

Dairy production in 2002

Milk purchase

In total 2 523,7 million liters of milk were delivered to dairy industry according to statistical survey of the Ministry of Agriculture. It represents the moderate increase by 11,7 mil. l (0,8 %) comparing with previous year 2001.

The total purchase was far from fulfilling of assigned milk volume in terms of production milk quotas.

The average fat content has declined from 4,029 % to 3,98 %. The average content of protein run into 3,34 % and it was only 0,01 % under the level comparing with previous year.

Considerable inter yearly decline of fat content by 0,128 % was reached in June of the last year.

The share of purchased milk classified in Q quality has inter yearly increased from 28,9 % to 40,5 %, while the percentage of milk in non-standard quality has increased from 1,4 % to 2,2 %. The rest of milk 69,7 % in 2001 and 57,3 % in 2002 was classified to the 1 quality class.

Prices

Average realization price of 1 liter purchased milk has increased from 7,80 CZK in 2001 to 8,12 CZK in 2002 by 0,032 CZK (4,1 %). The level of this price was still influenced by favorable prices of protein products on the foreign market in 2001 and their deep tumble in last year.

The growing prices of purchased milk have been not reflected nor in export, but neither in the market prices of milk products on the domestic market as it follows from the next table.

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

Product	2001	2002	Difference	Index 2002/2001
Half fat milk – long life (UHT) – 1 l	11,80	10,57	-1,23	89,6
Skim milk – long life (UHT) – 1 l	11,06	10,12	-0,94	91,5
Half fat milk fresh pouches – 1 l	9,95	10,20	0,25	102,5
Half fat milk fresh carton – 1 l	-	10,62	-	-
Yogurt natural to 4,5 % fat - 180-200 g pot – 1 kg	-	31,90	-	-
Flavored cream yogurt – 150 g – 1 kg	39,02	41,03	2,01	105,2
Flavored skim and low fat yogurt 125 g – 1 kg	42,83	-	-	-
Fresh butter – 250 g Al foil – 1 kg	81,64	81,17	-0,47	99,4
Quark– 250 g Al foil – 1 kg	42,94	43,96	1,02	102,4
Edam cheese 30 % - 1 kg	-	82,89	-	-
Edam cheese 45 % - 1 kg	111,02	89,37	-21,65	80,5

From the table you can see the deep default of market prices on the domestic market of the basic products such the long life milk (UHT) and cheeses.

The price of UHT half fat milk no more covered the production costs, has declined by 10,4%

Analogy the price of UHT skim milk has reduces by 9,5 %. Even if the butter price has lowered only by 0,6 %, its level for enterprises is continually unprofitable.

The market price of natural cheese shown the deep decline, its offer has significantly overrun the growing level of demand. This can be documented by decline of Edam cheese (45%) price by nearly 20 % inter-yearly.

More favorable development show the second important products – half fat fresh milk in PE pouches (2,5 %), soft quark (2,4 %) and flavored cream yogurt (5,2 %).

Liquid milk

The production of liquid milk has reached the level 457 703 thousands l in 2002. It represents the decrease by 0,8 % compared with the last year. The share of UHT milk has increased significant from 61,4 % to 65,1 %, while pasteurized milk achieved responding fall from 38,6 % to 34,9 %.

Table 2 Liquid milk according to treatment

Liquid milk	Production in thousand l		Share in %		Index 2002/2001
	2001	2002	2001	2002	
Liquid milk total	461 490	457 703	100	100	99,2
out of which: pasteurized milk	177 967	159 622	38,6	34,9	89,7
UHT milk	283 523	298 081	61,4	65,1	105,1

According to results of customs statistics of the import of products (item CN 0401) above all of liquid milk and creams has rapidly increased from 27 290 to 43 376 tons (by 58,9 %) in 2002 compared with last year. There were almost exclusively deliveries from Slovakia, where dominated UHT half fat milk with fat content to 1 %. The export of this product category has decreased from 19 174 tons in 2001 to 13 968 by 27,2 % in 2002.

Table 3 Liquid milk according to fat content

Liquid milk	Production in thousand l		Share in %		Index 2002/2001
	2001	2002	2001	2002	
Low fat/ skim milk	84 516	59 519	18,3	13,0	70,4
Semi fat milk	364 581	387 131	79,0	84,6	106,2
Whole milk	12 393	11 053	2,7	2,4	89,2
Total	461 490	457 703	100,0	100,0	99,2

In category of low fat liquid milk with fat content up to 0,5 % under name „skim milk“ has reduced its share of production from 84 516 thousand liter to 59 519 thousand liter (from 18,3 % to 13 %).

The share of semi fat milk with fat content from 1,5 % to 2 % has increased from 79,0 % to 84,6 %. The share of whole milk decreased from 2,7 % to 2,4 %.

Table 4 Liquid milk according to packaging

Liquid milk	Production in thousand l		Share in %		Index 2002/2001
	2001	2002	2001	2002	
UHT milk in cartons	283 523	298 081	61,4	65,1	105,1
Pasteurized milk in cartons	68 582	63 590	14,9	13,9	92,7
Others	109 384	96 032	23,7	21,0	87,8
Total	461 490	457 703	100,0	100,0	100,0

The share of UHT milk in cartons has increased in last year, while the share of pasteurized milk decreased from 14,9 % to 13,9 %. The share of liquid milk in other packaging dropped from 23,7 % to 21,0 %.

The production and delivery of school milk reached 4 657 thousand liter in last year. 86,4% of it was flavored milk.

Other liquid milk products

Table 5 Production of creams

Product	Production in thousand liter		Share in %		Index 2002/2001
	2001	2002	2001	2002	
Creams including cultured creams	37 434	37 848	100,0	100,0	101,1
out of which: cultured creams	10 788	10 998	28,8	29,1	101,9
creams with fat content min. 30 %	18 894	17 420	50,4	46,0	92,2

The cream production including cultured creams increased slightly by 1,1 %; the share of cultured creams has increased by 1,9 %, while the share of creams with minimal fat content 30% decreased by 7,8 %.

Table 6 Production of yogurt

Product	Production in tons		Share in %		Index 2002/2001
	2001	2002	2001	2002	
yogurt total	96 780	87 894	100,0	100,0	90,8
out of which: flavored yogurt	64 842	60 973	67,0	69,4	94,0
low fat up to 0,5 %	-	12 830	-	14,6	-

Production of yogurt after several positive development in the last years has decreased by 9,2 % from 96 780 tons to 87 894 tons in 2002 in comparison with 2001, while the share of flavored yogurt shown moderate increase from 67,0 % to 69,4 %. The share of low fat yogurt reached 14,6 %.

Group of other cultured milk products (without buttermilk) from other liquid cultured milk products has shown the production growth from 18 830 thousand l to 20 890 thousand l (by 10,9 %). The share of flavored products in this group has increased from 36 % to 47,6 %. The production of cultured buttermilk has decreased from 11 599 thousand l to 11 043 thousand l, by 4,8 %.

Import of product (item CN 0403) including yogurts and other liquid cultured products significantly increased from 28 497 tons to 30 750 tons (by 7,9 %) according to customs statistic in 2002.

Predominant products of this import represented yogurts mostly from Germany and Slovakia.

Export of this group (to Slovakia) has decreased from 10 494 tons in 2001 to 9 019 tons in 2002 (by 14,1 %).

Butter

The total butter production, including production and using of all types of butter, spread butter, butter with plant fat, (statistical report of Ministry of Agriculture 6-12) has reached 66 312 tons in 2002, which represents the decrease by 0,6 % (420 tons).

Table 7 Development of production and stock of butter

Butter	Production in tons		Difference	Index 2002/2001
	2001	2002		
Opening stocks to 1.1.	2 869	2 044	-835	71,0
Production	66732	66 312	-420	99,4
Sale on domestic market	41 382	41 017	-365	99,1
Export	22 931	22 452	-479	97,9
Final stocks to 31. 12.	2 044	1 801	-243	88,1

Production of butter has reduced inter yearly from 66 732 tons in 2001 to 66 312 in 2002 (by 420 tons). This decline was significantly lower in comparison with decrease of fat content in total purchased and delivered milk to dairies for processing and it was corresponding to lower butter production in the level 930 tons. Import of butter was very high in 2002, it represented 4 714 tons total, in comparison with 2 581 tons of butter in 2001 (by 82,6 %).

Very fast higher import was allowed by drop of butter price on the world market and by support of the hard CZK in connection to EUR and USD. The all affected by growing of subsidies of EU and by low protection of domestic market, resulting from lower duty on the base international agreements. It refers to 345 tons butter quota, with 15 % preference concession to EU, and 2 781 tons with contracting duty 32 % on base of WTO (World trade organization) agreement.

With regard to that legislation allows apply by butter import protect arrangements, it was in July after overrunning of so-called „started level“ lunched adding duty for imported butter in level 22,6 %. Currently valid duty rate has increased from 68 % to 90,6 %.

The sale of butter on domestic market has increased from 41 382 tons in 2001 to 41 017 tons (by 365 tons) in 2002 according to departmental statistic. Because this level does not content the value of imported butter the real sale is significant higher.

Export of butter was 22 452 tons in 2002, this is lower by 479 tons (2,1 %) in comparison with last year.

Quark and quark specialties

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

Table 8 Production of quark and quark specialties

Product	Production in tons ¹⁾		Difference	Index 2002/2001
	2000	2001		
Quark	30 532	31 598	1 066	103,5
Cream cremes	8 762	9 676	914	110,4
Quark desserts	4 426	3 990	- 436	90,2
Total	43 720	45 264	1 544	103,5

1) data from January to November

The total quark production was 31 598 tons in 2002, and it has increased by 1 066 tons (3,5 %) inter-yearly. On total quark production participates hard quark 76,1 % (2 4039 tons – index 111,7), fine fat quark 15 % (4 723 tons – index 81,62), hart quark 4,3 %(1 357 tons – index 104,9 %) and industrial quark 4,6 % (1 460 tons – index 75,4).

Very positive development has shown cream cremes. Its production has increased by 10,4 % inter-yearly, while the production of quark desserts stagnated and reached 4 238 tons in 2002 (10 % inter-yearly decline).

Cheese

The natural cheese production took part on successful development in 2001, while processed cheese production has deep declined.

Table 9 Development of cheese production

Product	Production in tons		Difference	Index 2002/2001
	2001	2002		
Natural cheese	87 579	94 063	6 484	107,4
Processed cheese	25 214	21 269	-3 945	84,4
Total	112 793	115 332	2 539	102,3

Natural cheese production has increased from 87 579 tons in 2001 to 94 063 tons in 2002 (by 6 484 tons - 7,4 %), while the processed cheese production has declined during the same period from 25 14 tons to 21 269 tons (by 3 945 tons – 15,6 %).

Statistical survey of Ministry of Agriculture classifies cheese according to water content in non-fat solids as soft cheese, semi-hard cheese, hard cheese and extra hard cheese, as showed in the following table.

Table 10 Natural cheese production

Assortment of cheese	Production in tons		Difference	Index 2002/2001
	2001	2002		
soft cheese	19 816	22 797	2 981	115,0
semi hard cheese	50 619	59 542	8 923	117,6
hard and. extra hard cheese	17 144	11 724	-5 420	68,4
total natural cheese	87 579	94 063	6 484	107,4
out of which:				
soft non-ripening cheese	5 310	7 332	2 022	138,1
soft ripening cheese	5 031	4 969	-62	98,8
White cheese in brine	9 154	12 837	3 683	140,2
molded cheese	11 067	11 329	262	120,2

The realized changes in statistical estimation of natural cheese allow only limited comparison of their trends.

The enormous growth of production from 50 619 tons in 2001 to 59 542 tons in 2002 (by 17,6 %) shown semi-hard cheese, especially Edam cheese and white cheese in brine Jadel and Akawi (without Istambuli), which were included in this category.

Production of hard and extra hard cheese has significantly declined inter yearly from 17 144 tons to 11 724 tons (index 68,4).

Substantial was growth of cheese sale on the domestic market from 68 630 to 74 946 tons (index 109,1). Significantly increased stock (reserves) of cheese from 2 002 tons on the start of year to 3 767 tons to the end of the last year were influenced by increase of natural cheese production, decrease of processed cheese production and negative balance of foreign trade.

While foreign trade within CN 0406 – cheese and quark has decreased inter yearly from 19 723 tons in 2001 to 17 605 tons in 2002 (index 89,3) the import has increased in the same period from 17 684 tons to 19 750 tons (index 111,7).

Overall situation complicated the growing import of cheap Edam cheese from Poland and partly from Ukraine. On the total import participated quark and fresh cheese with 37 % and processed cheese from 30 %. The rest of import value presented natural cheese.

Milk powders

The production of milk powders without baby and infant nutrition has increased from 58982 tons in 2001 to 57 228 tons in 2002 (by 1 754 tons – 3 %) according to statistical survey of the Ministry of Agriculture.

Table 11 Production of milk powders

Product	Production in tons		Difference	Index 2002/2001
	2001	2002		
milk powder without baby a. infant nutrition	58 982	57 228	-1 754	97,0
out of which:				
skim milk powder	39 695	36 877	-2 818	92,9
whole milk powder	19 288	20 352	1 064	105,5
export of skim milk powder	34 496	29 491	-5 368	84,4
export of whole milk powder	15 342	16 617	1 275	108,3

Drop of production is caused almost exclusively by skim milk powder, which volume has decreased from 39 695 tons to 36 877 tons (by 2 818 tons – 8,1 %) inter yearly.

In connection with decrease of production, the export of skim milk powders has declined from 34 496 tons to 29 128 tons by 5 368 tons (15,6 %).

Whole milk powder production has moderately increased from 19 288 tons to 20 352 tons by 1 064 tons (5,5 %).

The decline of skim milk powder was influenced by dramatic decrease of prices on the foreign markets, its fall under level in comparison with last year by nearly half (70 – 100 %). Similar decline was by whole milk powder.

Total price drop affected the overall stock of milk powders. These provisions have increased to 9 400 tons to 31.12.2002, in comparison with the end of 2001 (by 4448 tons – index 211) which represents double level. Skim milk powder is the main part (87 %) of milk powders stocks.

Ice cream

The production of ice cream according to statistical survey of the Ministry of Agriculture shown the moderate decline from 7 018 tons in 2001 to 6 738 tons in 2002 (by 280 tons).

Conclusion

The whole situation on the milk market after last favorable period has become more complicated in 2002. Deep prices drop of milk products on the foreign market, low realization prices on the domestic market, the growing intensity of import of dairy products (especially of UHT liquid milk, yogurts and cheese) and high stocks of skim milk powder and cheese from the last year created extremely severe economical conditions. The lowering of dairy product prices in last year negative influenced the results of foreign trade with milk products.

Table 12 Czech dairy products foreign trade

Indicator/year	2001	2002	Difference	Index 2002/2001
Export of milk a. milk products	7488559	5136328	-2352231	68,6
Import of milk a. milk products	2667725	3239731	572006	131,4
Balance	4820834	1896597	2924237	39,3

Data of customers statistic

The data from table show deep drop of export value from 7 489 mil. CZK in 2001 to 5 136 mil. CZK in 2002 (by 31,4 %) by simultaneous growth of import value from 2 2668 mil. CZK to 3 240 mil. CZK (by 21,4 %) inter yearly.

The result of this situation is that positive balance dropped (by 60,7%) from 4 821 mil. CZK in 2001 to 1 897 mil. CZK (by 2 924 mil. CZK) in 2002.

To solve this critical development it is necessary to decide and within the given possibilities prevent the excessive imports, ensure sufficient financial resources for export of overproduction and struggle for realistic prices level of purchased milk with regard to the possibility of its realization.

Supplement 1: Production of dairy products in 2002

Product	Unit	Production 2001	Production 2002	Index 2002/2001
Purchase of milk	mil. l	2512	25234	100,5
Average fat content	%	4,039	3,98	x
Average protein content	%	3,35	3,34	x
Average realized price	CZK/l	7,80	8,12	104,1
Liquid milk total ¹⁾	thousand l	461490	457703	99,2
Creams including cultured creams	thousand l	37434	37848	101,1
Yogurts total	tons	96780	87894	90,8
Quarks total	tons	30532	31598	103,5
Cream cremes	tons	8762	9676	110,4
Quark desserts	tons	x	4238	x
Butter total	tons	66732	66312	99,4
Natural cheese	tons	87579	94063	107,4
Processed cheese	tons	25214	21269	84,4
Ice cream	tons	7018	6738	96,0
Milk powder without baby a. infant nutrition	tons	58982	57228	97,0
out of which: skim milk powder	tons	39695	36876	92,9

1) without school milk

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

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