology, breadmaker, activization.

In food technologies water, liquid and moisture are synonyms [2]. In work we expand concept of a liquid and we will treat as a liquid everything that spreads, in particular, the dough also we will consider as a liquid.

According to the book of the recipes recommended by manufacturers of breadmaker, all components share liquid and firm fractions. The traditional technology of preparation of bread brioche gives bread which completely fills the form. If liquid is made active, bread rises under a cover of breadmaker and as this space does not heat the bread top is not baked thoroughly. The made active bread brioche of standard volume is obtained, if pawned components to reduce by 20 %.

If to any standard mix for baking (there exist about 10) to apply technology of activization of a liquid the dough rises enough and gets to non heated zone of breadmaker. To receive bread of the standard sizes, it is necessary to reduce the quantity of pawned components to a third. For this purpose two standard packages of a mix are used for baking of 3 loaves of bread. There are no small packages for preparation by liquid activization of technology only one loaf of bread. It means that the offered technology is absolutely new and was not applied earlier anywhere.

The liquid activization technology a can be applied at different stages of baking breads with deenergizing breadmaker or without deenergizing. Breadmaker does not interrupt the program of baking if the switching-off mode lasts less than 20 minutes. In our practice any liquid activization technology takes no more than 5 minutes.

Some variants of technology of liquid activization are offered. Transformation of liquid fraction into foam is one of variants of liquid activization applied to bread brioche. The mathematical model for this technology is constructed. It shows that foam 1, 5 times is more effective than liquid fraction. For transformation of liquid into foam V - technology of beating is used [1].

Literature.

1. Бородин В.О. V-технологія збивання. Удосконалення процесів і обладнання – запорука інноваційного розвитку харчової промисловості. Матеріали міжнародної науково-практичної конференції, 10-11 квітня 2012 р., Матеріали доповідей, Київ, НУХТ, 2012 р., ст.146-147.
2. Гинзбург А.С. Основы теории и техники сушки пищевых продуктов., М., Пищ. пром., 1973, 526с.