

THE PROSPECT OF USING DAIRY PRODUCTS IN CIABATTA RECIPES

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Italian ciabatta bread differs from classic bread in its shape and the presence of many large pores. Due to the long fermentation process of the dough (about 12 hours), very large porosity is formed in the baked product. Ciabatta is produced both in small bakeries and on flow-mechanized lines, producing frozen semi-finished products that are in demand in cafes, supermarkets, restaurants, hotels and other catering establishments.

The production recipes are very different. Even in Italy, special technologies and recipes for ciabatta have been formed in different regions, which leads to the formation of different porosity structures and taste properties. In particular, the following types of ciabattas are known: Ciabatta integrale (contains whole wheat flour), Ciabatta Toscana (characterized by a dense crumb), Como Ciabatta (with a very tender crumb), Ciabatta al latte (cooked with sourdough and milk), etc.

Due to its rectangular shape, tender crumb and crispy crust, ciabatta has found wide popularity for making sandwiches. Given this fact, attention should be paid to the chemical composition of ciabatta. In particular, the protein content and the balance of the amino acid composition of the product are important because widespread consumption of ciabatta can significantly improve the diet of all population groups and different ages.

In the recipe for traditional bakery products, various dairy products are used: milk and whey, studies have been conducted on using casein and albumin. Such raw materials are used primarily as a source of easily digestible and balanced protein. In baking, native milk (which can replace all the water in the recipe) and dry whole or dry skim milk in an amount of about 3–4% are used. However, it is noted that with the addition of raw materials with a large amount of proteins (including casein and albumin in the amount of 8–12% of the flour weight), the structure of the porosity of the bread deteriorates, and specific volume decreases. Milk whey (about 20% of the flour weight) is used to reduce the fermentation period of the dough, which can be useful specifically to produce ciabatta.

Therefore, further research will be aimed at increasing the protein content in ciabatta and reducing the duration of dough fermentation due to the use of various milk processing products.