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PROSPECTS OF CHEESE PRODUCTION DEVELOPMENT IN KAZAKHSTAN

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According to the program «Industrial - Innovative Development of Kazakhstan - 2020», the future of the country is closely linked to the development of processing industries of AIC, and especially with the development of deep processing of agricultural raw materials into high-quality technology competitiveness of domestic food.

Milk and dairy products play an important role in the organization of healthy nutrition of the population. A special place among a wide range of dairy products occupies cheeses. Cheese - one of the most useful and easily digestible consuming food, derived from milk. Cheese added to the list of dietary products. Medical and dietary properties of the cheese are due to its composition. The cheese contain 22% protein, i.e. more than meat, 30% fat, from 400 to 700 mg% of mineral salts of calcium and phosphorus, and all vitamins of milk, which are known as substances of life. The cheeses are all necessary for the normal development of man vitamins. Cheese is a source of vitamin A, water-soluble vitamins, especially B group [4]. As for the cheesemaking in our country, despite the high natural and climatic potential for the development of agricultural production, there is a low level of industrial processing of milk and dairy products.

Externally, the cheeses are divided into fresh, soft with a tender crust (white mold), soft with washed crust, cheese with blue cheese (blue cheese), boiled-pressed and extruded. Other types of cheese - whey albumin, albumin, processed and covered by several categories. Rare types of cheese - German cheese from sour milk and Norwegian brown cheese (bryunust).

As technology cheeses are divided into hard, soft, brine and processed (processed) [4]. In our country 2,5 kg of cheese consumed per capita per year, for comparison France, where 25.9 kg of cheese consumed per year per capita is the leader in consuming of cheese. On the second place by a small margin is Iceland - 25.2 kg. Next are Finland and Germany - 24.7 kg and 24.3 kg. Also in the top ten cheese lovers entered Estonia, Switzerland, Italy, Lithuania, Austria and Sweden.

The last place was China: although in the country last year was eaten 49 thousand tons of cheese, on every citizen had only 37 grams per year [1].

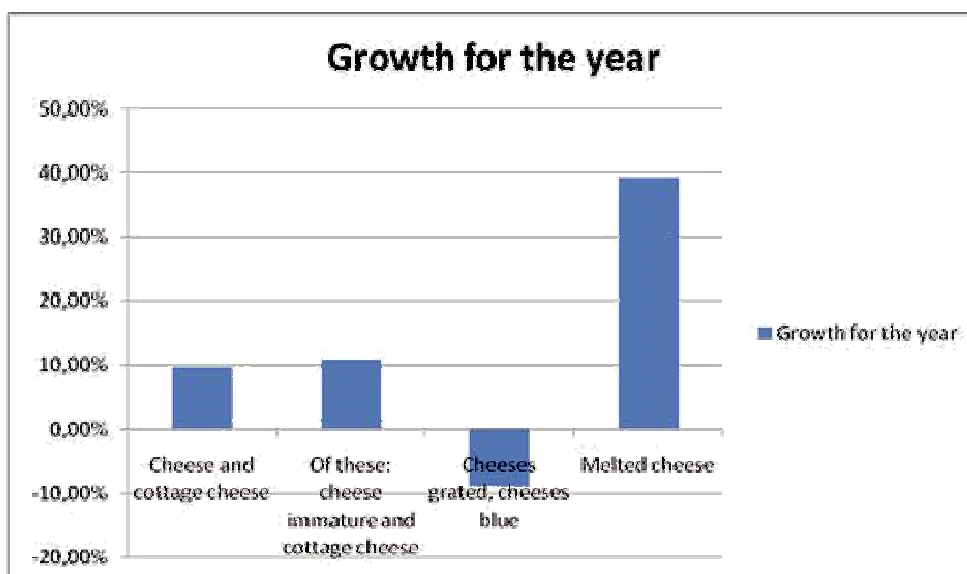
Cheese, produced in Kazakhstan, presented by soft and processed cheese, produced on small enterprise, in the former oil and cheese storages at regional milk associations. For the production of hard cheese the country's milk does not meet the requirements to raw materials for cheesemaking.

According to SC MNE of RK on the basis of 2016, domestic producers have provided 82.8% of the total market demand (cover domestic demand + export / re-export), and traditionally high share of own production in the sector has increased this year.

In physical terms, the production of cheese and curd increased by 9.8%, but still provide only slightly more than half of the demand [1].

Table 1 - Cheese production share in the total production of dairy products(tons)

Product	2016	2015	Growth for the year
Processed milk and cream	192320	178073	8%
Butter and dairy spreads	5643	6136	-8%
Cheese and cottage cheese	9915	9,32	9,8%
Of these: cheese immature and cottage cheese	7455	6722	10,9%
Cheeses grated, cheeses blue	1429	1569	-8,9%
Melted cheese	1031	740	39,3%
Other dairy products	92189	88338	4,4%
Of these: condensed milk and cream	4112	2893	42,1%
Yogurt, fermented milk and cream	82316	79472	3,6%
Ice cream and food ice	9944	6106	62,9%

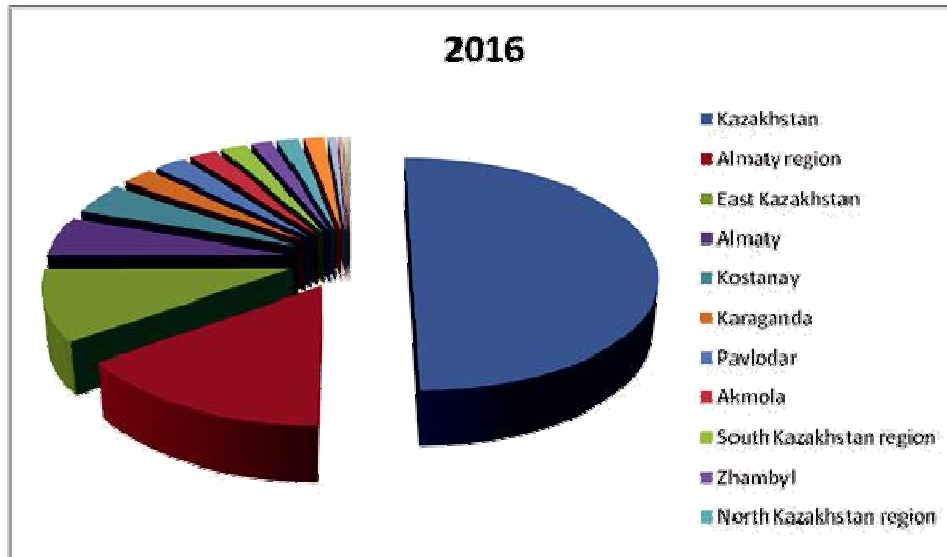


Pic.1- Annual production growth of different types of cheese in Kazakhstan

Industry experts to major republican cheese producers referred LLP «Burnensky cheese plant», LLP «Milk Alliance», «» DEP «Kostanai Dairy Plant», LLP «Kokshetau Dairy Plant» Milk Sinegorye «» and LLP «Merke Cheese Factory.» [1].

Table 2- Production of cheese and cottage cheese by region

Region	2016 год	2015 год	Рост за год
Kazakhstan	7824	7322	6,9%
Almaty region	2359	1888	24,9%
East Kazakhstan	1541	943	63,4%
Almaty	849	1264	-32,8%
Kostanay	694	425	63,3%
Karaganda	387	505	-23,4%
Pavlodar	381	262	45,4%
Akmola	334	191	74,9%
South Kazakhstan region	300	354	-15,3%
Zhambyl	252	624	-59,6%
North Kazakhstan region	252	352	-28,4%
Astana	250	351	-28,8%
Mangistau	105	59	78%
West Kazakkhstan	53	13	307,7%
Kyzylorda	36	42	-14,3%
Aktobe	30	44	-31,8%
Atyrau	1	5	-80%



Pic.2- Production of cheese by regions for 2016 year

So, one of the main problems of the dairy industry in Kazakhstan with all the consequences is the lack of infrastructure for the collection of raw material.

An analysis of the situation in the dairy industry in our country shows that the Kazakhstan market requires an expansion of the cheese assortment of domestic production, a topical solution from the point of view of availability of raw materials and technology is to improve the technology of curd cheese product.

Curd cheese - a cheese that is made on the basis of cottage cheese and is a valuable food product, rich in calcium, vitamins and protein, most of which is in a soluble form and therefore very well absorbed by the body. Curd cheese - it is 100% natural product, made from natural milk. Unlike other types, curd cheese does not mature and slightly squeezed. They occupy an intermediate position between the cheese and cottage cheese. According to its consistency curd cheese similar to cottage cheese, but it is less acidic. Today the Kazakhstan market of curd cheese is presented primarily by imported foreign brands, including: Almette, President, Viola, Buko, Creme Bonjour, Milkana cheeses, etc. .These are not accessible to all because of the high prices. Curd cheeses are varied in tastes: sweet pepper, greens, salmon, red caviar, oranges, nuts, herbs and olive, etc [4].

Cheese and cheese market is waiting for a local manufacturer. Today, when the market offers a significant amount of various types of imported cheese, increase the competitiveness of domestic product, development of highly efficient technologies that quickly respond to market demand - a task of paramount importance. Its solution will not only increase production, but also improve the quality of cheeses produced, to better meet the growing needs of the population and consumer preferences for quality, weight, shape and appearance of packaging, improve the economic condition of the enterprises the cheese industry. Currently special urgency has the creation of a new generation of products, due to the lack of vital nutrients [4].

Therefore seems reasonable and justified use in the cheese manufacture not only cow's milk but also camel milk in view of its valuable hypoallergenic and biological properties. Being rich in proteins and vitamins, it is an ideal food supplement for health, as well as malnourished children and adults. It contains essential minerals such as potassium, zinc, manganese, copper, magnesium, iron, sodium. Camel milk based milk products, such as yogurt, cottage cheese, cheese also have useful properties. They are considered very valuable and dietary. Long since dairy products based on camel milk used for the treatment of tuberculosis and other debilitating diseases of the body, ulcerative lesions of the gastrointestinal tract [3].

Currently in our country there are several companies engaged in processing of camel milk such as «Daulet-Beket» LLP, the main activity of which is the production of fermented milk product – shubat. In Shieli in 2012 it was launched plant for processing of camel milk; also recently the construction of camel milk processing plant in Turkestan has begun.

Conclusion

Thus, from the above data, we can conclude that the present condition of mineral deficiency and a small range of products from camel milk can be solved by improving the technology of cottage cheese on the basis of camel milk. It will allow creating new types of dairy products with a high content of vitamins and minerals, with a high nutritional and biological value.

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