

1. Investigation of Modern Ingredients for the White Sauce

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Introduction. The inclusion of a variety of sauces to the diet typical for all segments of the population of our state. As the basis for sauces can serve broths (meat, fish, mushroom), milk, sour cream, butter, oil and so on. Most sauces are characterized by high organoleptic characteristics, which causes their popularity among the population, a relatively high caloric and carbohydrate content.

Materials and methods. We decided to develop recipes of fortified milk sauce, which would contain raw materials with a high content of dietary protein. As the control sample the "Bechamel" sauce has been chosen.

Results. To increase the biological value of the sauce in the recipe to increase a new plant culture of savnet varieties "Kyiv ultra" has been added. This variety savnet is valuable, because it contains a high content of ascorbic acid and carotene: of 1103,71 and 53,06 mg/% per dry matter relatively. The amount of nonessential amino acids is 14.9 g per 100 g of dry matter of savnet; essential – 10,12 g / 100 g; i. e. essential amino acids contain 40,33 % of the total number of amino acids. Rheological properties of the sauces studied were determined by rotary viscometer of the "REOTEST-2" type.

Table 1. The basic structural and mechanical characteristics
samples of sauces

Model samples	η_0	η_m	$\eta_0 - \eta_m$	P_{k1}	P_{k2}	P_m	P_{k1}/P_{k2}	P_m/P_{k1}
Serum	85,59	1,36	84,23	85,59	349,18	610,66	0,14	7,13
Control	57,06	1,36	55,7	57,06	365,01	595,96	0,15	10,44
Savnet 5%	52,85	2,83	50,02	17,60	51,62	175,13	0,34	9,95
Savnet 10%	13,21	2,08	11,13	4,40	15,22	93,01	0,28	21,13
Savnet 20%	19,02	0,43	18,59	19,02	42,13	82,66	0,45	4,34

Analyzing the results of the study, we can conclude that the given samples are not linearly dependent on shear stress and are not riotous liquids, which are characterized by the thixotropy.

Analyzing the nature of the rheological curves of currents, it can be concluded that the structure of the investigated samples can be attributed to the coagulative type (as $P_{k1} > 0$). The change in the concentration of the content of savnet to greater extent in the technology of sauces cooking has a negative impact on the performance of current and also affects their organoleptic characteristics.

Conclusions. Samples sauces can be attributed to coagulation type. The most structural property has a sample sauce with a concentration of Savnet 5%. But the analysis of the conducted research allows to claim about the use of stabilizers needed for the enrichment of sauce with this vegetable raw material.