



CZECH AND MORAVIAN DAIRY ASSOCIATION

Dairy production in Czech republic 2003

Secretariat of ČMSM

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Dairy production in 2003

Milk purchase

Total 2 530,9 million liters of milk according to statistical survey of the Ministry of Agriculture were delivered to dairies for processing. It represents only moderate increase by 7,1 mil. l (0,3 %) comparing with previous year 2002.

The average fat content reached 3,973 % and was approximately on the same level (-0,007 %) as in 2002. The average content of protein has increased from 3,34 % in 2002 to 3,39 % in the previous year.

The share of purchased milk classified to the 1 quality class has increased from 57,3 % to 59,2 % inter - yearly. The share of purchased milk classified in Q quality has reduced from 40,5 % to 39,1 %. Non-standard quality milk has declined from 2,2 % to 1,7 %.

Prices

Average realization price of 1 liter purchased milk has decreased from 8,12 CZK in 2002 to 7,79 CZK in 2003. The level of this price was influenced by deep tumble of protein products and butter prices on the foreign markets and by their high reserves.

Table 1 Development of market prices of selected dairy products in CZK

Product	Decem ber 2002	Decem ber 2003	Difference	Index 2003/2002
Half fat milk – long life (UHT) – 1 l	10,57	10,68	0,11	101,0
Skim milk – long life (UHT) – 1 l	10,12	10,12	-	-
Fresh half fat milk pouches – 1 l	10,20	9,61	-0,59	94,2
Fresh half fat milk carton – 1 l	10,52	9,50	-1,12	89,5
Yogurt natural to 4,5 % fat 150 g pot – 1 kg	31,90	31,91	-	-
Soft quark – 250 g Al foil 25 % solid – 1 kg	43,96	42,89	-1,07	97,6
Fresh butter – 250 g Al foil – 16 % water	81,70	89,36	8,19	110,1
Edam cheese 30 % - 1 kg	82,89	88,37	5,48	106,6-
Edam cheese 45 % - 1 kg	89,37	97,55	8,18	118,4

The lowest level has shown the assortment of liquid milk, especially fresh half fat milk in carton and in pouches. Theirs prices reduced by 10,5 %, respective by 7,8 %.

The more positive development has reached by butter price + 10,1 % and at the end of year by edam cheese 30 % (+6,6 %) and by edam cheese 45 % (+18,4 %) prices.

Liquid milk

The production of liquid milk has increased by 3,5 % from 457,8 mil. l to 473,8 mil. l. The share of UHT milk has increased significant from 65,1 % to 71,1 %, while the production of fresh pasteurized milk fall from 34,9 % to 28,9 %.

Table 2 Composition of liquid milk in accordance with industrial milk treatment

Liquid milk	Production in thousand l		Share in %		Index 2003/2002
	2002	2003	2002	2003	
Liquid milk total	457 703	473 848	100,0	100,0	103,5
out of which: pasteurized milk	159 622	137 150	34,9	28,9	85,9
UHT milk	298 081	336 698	65,1	71,1	113,0

Table 3 Composition of liquid milk with different milk fat content

Liquid milk	Production in thousand l		Share in %		Index 2003/2002
	2002	2003	2002	2003	
Low fat/ skim milk	59 519	53 998	13,0	11,4	90,7
Semi fat milk	387 131	401 897	84,6	84,8	103,8
Whole milk	11 053	17 953	2,4	3,8	162,4
Total	457 703	473 848	100,0	100,0	103,5

In this period the share of half fat milk which represent the base of total liquid milk production has increased slight. The production of skim milk has decreased from 13 % to 11,4 %, while the share of whole milk has increased from 2,4 to 3,8 %.

Table 4 Production of milk in different packaging

Liquid milk	Production in thousand l		Share in %		Index 2003/2002
	2002	2003	2002	2003	
UHT milk in cartons	298 981	336 698	65,1	71,1	113,0
Pasteurized milk in cartons	63 590	47 917	13,9	10,1	75,3
Others	96 032	89 233	21,0	18,8	92,9
Total	457 703	473 848	100,0	100,0	103,5

The share of UHT milk in cartons has increased by 13 % (38,6 mil. l) in the last year, while the share of pasteurized milk in cartons decreased by 24,7 % (15,7 mil. l). From the total production of liquid milk 79 % was packed in cartons (long life and pasteurized milk). The share of liquid milk in other packaging (predominantly in plastic pouches) was 21 %.

Creams

Table 5 Production of creams including cultured creams

Product	Production in thousand liter		Share in %		Index 2003/2002
	2002	2003	2002	2003	
Creams including cultured creams	37 848	38 088	100,0	100,0	101,6
out of which: cultured creams	10 998	11 346	29,1	29,8	103,2
Creams with fat content min. 30 %	17 420	16 606	46,0	43,6	95,3

The cream production including cultured creams increased slightly by 1,6 % and reached the level 38 088 thousands liters. The share of cultured creams was 29,8 %, while the share of creams with fat content min. 30% was 43,6 %.

According to results of customs statistics the import of products (item CN 0401) above all of liquid milk and creams has rapidly increased from 43 491 tons to 51 315 tons (by 18 %) in 2003 compared with last year. There were almost exclusively deliveries from Slovakia, where dominated low fat milk in consumer packaging. The export of this product category has increased by 2,1 % from 13 372 tons in 2002 to 13 656 tons in 2003.

Yogurts and other cultured milk products

Table 6 Production of yogurt

Product	Production in tons		Share in %		Index 2003/2002
	2002	2003	2002	2003	
Yogurt total	87 894	86 672	100,0	100,0	98,6
out of which flavored yogurt	60 973	61 522	69,4	71,0	100,9
low fat up to 0,5 %	12 830	11 503	14,6	13,3	89,6

Production of yogurt in the last year has decreased by 1,4 % to 86 672 tons in comparison with 2002. The share of flavored yogurt has shown moderate increase to 71,4 % and the share of low fat yogurt reached 13,3 %.

Group of other cultured milk products (without buttermilk) has shown the significant growth to 24 031 thousand l (by 15,1 %). The share of flavored products in this group was 43,7 %.

Import of this product category (item CN 0403) including yogurts and other liquid cultured products was still very high, although it has moderate declined from 30 749 tons to 29 190 tons (by 5,1 %). Export of this group has decreased from 9 027 tons in 2002 to 6 705 tons in 2003 (by 25,7 %).

Butter

The total butter production, including production and using all arts of butter, spread butter, butter with plant fat, (statistical report of Ministry of Agriculture 6-12) has reached 65 200 tons in 2003, which represents the decrease by 1,7 % compared with last year. Orientated balance as it follows from the next table.

Table 7 Development of production and stock of butter

Butter	Production in tons		Difference	Index 2003/2002
	2002	2003		
Initial reserve to 1.1.	2 044	1 801	243	88,1
Production	66 312	65 200	-1 112	98,3
Sale on domestic market	41 017	39 519	-1 498	96,3
Export	22 452	22 656	204	100,9
Final reserve to 31. 12.	1 801	1 762	-39	97,8

Reserve of butter has reduced to 1 762 tons (to 31.12. 2003) and this resulting in limiting of the overrunning offer and in growing of trade price on the domestic market. The sale of butter on domestic market has decreased by 1 498 tons to 39 519 in 2003.

Import of butter according to the customs statistic has increased from 4 714 tons to 5008 tons (by 6,2 %). Export of butter according to the customs statistic has increased from 22 766 tons to 23 033 tons (by 1,0 %).

With regard to that continuing dynamics at the end of year it could lead to overcoming of whole years value (quota) determinate by WHO. The Czech and Moravian Dairy Association demanded with agreement of exported dairies for reduction the rested quota by 1000 tons. This arrangement resulting in growing of butter offer for the domestic market.

Table 8 Production of butter

Product	Production in tons		Difference	Index 2003/2002
	2002	2003		
Fresh butter	33 172	29 892	-3 280	90,1
Other/Blocks	17 036	18 434	1 398	108,2
Spread butter	7 151	7 416	1 398	103,7

The main product on the domestic market is fresh butter. Its production has decreased by 3 280 tons in 2 003.

Quark and quark specialties

The production of quark and quark specialties has been on rise by 3,5 % inter yearly.

Table 9 Production of quark and quark specialties

Product	Production in tons		Difference	Index 2003/2002
	2002	2003		
Quark	31 598	32 706	1 108	103,5
Cream cremes	9 676	10 183	507	105,2
Quark desserts	4 238	4 298	60	101,4
Total	45 512	47 187	1 675	103,7

The total quark production was 32 706 tons in 2003, and it has increased by 1 108 tons (3,5 %) inter-yearly. On the total quark production participates soft quark 68,7 % (22 482 tons – index 93,5), fine fat quark 15 % (5 638 tons – index 119,4), hard quark 4,4 % (1 438 tons – index 106,0 %) and industrial quark 9,6 % (3 148 tons – index 215,7).

Cream cremes production has increased by 507 tons and reached 10 183 tons (index 105,22). Production of quark desserts has increased by 60 tons to 4 298 tons (index – 101,4).

Cheese

The natural cheese production stagnated on the level 94 393 tons. It was only 0,3 % higher in comparison with last year. Processed cheese production has declined inter yearly by 6,4 % to 19 918 tons.

Table 10 Development of cheese production

Product	Production in tons		Difference	Index 2003/2002
	2002	2003		
Natural cheese	94 063	94 393	330	100,3
Processed cheese	21 269	19 918	-1 351	93,6
Total	115 332	114 311	1 021	99,1

Total cheese production has decreased by 0,9 % to 114 311 tons.

Table 11 Natural cheese production

Assortment of cheese	Production in tons		Difference	Index 2003/2002
	2002	2003		
Soft cheese	22 797	23 695	898	103,9
Semi hard cheese	59 542	58 314	-1 228	97,9
Hard and extra hard cheese	11 724	12 384	660	105,6
Total natural cheese	94 063	94 393	330	100,3

The production data of semi-hard category include besides of selected semi –hard cheese Edam cheese, Gouda, Madeland, in addition white pickled cheese Akawi, Jadel and also other assortment as Niva, Zlato etc.

The development of cheese production from the point the view of traditional classification shows the following survey.

Table 12 Assortment of natural cheese (according with traditional classification)

Category of cheese	Production in tons		Difference	Index 2003/2002
	2002	2003		
Soft non-ripening cheese	7 332	7 605	273	103,7
Soft ripening cheese	4 969	x	x	x
Pickled cheese	12 837	10 192	-2 645	79,4
Molded cheese	11 329	12 015	686	106,1
Selected semi hard cheese	45 971	47 957	1 986	104,3
Hard a. extra hard cheese	11 258	11 152	106	99,1
Others	529	x	x	x

Production of semi-hard cheese include Edam cheese, Gouda, Madeland, without pickled cheese and Niva, Zlato. The table shown enormous decrease of pickled cheese by 20,6 % (2 645 tons), which was compensated by increase of assortment other cheese.

Significantly high stocks (reserves) of natural cheese (4 248 tons) were on the start of last year and they have step by step declined to 2 556 tons at the end of the year.

Reduced stocks were influenced by the growing of sale on the domestic market from 74 942 tons to 76 747 tons by 2,4 % (1 805 tons).

The high offer of natural cheese was supported by growing import of cheese and quark from 19 734 tons to 23 233 tons by 17,7 % (3 499 tons).

Export of this cheese category has increased from 17 638 tons to 18 451 tons by 4,6 %. The decreased export of pickled cheese was compensated above all by edam cheese type.

Milk powders

The production of milk powders and the increase of its enormous stocks was influenced by dramatic decrease of prices on the foreign markets and absence of financial means for support of export.

On the next table are presented production, export and stocks.

Table 13 Production, export and stocks of milk powders (without baby and infant powder)

Product	Production in tons		Difference	Index 2003/2002
	2002	2003		
Initial stocks to 1. 1.	4 448	9 370	4 922	210,6
out of which: skim milk powder	3 741	8 176	4 435	218,5
whole milk powder	707	1 194	487	168,8
Total production	57 228	63 548	6 320	111,0
out of which: skim milk powder	36 876	39 257	2 381	106,5
whole milk powder	20 352	24 291	3 939	119,4
Total export	45 745	60 515	14 770	132,3
skim milk powder	29 128	37 487	8 359	128,7
whole milk powder	16 617	23 028	6 411	138,6
Final reserve to 31. 12.	9 399	7 307	-2092	77,7
out of which skim milk powder	8 176	6 002	-2172	73,4
whole milk powder	1 223	1 305	82	106,7

Total milk powder production without baby and infant powder has increased from 57 228 tons in 2002 to 63 548 tons in 2003 by 6 320 tons (index 111,0). On this increase has significant share skim milk powder – 39 257 tons (6,5 %) and whole milk powder – 24 291 tons (19,4 %).

The export of skim milk powder has increased very fast from 29 128 tons to 37 487 tons (28,7 %) and export of whole milk powder from 16 617 tons to 23 028 tons (38,6 %).

The stocks of milk powder keep still on the high level. To declining of it before admission to EU it is necessary to ensure sufficient financial resources.

Foreign market

The low prices of milk products on the foreign markets and the growing of import negative influenced on the balance of foreign trade with milk products.

Table 14 Czech dairy products foreign trade (thousands CZK)

Indicator/year	2002	2003	Difference	Index 2003/2002
Export of milk a. milk products	5 130 052	5 708 961	578 909	111,3
Import of milk a. milk products	3 238 916	3 720 041	481 125	114,9
Balance	1 891 136	1 988 920	97 784	105,2

Data of customers statistic

Total financial value of import has increased by 481,1 mil. CZK to 3 720,0 mil. CZK (14,9 %). The value of export has increased by 578,9 mil. CZK (11,3 %) to 5 708,9 mil. CZK.

The higher export level in 2003 was influenced by additional export of milk powder produced in 2002, which didn't exported in current year for insufficient subvention. Positive balance of foreign trade with milk products has increased only by 97,8 mil. CZK to 1 988,9 mil. CZK.

Conclusion

Even if the summer has been influenced by enormous dry wheather delivery to Dairies reached in 2003 the level responding to the average in the past years.

Unbalanced world market with milk products affected also our milk sector. The high stocks of protein products influenced (provoked) reducing of milk product prices on the domestic market, created tenseness economical milieu and the result was the lowering of purchased milk prices.

Only at the end of year the prices of basic milk products on the foreign market revived compared with historical low level on the beginning of year. It should be positive trend to coming back to milk market stability.

Supplement 1: Production of dairy products in 2003

Product	Unit	Production 2002	Production 2003	Index 2003/2002
Purchase of milk	mil. l	2 524	2 531	100,3
Average fat content	%	3,98	3,973	-0,007
Average protein content	%	3,34	3,39	+0,05
Average realized price	CZK/l	8,12	7,79	95,9
Liquid milk total	thousand l	457 703	473 848	103,5
Creams including cultured creams	thousand l	37 848	38 088	100,6
Yogurts total	tons	87 894	86 672	98,6
Quarks total	tons	31 598	32 706	103,5
Cream cremes	tons	9 676	10 183	105,2
Quark desserts	tons	4 238	4 298	101,4
Butter total	tons	66 312	65 200	98,3
Natural cheese	tons	94 063	94 393	100,3
Processed cheese	tons	21 269	19 918	93,6
Milk powder without baby a. infant powder	tons	57 228	63 548	111,0
out of which: skim milk powder	tons	36 876	39 257	106,5

Information source: Statistický výkaz SFTR (MZe ČR) *Statistical survey of the Ministry of Agriculture*

