

A FEW PROBLEMS OF THE PRODUCTION AND CONSUMPTION OF COW'S MILK IN COUNTY CSONGRÁD

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Milk plays an exceptionally important role in the nutrition of mankind as it contains large quantities of amino-acids indispensable for the organism, well supplementing the vegetable proteins by this. Many calcium compounds and phosphoric acid salts are contained in it, whereby the protein utilization is facilitated. Its fat is rich in vitamins-A and F. Notwithstanding all these qualities the milk is one of our cheapest nutriments, the nutritive value of 1 liter milk being equivalent to that of e. g. 8 eggs, 45 dkg lean meat or 2,5 kg vegetables. Milk is the most important food-stuff of public supply, still our country occupies a very unfavourable position in the milk- and dairy product consumption on the ranklist of European countries. (Among the European countries only the populations of Portugal and Spain consume less milk and milk production than the ours.)

Undoubtedly a substantial progress is evident in the last period but neither the actual results can be called reassuring. (A considerable consumption increasing effect was achieved by a few central dispositions issued recently, but also further on important tasks remain incumbent upon the

- a) milk industry,
 - b) trade and
 - c) agriculture.
- a) Our milk industry has done lately much for the expansion of the milk- and dairy product consumption as large scale as possible. In this field the assortment-enlargement is to be stressed first of all but the disposition has likewise a consumption increasing effect that the shops can send back return-goods to their centre within the guaranteed time, without price sanctions. The tendency is good but with a steady commodity supply and a broad scale of good quality dairy products, the industry can give a positive impact to the dairy product consumption of our population also further on. The co-operative farms help the supply with the local manufacturing of dairy products.
- b) Much remains to be improved in the field of building-up the network of trade. In national relation still in 1969 213 communities (against 642 of the preceding year) did not benefit from an organized milk-supply). Jointly with a more perfected building-up of the network

of milk-industry, the number of specialist, milk-industry shops must be increased.

- e) An important task devolves however on the agriculture as well. In the first place a rise of the milking average will have to be attained by means of a good breed composition, judicious and economical feeding and by bringing about a healthy environment. The numerical reduction of the cattle-stock must be likewise stopped.

Unfortunately also our County is characterized by a periodical decrease of the cattle-stock (and within it of the cow-stock) (wave-trough in 1961 and 1968). This tendency is the most intensive in household farms but the cow-stock of State Farms is stagnant similarly or proceeds in a slightly decreasing direction respectfully. (Fig. 1.) A growing tendency

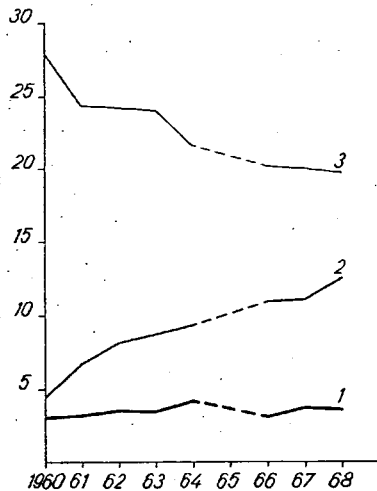


Fig. 1. Trend in the cow-stock per sector in County Csongrád (in 1000 heads)

1 = State Farms

2 = Cooperative farms

3 = Cooperative Farms household and individual.

can be observed in the cooperative farms but either they can counterweight the regression of the other two sectors. The average yearly milk-yield of the existing cow-stock changes barely during the 1960—1968 period, apart from a minor wavetrough of 1961—1962, thus the problem caused by the numerical reduction is not solved by a rise of yield. Having in view that both the internal supply and the increasing export-requirement demand an ever larger performance from our animal-breeding, we must find the incentives which shall be instrumental to stop this stock decrease. For the time being we are not in possession of the material precondition to run-in the milk-producing activity of collective farms in such a way that they should become capable to substitute the household farms. (The most important problem is the shortage of modern barns).

The milk production of County Csongrád in 1968 was

938 100 hl which was divided by sectors as follows:

Sector	Produced milk (hl)	In percentage of the total
State Farm	112 400	12,0
Cooperative farms	337 700	36,0
Coop. farm groups	2 300	0,2
Household farms.....	485 700	51,8
Totally	938 100	100,0

The above data demonstrate that in 1968 still the household farms gave a considerable part (51 per cent) of the produced milk. The tendency of the milk production during the last 10 years reflects the same situation as the distribution of the cow stock. The decrease of the cooperative farm, household and individual share in the total quantity of produced milk is in favour of the cooperative farms in the first place and of the State Farms in a smaller degree.

Examining the trend of milk production in the past 9 years it can be established that a smaller regression occurred in 1961, while a heavier in 1964/65. The decrease in the production of 1961 did not involve also a reduction in the quantity of the bought-up milk (Fig. 2.) but the decline

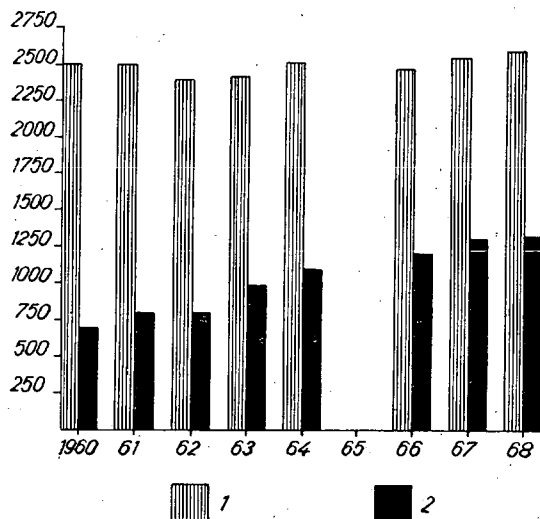


Fig. 2. Trend in the quantities of produced and bought-up milk in County Csongrád
 = in million litres)
 1 = produced milk
 2 = bought-up milk

occurred in 1964—1965 is considerable (represented an about 5000 hl shortage in the buying-up). The quantitative reduction of the milk-yield was caused by the foot-and-mouth disease which affected 36 per cent of the cattle stock. The 1964 level of milk production was attained again by

the County in 1967 only. Since the wave-trough of 1965 the tendency is a rising one to such an extent that it was not broken either by the milder epidemic of the foot-and-mouth disease reappearing in 1968/69.

The per capita milk production of the County was 209 liters in 1968 which in the order of succession of counties corresponds to....

As the population of our county does not consume the total milk-quantity produced, the surplus is transported to Budapest in the first place in form of loose milk, but a contribution is given also to the milk-supply of the border region of Bács-Kiskun and Békés counties. Among the exports of our dairy products only the butter is worth mentioning (382.700 kg in 1968).

In comparing the 1968 cow-stock of County Csongrád with that of 1960 it is conspicuous that apart from the smaller wave-troughs it is stagnant during the nine above mentioned years. In the field of milk-production per cow however a slight improvement is present. While in 1960 the County average was 2510 liters, it rose to 2594 liters by 1968. Regrettably this quantity can still not yet be called satisfactory and the most important task of our animal breeding is to produce some improvement in this field.

It is interesting to have a look at the trend in the milk-yield per cow and per sector:

Sector	Year 1960	Year 1968
State farms	3622 litres	2932 litres
Cooperative farms	2457 litres	2689 litres
Household and individual farms:.....	2410 litres	2469 litres

(on the ground of animal census in the spring)

While in 1960 in the State Farms 3622 litre was the milking average, it decreased to 2932 lit. by 1968/in consequence of a thinning of the cow-stock.

While in 1960 the milk-yield per cow in State Farms was 1212 litres higher than in households of the cooperative farms and in the individual household farms, this milk-yield difference diminished to 463 litres by 1968. The twice occurring foot-and-mouth disease which precisely in the State Farms was the most severe (where the largest number of animals was accomodated in each establishment) has contributed to this in a large measure.

(The environment and feeding, jointly with the selection of breed, display the largest influence on the formation of milk yields. The analysis of this domain of problems merits however an independent study.)

It is fortunate that the quantity of purchased milk — apart from the regression in 1964/65 — is uniformly speeding up. (Fig. 3.) A positive fact is similarly that the monthly fluctuation of buying-up is not too intense. Taking the February minimum as 100 for a basis, the maximum in August is 135. The quantity of milk bought-up during the intermediate months fluctuates between these extreme values — causing relatively not much problems to the milk industry. (Page 6.)

The milk and dairy products consumption per capita of the County Csongrád, converted to milk, was 11 litres higher in 1967 than the national average. (The national average was 145, that of the County 156 central position through this, because the smallest per capita consumption per county was 113, the highest 187. Though these values present a relatively high variation, still all these figures can be called as low.

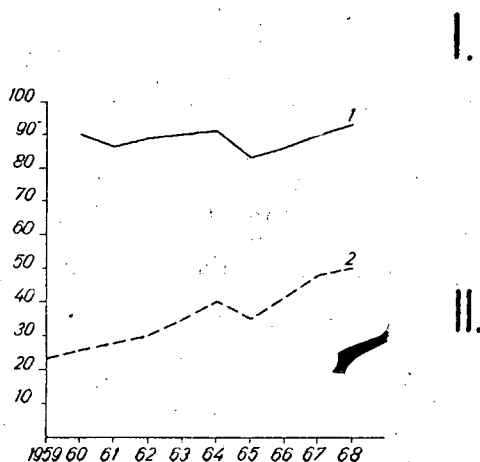


Fig. 3. Trends in the milk-yields and milk buying-up per cow.
 = average milk quantity given by one cow
 = bought-up milk quantity per cow.

According to data of the Institute for Food- and Nutrition Science 260 liters represent the optimum milk consumption level in our country.

Month	Quantity of the bought-up milk in liters	Buying-up in February = 100
January	37 593	104
February	35 794	100
March	38 159	106
April	38 178	106
May	43 792	122
June	44 707	124
July	46 625	130
August	48 483	135
September	45 115	126
October	43 438	121
November	37 297	104
December	40 046	111

This value depends upon countries, climate, composition of the population according to age, structure of its food-stuffs, traditions etc., therefore is far higher here and there. The consumption by the population of County Csongrád lags still considerably behind this figure. It would not be pos-

sible either to satisfy the population with so much milk with the present cow-stock, but this „ideal” quantity of milk consumption is even not yet claimed for the time being. Conditions for the expansion of milk consumption are to make the population conscious of the biologically important role of the milk on the one hand and rearing of a healthy, well milking cow-stock, hygienic milk production, modern milk-manipulation and transport, as well as hygienic selling methods on the other. The regular milk and cacao supply of schools must be put in practice. Steps shall be taken to keep abreast with the employment of up-to-date packing methods with plastic materials and paper, furthermore sterile milk should be put into circulation which may be preserved over 20—30 days also.

The growing tendency of milk- and dairy products consumption may be called positive. The consumption of nutriment rich in protein is at the same a yardstick of the qualitative level of nutrition as well. It is a world-phenomenon that the rate of consumption of the various dairy products increases at the expense of liquid milk. The Food-Science Institutes suggest about one third of consumption in liquid milk and two-thirds in the form of dairy products. The population of our country consumes more milk, than dairy products converted to milk. (In case of larger consumers the ratio is displaced in favour of the dairy products). This appears also in the consumption of the town of Szeged, the structure of which is as follows.

Milk and dairy products	Absolute quantity of consumption, hl, q.	Consumption per capita, lit. kg.
Consumption milk, totally	110 047	91 705
Flavoured products	1 563	1 302
Sour milk products	702	0,585
Clotted cream	2 763	2,302
Sweet cream	510	0,425
Butter	2 872	2,393
Hard cheese	233	0,194
Semi-hard cheese	1 323	1,103
Soft cheese	64	0,053
Mouldy cheese	92	0,076
Cream-cheese of sweet cream	8	0,006
Processed cheese, in block	898	0,749
Processed cheese in cardboard boxes	1 124	0,937
Cheeses totally	3 753	3 127
Table curd	1 280	1 067
Flavoured curd	21	0,017

According to the above table the consumption of table may be regarded as particularly low, amounting to 1067 kg only, per capita and year. Furthermore the consumption of sour milk-products is infinitesimal (0.585 kg) and spreading of these is just now in course. The low state of our butter consumption is correlated with our specific dietary form.

Summary

The consumption of milk and dairy products in our country can be called exceptionally low. (It is higher everywhere in Europe, two countries excepted.) Though in national relation — as regards consumption — the County Csongrád does not occupy the last place, but is still at a far lower level (156 litres) than it could be considered satisfactory.

The cow stock of our County has shown a mildly decreasing tendency during the period from 1960 to 1968. (The regression of the cow stock in household farms is responsible for this which could not be counterbalanced by the socialist sectors.) Since neither the milking average rose in the above period a substantial quantitative change did not occur either in milk production. It is fortunate however that the buying-up, as well as the demand and consumption of the population have likewise grown. As our internal consumption and export requirements increased similarly — against which the quantity of produced milk has barely changed — our surplus which was contributing to the supply of other counties and of Budapest has diminished. This tension subsists and representing a national phenomenon is by all means worthy of attention, and all effort must be done to stop the reduction of cow stocks, and to raise the milking average. Parallel to this — and notwithstanding the diminution of the surplus — a further influence is to be exerted in the direction that quantitative and qualitative demands of our population for milk and dairy products be intensified and their alimentation be displaced toward a healthier direction.

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