PROBLEM OF POROSITY
AND QUALITY OF FOOD PRODUCTS

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The most widely spread among food products types of disperse structures: coagulative, condensation and crystallizational are considered in the article. Development of coagulative structure penetrating all volume of the system occurs due to favorable impaction of particles of the most highly disperse colloid fraction.

General view of the differential function of pores radial distribution in food products is presented. The form of DDF (differential distribution function) curve is dissymmetric, and has its maximum locating in microporous area.

At present time, the notion of general porosity defined according to Government Standard 5669-96 is used for the inspection of porous structure of bakery products. At the same time, real thickness of crumb remains permanent. In fact, it depends on the dough composition - grade of flour, ingredients, the method of dough process and other factors. Deviations from common technologies of cooking dough introduce an error during the porosity test. Trying to be in step with current time, the Government Standard makers systematically increase the number of density values of nonporous mass, trying to envisage the appearance of new assortment of a product.

The authors elaborated a new device for the determination of general porosity of bakery products, which differs from Zhuravlyov device by the capability to specify real density of products, sharply reducing an error that raises because of the existing uncertainty concerning real density of the samples. It is propose to determine the level of pores homogeneity in bakery products with the help of variation coefficient, i.e. objectively but not sensory as it is done nowadays.

Keywords: dispersion, coefficient of variation, homogeneity of pores, wares of bakeries, a differential function distributing of pores on radiuses, coagulative, condensations and krystalyzatsyonnye structures.