

# ***LTO International comparison of producer prices for milk***

# **2003**



*prezzi di latte • melkprijzen • prix du lait  
milch preise • mjölk priser • milk prices • maelk priser*

**LTO** Nederland



# COLOPHON

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## Foreword

This is the LTO International Milk Price Comparison report for 2003. Another year that has seen a fall in the prices paid and an average milk price that once again is below 30 Euro cents per kg milk.

The fall has been caused mainly by the reforms in the European common agricultural policy and the worsening situation on the dairy market. However, this year too the differences between companies and especially between regions are substantial. This proves that in addition to political and market circumstances company policies also have a substantial effect in determining the prices finally paid.

Differences of more than 10 Euro cents per kg milk have a major impact on farmers' incomes and to a large extent determine the perspectives in the dairy farming sector. They also indicate that despite the threats from the amended EU dairy policy there are also opportunities for companies that find a niche in the market. Of course, comparison of milk prices on its own is not enough.

We know from the past that companies are sometimes able to pay a high price for a time, but then find they cannot continue to do so. In this respect, such a price comparison has its limitations. Nevertheless, this year we have again attempted to provide a picture of the market position and activities of the most important companies. Although this cannot be complete, it gives dairy farmers an impression of the results achieved by these companies and of their vision for the future, and is a useful tool for comparing companies.

2003 was also a year in which the competition between companies and the supermarket war highlighted the vulnerability of the dairy sector. Here again the reforms in EU dairy policy have had an influence on the policies of individual companies. In this respect the consequences of a change in policy can be limited by competing not solely on price.

It is expected that in the years to come this trend will lead to restructuring of the European dairy industry. The dominant market position of the highly concentrated supermarket sector relative to the dairy industry is leading to price cutting. The development of a number of market leaders in the dairy industry will have to turn this process around.

Even if there is such a development it remains important to have an objective picture of companies. I am therefore also pleased to be able to report that in 2004 it has been decided to continue the LTO International Milk Price Comparison for the next four years.

I should like to thank all those who have assisted in this milk price comparison, especially the dairy farmers, who every month send in a copy of their statements in respect of milk price payments, and the EDF secretariat.



Siem-Jan Schenk  
Chairman Dairy Committee Dutch Organisation for Agriculture and Horticulture (LTO Nederland)

## 1. Introduction

Each month a comparison of the prices of raw milk paid by various dairy companies in the EU is published by the Dairy Committee of the Dutch farmers union (LTO Nederland) on the website [www.milkprices.nl](http://www.milkprices.nl). This comparison is produced in association with European Dairy Farmers (EDF), which collates and provides milk price data on a monthly basis. The calculations are performed by Dutch Dairy Board (Productschap Zuivel).

After the calendar year, when most (cooperative) companies have presented their definitive milk prices, an annual report is presented that includes supplementary payments for end of the year profits. The present report shows the results for calendar year 2003 (chapter 3) and in addition the milk prices for the years 1999 until 2003 (chapter 4) and prospects for 2004 (chapter 5).

In chapter 2 the selection of the dairy companies is explained. The main characteristics of the payments systems of the individual dairy companies are presented in chapter 6, including some further information about the dairies.

The chosen standards, the method and other general assumptions regarding the milk price comparison are described in appendix 1. Additional background information is presented in annex 2.

Both this report and previous publications can be downloaded from the website (see colophon).

## 2. Selection of dairy companies

Producer prices paid by fourteen EU dairy companies are compared. For one dairy, namely Arla Foods. Three different prices are calculated for their Danish and Swedish member suppliers and for the suppliers of Arla Foods UK (formerly Express Dairies). So in total sixteen milk prices are compared.

Monthly calculation and publication of the Parmalat milk prices ceased at the start of January 2004. The Parmalat milk prices are also not included in this publication.

The selection of the dairies in the milk price comparison was based on their size and location within the EU. Nine dairies are among the top 20 of World Dairy companies (table 1).

**Table 1**  
**Top 20 World dairy companies**

	company <sup>1</sup>	country	dairy turnover (€billion)
1.	Nestlé	CH	15.3
2.	Dean Foods	USA	6.3
3.	<b>Danone</b>	F	6.2
4.	Dairy Farmers of America	USA	6.1
5.	Fonterra <sup>2</sup>	NZ	6.1
6.	<b>Arla Foods</b>	DK/S	5.5
7.	<b>Lactalis</b>	F	5.4
8.	Unilever <sup>2</sup>	NL/UK	5.2
9.	Kraft Foods	USA	5.0
10.	Parmalat <sup>4</sup>	I	4.7
11.	<b>Friesland Coberco Dairy Foods (FCDF)</b>	NL	4.4
12.	<b>Bongrain</b>	F	4.0
13.	Meiji Dairies	Japan	3.8
14.	<b>Campina</b>	NL	3.7
15.	Morinaga Milk Industry	Japan	3.5
16.	Land O'Lakes	US	2.7
17.	<b>Humana Milchunion</b> <sup>2</sup>	D	2.5
18.	<b>Sodiaal</b>	F	2.5
19.	Schreiber Foods <sup>3</sup>	USA	2.1
20.	<b>Nordmilch</b>	D	2.1

Source: Rabobank International, ranked by dairy turnover in EUR billions, 2003 + mergers & acquisitions in 2004

1. Dairies included in the LTO International Milk Price Comparison are printed in **bold**.
2. Preliminary figure
3. Estimate
4. Unaudited aggregated data

The other five dairy companies (Belgomilk (B), First Milk (UK), Glanbia (IRL), Kerry (IRL) and Kymppi (FIN) were selected because of the regional/national spread. With the exception of the Finnish company Kymppi, these companies are incidentally also amongst the largest dairy companies in their own countries.

Finnish Kymppi is a relative small company. Kymppi is chosen in this milk price comparison as an alternative for the large cooperative Valio. The milk price of Kymppi generally follows the payments of Valio.

### 3. Milk prices 2003

In 2003 the average milk price paid for standard milk by the fourteen dairies was calculated at €29.91 per 100 kg. Compared to the previous year the average price was 2.5% lower (minus €0.75). Producer prices paid for raw milk vary strongly among the companies as can be seen in table 2.

**Table 2**  
**Standardised milk price calculations for 2003 deliveries (euro/100 kg)**

(Price per 100 kg standard milk with 4.20% fat, 3.35% protein, total bacterial count 24,999/ per ml, somatic cell count 249,999 per ml and a yearly delivery of 350,000 kg. VAT and levies excluded. supplementary payments for end-of-the-year-profit-distributions are included.)

	2003	rank	2002	rank	2003/2002	2003/2002 corrected for currency changes
Kymppi	35.69	1	35.85	1	-0.4%	
Arla Foods S	31.99	2	31.74	4	0.8%	0.4%
Arla Foods DK	31.77	3	32.71	2	-2.9%	-2.9%
Sodiaal	31.44	4	31.68	5	-0.8%	
Lactalis	31.32	5	31.58	9	-0.8%	
Danone	31.26	6	31.68	6	-1.3%	
Bongrain	31.19	7	31.60	8	-1.3%	
FCDF	30.41	8	31.68	7	-4.0%	
Campina	30.11	9	32.51	3	-7.4%	
Belgomilk	29.61	10	29.63	11	-0.1%	
Humana	29.34	11	30.81	10	-4.8%	
Glanbia	28.60	12	29.10	12	-1.7%	
Kerry	27.86	13	28.32	14	-1.6%	
Nordmilch	27.34	14	28.67	13	-4.6%	
Arla Foods UK	26.13	15	27.84	15	-6.1%	3.0%
First Milk	24.43	16	25.14	16	-2.8%	6.3%
<b>Average</b> <sup>1</sup>	<b>29.91</b>		<b>30.66</b>		<b>-2.5%</b>	

1) Arithmetic average

As a result of the disappearance of Parmalat from this milk price comparison, the lead position was taken over by the Finnish company Kymppi. This dairy company paid a somewhat lower milk price in 2003 than in 2002 (-0.4%).

Only the Swedish dairy farmers, who supply to Arla, and the English dairy farmers received a higher milk price in 2003 than in 2002. The fact that the milk prices of Arla Foods UK and First Milk expressed in Euros have fallen is a result of the fall in value of the British pound. If a correction is made for this (see final column in table 2), the calculated milk price of both companies in 2003 has risen by 3.0% and 6.3%, respectively, compared with 2002. The rise in milk prices in the United Kingdom is, inter alia, a consequence of the price rises in supermarkets. Partly under pressure from protests by farmers, the supermarkets raised their prices for liquid milk and cheese, on condition that this price rise would be passed on by the dairy industry to their dairy farmers/suppliers.

The largest fall in milk prices occurred in the German and Dutch dairy companies. It is possible that these companies were relatively the most affected because of the poor prices achieved for cheese and the increase in the number of discount stores in their home markets in North-West Europe.

In addition, the result of Friesland Coberco Dairy Foods (FCDF), which achieves a relatively large proportion of its turnover in non EU countries, was also adversely affected by the expensive Euro.

The substantial fall experienced by Campina compared with the previous year is partly a result of the policy adopted in respect of reserves. In 2002 no additions were made to the general reserve, whilst over 2003 a sum of € 1.00 per 100 kg was added and this was debited to the milk price paid.

The fall in the milk price for Danish suppliers to Arla is also striking because in previous years this milk price was very stable and even rising to some extent (see also table 1, appendix 2). Arla is also experiencing increasing price competition by the discount stores and greater competition by imported products on its home markets Denmark and Sweden.

Just as in 2002, the milk prices paid by the French companies in 2003 fell less than average.

Belgomilk – partly because of the good sales of ice cream (26% of turnover) – succeeded in maintaining the milk prices in 2003 at virtually the same level as in 2002.

It can be seen from table 2 that there is a substantial spread between the various companies in terms of the milk prices paid. Per 100 kg standard milk, a dairy farmer supplying the Finnish company Kymppi received more than € 11 per 100 kg milk more than his British colleague supplying First Milk.

### **Trends in the dairy market in 2003**

The fall in the milk prices is a consequence of the trends in the dairy market. As a result of excessive supply, the dairy market was characterised by falling prices in the first half of 2003, which was reflected in a sharp fall in the prices for milk powder and butter down to the respective intervention levels. A price recovery slowly began to be recorded in the second half of the year. This resulted from better sales prospects as a consequence of the economic recovery in certain regions, such as in South-East Asia and the disappointing milk production in Australia as a result of the drought in the previous season. In addition, the substantial drop in the value of the dollar contributed to an accelerated rise in the worldwide market price for dairy products expressed in US dollars.

The lower milk prices in 2003 are largely to be ascribed to the low market prices for cheese. These remained on average more than 5% below the 2002 level. One reason for these lower prices was the rise in cheese production. More milk was produced in 2003 and a substantial proportion of this was processed to more cheese. Incidentally, the fall in prices was not the same for all varieties of cheese. The prices for Emmental cheese fell less than those for Edam and Gouda. The average prices (quoted prices) for the bulk products butter and skimmed milk powder were even somewhat higher in 2003 than in 2002. Figure 3 in appendix 2 shows what proportion of the milk supplied is processed to cheese in each country.

The pressure on, in particular, the sales prices for liquid milk and liquid milk products increased as a result of the strengthened market position of the discount stores carrying own private labels.

Finally, the milk prices in 2003 may have been influenced by the uncertainty which confronted the market prior to the accession of the ten central and Eastern European countries to the EU and the implementation of the decisions with regard to the reform of EU dairy policy.

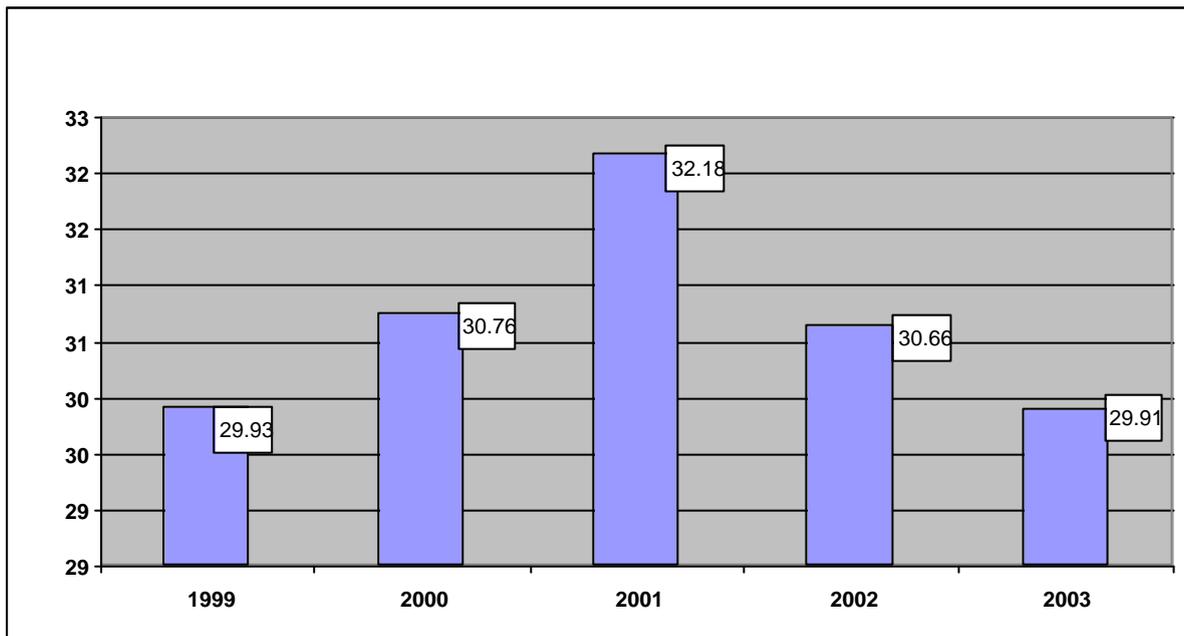
## 4. Milk prices from 1999 to 2003

### 4.1 Trend in average milk price

Monthly milk prices are collected and calculated from January 1999 onwards. It can be seen from graph 1 that in 2003 the milk prices had on average returned to the level of 1999.

**Graph 1**

**Average producer prices calculated for standard milk in 1999 until 2003 (euro/100 kg)**



The high milk price in 2001 was the consequence of the favourable market situation in that year, especially the first half of 2001. This period was characterised by high oil prices, a rising dollar and a relatively good demand for dairy products. The situation deteriorated in the second half of 2001, but cheese prices still remained at a relatively high level during that period.

## 4.2 Average calculated milk price per dairy company

The Finnish company Kymppi paid the highest milk price every year (see table 1, appendix 2) and thus also on average.

**Table 3**  
**Average calculated prices for standard milk per dairy for the years 1999 until 2003**  
**(euro/100 kg and average =100)**

	Average <sup>1</sup> 1999- 2003	average =100
Kymppi	34.88	114
Arla Foods S	32.44	106
Arla Foods DK	32.11	105
Lactalis	31.58	103
Danone	31.57	103
Sodiaal	31.54	103
Bongrain	31.52	103
FCDF	31.50	103
Campina	31.28	102
Humana	30.55	100
Belgomilk	30.20	98
Glanbia	30.00	98
Nordmilch	29.47	96
Kerry	28.80	94
Arla Foods UK	27.75	90
First Milk	25.80	84
<b>average</b>	<b>30.69</b>	<b>100</b>

The milk price calculated for Kymppi is 14% higher than the average for all dairy companies. Kymppi is followed by Arla with more than 5% above average. The Dutch and French companies paid approximately 3% more.

The calculated milk price for Humana is average, whilst the prices for Belgomilk and Glanbia are 2% lower. After Nordmilch (-4%) and Kerry (-6%) British dairies, Arla Foods UK (-10%) and First Milk (-16%) come bottom of the rankings.

## 4.3 Indication of average milk prices actually paid by the dairies

Just as every comparison has its strong and weak points, this milk price comparison has the strong point that the calculated milk prices are readily comparable. It indicates precisely what a dairy farmer would have received if he had supplied his (standard) milk not to his own company but to another dairy company. However, it must be emphasised that these calculated milk prices for standard milk do not correspond to the average milk price paid by the dairy companies. The average milk price paid will show a greater deviation from the calculated milk price the greater the degree to which the average contents, size of farm, quality, etc. deviate from the standard milk chosen.

So as to be able to obtain an indication of the extent to which the calculated milk price deviates from the average milk price paid, supplementary calculations were made where the average fat and protein content, and also the average size of farm, were incorporated per country<sup>1</sup>.

Thus, for example, for Kymppi the milk price is calculated for milk with 4.22% fat, 3.39% protein and a yearly delivery of 113,000 kg. This leads to the following results (table 4).

**Table 4**  
**Average calculated milk price based on different standards per country**

	milk price	rank <sup>1</sup>	fat% <sup>A</sup>	protein% <sup>B</sup>	delivery	difference <sup>2</sup>
Kymppi	35.18	1 (1)	4.22	3.39	113,000	0.30
FCDF	33.08	2 (8)	4.43	3.46	431,000	1.58
Campina	32.86	3 (9)	4.43	3.46	431,000	1.57
Arla Foods DK	32.81	4 (3)	4.29	3.40	508,000	0.70
Arla Foods S	32.21	5 (2)	4.17	3.32	295,000	-0.24
Humana	30.73	6 (11)	4.20	3.42	219,000	0.17
Danone	30.55	7 (6)	4.08	3.20	196,000	-1.03
Sodiaal	30.53	8 (4)	4.08	3.20	196,000	-1.02
Bongrain	30.41	9 (7)	4.08	3.20	196,000	-1.11
Lactalis	30.34	10 (5)	4.08	3.20	196,000	-1.23
Nordmilch	29.61	11 (14)	4.20	3.42	219,000	0.14
Belgomilk	28.66	12 (10)	4.07	3.32	198,000	-1.54
Glanbia	28.47	13 (12)	3.80	3.26	196,000	-1.53
Arla Foods UK	27.90	14 (15)	3.99	3.30	604,000	0.16
Kerry	27.27	15 (13)	3.80	3.26	196,000	-1.53
First Milk	25.65	16 (16)	3.99	3.30	604,000	-0.15
<b>average</b>	<b>30.39</b>		<b>4.12</b>	<b>3.32</b>	<b>299,875</b>	<b>-0.30</b>

Source A: Contents 2002, CNIEL L'Économie Laitière en Chiffres, May 2004

Source B: Average quota ONILAIT Annual report 2003

1) Ranking based on standard milk in brackets, according to table 2.

2) Difference between average milk price (column 1) and milk price for standard milk according to table 2.

Table 4 gives an indication that after Kymppi the Dutch dairy farmers receive on average the highest milk price. This is in particular due to the higher fat and protein contents. However, as a consequence of these higher contents the milk supplied by the Dutch dairy farmers is also more valuable as a raw material for processing than, for example, Irish milk, which has the lowest contents. Milk with higher contents and thus more solids and less water in general has an added value as a result of lower transport costs, more efficient processing, etc., but this does not apply to all dairy products.

There is no point in stimulating a higher protein content for milk that is processed to liquid milk. Because the protein content of liquid milk is not allowed to be standardised, a higher protein content does not yield additional income. It is not for nothing that Arla Foods UK, which sells virtually all milk supplied as liquid milk, pays nothing for additional protein above 3.0%.

<sup>1</sup> It was not possible to obtain the requisite data for all individual companies.

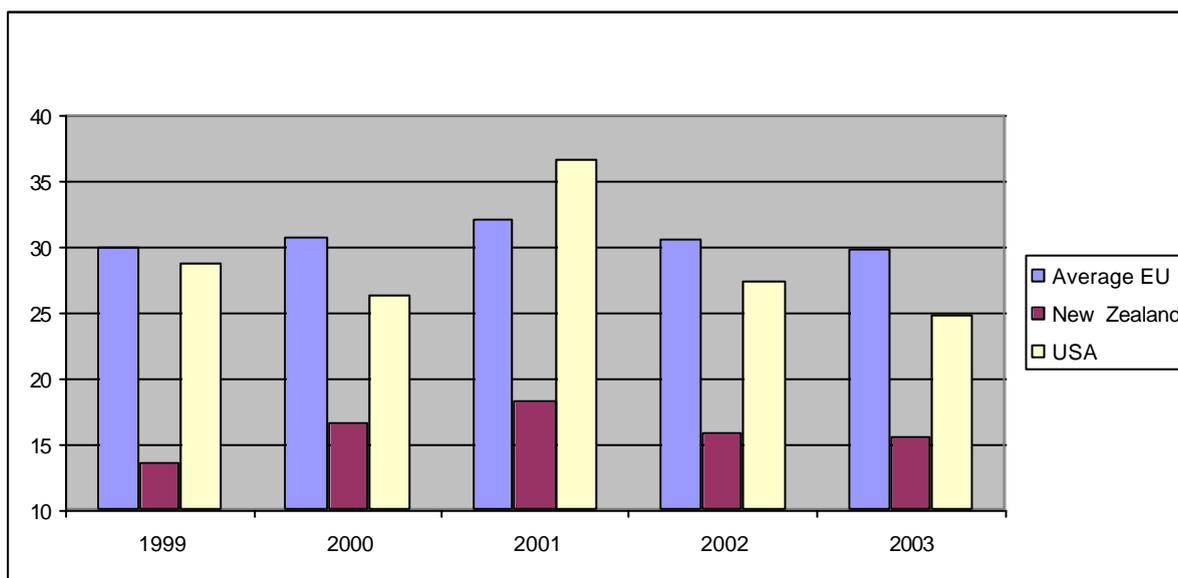
## 4.4 USA and New Zealand

More than 90% of the New Zealand milk production is sold on the world market. Therefore, the milk prices in New Zealand (Fonterra) give a good indication of the prices on the world market. In its most recent milk price year just ended, from June 2003 to May 2004, Fonterra paid a 15% higher milk price than in 2002/03.

The milk prices in the USA are protected from the world market. The dairy market in the USA is regulated even more than in the EU and minimum prices also apply. The USA exports are virtually nothing.

Over the past five years the calculated milk prices in the USA were on average only about 5% lower than in the EU. However, the American milk price fluctuates more than in Europe, as can be seen from graph 2. The milk price in New Zealand is on average approximately half the European prices (see also table 1 in appendix 1).

**Graph 2**  
**Calculated milk prices in the EU, USA and New Zealand**

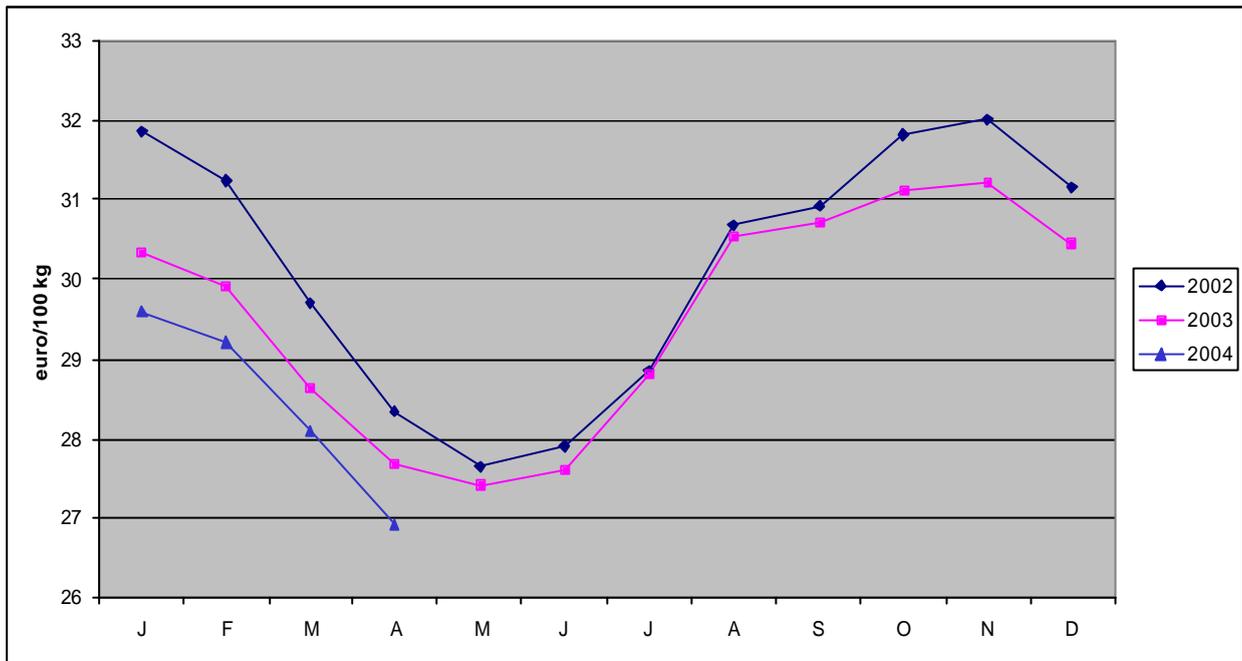


Because the calculated milk prices are expressed in Euro per 100 kg the change in the exchange rates of the US (and New Zealand) dollar relative to the Euro (see also graph 1 in appendix 2) have an influence on these milk prices. The higher USA milk price in 2001 is partly a consequence of the high exchange rate for the dollar in that year. The converse applies for 2003.

## 5. Prospects for 2004

Despite the lower supply of milk, in the first few months of 2004 milk prices paid in advance fell further and currently (April 2004) are approximately 2.5% lower than last year.

**Graph 3**  
*Trends in milk prices paid in advance (euro/100 kg standard milk)*



Forecasting is difficult, certainly in a year in which the intervention prices are being lowered and the EU has been expanded by ten new member states. The effects of this are uncertain and difficult to take into account in advance in the pricing of dairy products. After all, market prices are ultimately determined by the relationship between supply and demand.

What is certain is that the intervention prices for butter and skimmed milk powder will be lowered by 7 and 5%, respectively, with effect from 1 July 2004.

In addition to these reductions in intervention price there are also a few positive developments. Despite recent reductions in export refunds, the market prices of, for example, butter and skimmed milk powder have held up at a reasonable level. The supply on the world market is lower, especially because of the after-effects of the drought in Australia, and there is a reasonably high demand, for example from China and the oil-producing countries. As a result, the world market prices expressed in US dollars are high.

## 6. Supplementary information per dairy company

In this section the supplementary information per dairy company with regard to the payment system adopted and the way in which the milk prices have been calculated in this milk price comparison is restricted to supplementary information/changes compared with the previous report (LTO International Milk Price Comparison 2002, appendix 2).

In this chapter further information about the dairies is presented, namely:

1. Belgomilk (Belgium)
2. Arla Foods (Denmark and Sweden)
3. Humana Milchunion and Nordmilch (Germany)
4. Bongrain, Danone, Lactalis and Sodiaal (France)
5. Glanbia and Kerry (Ireland)
6. Campina and Friesland Coberco Dairy Foods (Netherlands)
7. Kymppi (Finland)
8. Arla Foods UK and First Milk (United Kingdom)
9. USA and New Zealand

In addition, an attempt has been made to collate and to analyse additional information on sales (based on production and market). Unfortunately, these data are either not available or virtually unavailable, and if available are difficult to compare. However, the proportions of the milk supplied processed to liquid milk (products) and cheese, respectively, are indicated per country in appendix 2, graphs 2 and 3. Also the price ratio between protein and fat is presented per company.

### 6.1 Belgomilk (Belgium)

#### Structure

Butter, cheese and milk powder account for 58% of the turnover of Belgomilk (2003 total € 572 million). Ice cream accounts for 26% of the total turnover.

Belgomilk is planning to merge with the Belgische Zuivelunie (BZU) with effect from 1 January 2005. If this merger goes through, this will result in a company that processes 30% of the milk produced in Belgium and has a turnover of approximately € 700 million.

#### Milk payment

Belgomilk adopts a fixed ratio between the butter fat and protein prices. From January 2003 the butter fat/protein price ratio has been 40/60 (or protein/fat price ratio of 1.5). For the previous 20 (!) years this ratio was 45/55.

Collection costs are € 4.71 per delivery and fixed costs per month are € 26.70.

A so called IKM premium (€ 0.25 per 100 litre) and a premium for extra quality (€ 0.75 per 100 liter) are included in the calculated milk price.

One of the characteristics of the Belgomilk payment system is the relatively high volume bonus from a yearly delivery of 170.000 litres and more. In the calculated milk price a significant quantity bonus (0.99 euro per 100 kg) is included. which corresponds with an annual delivery of 350,000 kg.

#### Supplementary payments and capital investment by members

In 2003 Belgomilk made a supplementary payment for end-of-year profits of € 9.30 per 100 kg protein in respect of the amount of protein supplied, less the first 1,700 kg. A supplementary payment for end-of-year profits of € 0.26 per 100 kg standard milk was calculated from this.

## 6.2 Arla Foods (Denmark and Sweden)

### Structure

Market breakdown of Arla Foods turnover:

Sweden and Denmark: 41.3%

United Kingdom: 32.3%

Outside Europe: 13.3%

### Milk payment

A new model of payment took effect as of October 2003 for both Danish and Swedish member suppliers. However the target of Arla is to pay the same milk prices in both countries the change in the exchange rates of the Danish Crown and the Swedish Crown relative to each other and relative to the Euro has an influence on the milk prices. As a consequence different milk prices are calculated for Arla Sweden and Arla Denmark.

### Payment model

parameter	
Fat and protein value	
- Volume based costs	
=	Raw material value
+	Added value % of raw material value
+/-	Quality payment/deduction % of raw material value
-	Fixed costs/member
=	Milk price paid in advance
+	End of the year bonus
=	Milk price ex farm

From October 2003 onwards the price ratio between protein and fat is set at 1.7.

### Quality payment

parameters	classes	limits	Premiums/deductions (% of raw material value)
Somatic cell count (1,000 cells per ml)	1S	-200	+2%
	1E	201-300	+1%
	1B	301-400	0
	2	401-500	-4%
	3	501-	-10%
Total plate count (1,000 bacteria per ml)	1E	-30	+1%
	1B	31-50	0
	2	51-200	-4%
	3	201-	-10%
Spores (spores per litre)	1E	-400	+1%
	1B	401-700	0
	2	701-2000	-4%
	3	2001-	-10%

### Supplementary payments and capital investment by members

Arla paid over the year 2002/2003 an end-of-the-year bonus for their Danish member suppliers of 5.5% of the raw material value and a fixed amount of € 11.80 per 100 kg to the Swedish member suppliers.

The supplementary payments are corrected for invested capital (only for Swedish members) and date of payment and calculated at € 1.52 and € 1.20 per 100 kg for the Danish respectively Swedish member suppliers.

Arla Foods' objective is a milk price 5% above a peer group of 5 big European cooperative dairies.

## **6.3 Humana Milchunion and Nordmilch (Germany)**

### **Milk payment**

In Germany milk payment is based on a monthly basic price for 3.7% fat and 3.4% protein and quality class I. This basic price is adjusted for actual fat and protein levels, using fixed fat and protein prices per % difference. Differentials are € 4.50 per % protein (both Nordmilch and Humana) and € 3.00 and € 2.75 per % fat for respectively Humana and Nordmilch. As of 1 January 2004 the difference in payment between the two companies became even greater because Nordmilch reduced the payment for more or less fat to € 2.50 per %.

For the German companies it is incorrect to establish a protein/fat price ratio of 1.5 or 1.64 on the basis of the price of fat and protein per % difference compared with the base contents because these companies on average pay only for additional fat. The average fat content in Germany is about 4.2% (0.5% more than the base price), whilst the average German protein content of 3.42% hardly differs from the base price.

The fixed costs deducted per month by Humana are € 61.00. Nordmilch deduces costs per delivery of € 4.00 and gives a quantity bonus of € 0.106 per 100 kg for an annual delivery of 350.000 kg.

### **Supplementary payments and capital investment by members**

From January to December 2003 Humana Milchunion eG has paid extra bonuses of € 0.85 per 100 kg on the milk price. Part of these bonuses, namely € 0.25 per 100 kg is not distributed to the member suppliers but added to the capital of Humana. In the calculation of the Humana milk price € 0.60 per 100 kg is retrospectively added to the monthly milk prices in 2003 and is not regarded as supplementary payments.

Furthermore a correction is made for invested capital based on member participating units for Humana and Nordmilch of 5.11 and € 4.00 per 100 kg. This correction results in a negative figure for supplementary payments of € 0.21 and € 0.16 per 100 kg for Humana respectively Nordmilch.

## **6.4 Bongrain, Danone, Lactalis and Sodiaal (France)**

### **Milk payment**

All French payment systems are based on a reference price for 1,000 litres of milk that contains 38 grams fat and 32 grams of true protein. The French true protein contents are converted to crude protein.

Change of the milk prices paid in France is based on quarterly national recommendations. These recommendations are based on an agreement between representatives of the dairy industry and farmers. In fact the recommendations are absolute price increases or decreases per litre compared with the same quarter a year ago. The recommendations are calculated from the development of the market prices for different dairy products.

### National recommendations

	milk price change compared to the same period in the previous year (€ per 1,000 litre)
1 <sup>st</sup> quarter 2003	-4.74
2 <sup>nd</sup> quarter 2003	-5.91
3 <sup>rd</sup> quarter 2003	-2.86
4 <sup>th</sup> quarter 2003	-2.57
1 <sup>st</sup> quarter 2004	-10.7 January -9.5 February en March
2 <sup>nd</sup> quarter 2004	-12.13

The difference in fat and protein content compared with 38 and 32 gram per litre, respectively, is multiplied by a (fixed) amount per gram fat and protein.

### Fat and protein price per gram (€ per kg)

	Lactalis	Bongrain	Danone	Sodiaa I
fat	3.049	2.897	3.000	3.000
protein <sup>1</sup>	6.098	5.336	4.500	4.600
protein/fat ratio	2	1.84	1.5	1.53

1) This amount applies for the range between 30 and 34 gram protein per litre (Lactalis and Bongrain) or 30-33 gram per litre (Danone and Sodiaal). A higher amount per gram protein applies for higher and lower protein contents

A bonus for milk recording and specialisation is included in the calculated milk price for Lactalis. Calculated milk prices for Bongrain, Danone and Sodiaal include bonuses for total bacterial and somatic cell count, spores and market situation.

### Supplementary payments and capital investment by members

With the exception of Sodiaal, the French companies are private companies which do not make any supplementary payments for end-of-year profits. As far as is known, the cooperative Sodiaal also made no supplementary payments for end-of-year profits in 2003.

## 6.5 Glanbia and Kerry (Ireland)

### Structure

Market breakdown of Kerry turnover: Ireland 20% and outside Europe (mainly USA) 32%.

### Milk payment

Calculated milk prices of Glanbia and Kerry are based on manufacturing milk.

Glanbia's milk price is calculated on the basis of a base price for milk containing 3.6% fat and 3.3% protein. The difference between these base contents and the actual fat and protein contents is then multiplied by a fixed sum per % fat (0.27) and per % protein (0.49 from March 2003). The protein/fat price ratio is thus 1.8. With effect from 2003 the milk price of Kerry is exclusive of bonuses for winter milk.

Fat and protein value of Kerry's milk price is calculated by multiplying the fat and protein prices per % with the contents. The fixed ratio between protein and fat prices is 2.

### Supplementary payments and capital investment by members

Kerry and Glanbia are companies with no supplementary payments in 2003.

## 6.6 Campina and Friesland Coberco Dairy Foods (Netherlands)

### Structure

Campina is an international cooperative with members in the Netherlands (6,508), Germany (2,421) and Belgium (71). Market breakdown of Campina turnover: Home markets Germany, Netherlands and Belgium 70% and 16% outside Europe. Friesland Coberco Dairy Foods (FCDF) has more interests outside Europe (30% of total turnover).

### Milk payment

The fat and protein value in the milk prices paid by FCDF and Campina is calculated by multiplying the contents by the prices for fat and protein per kg. In the case of Campina<sup>2</sup> these fat and protein prices can vary monthly depending on the prices realised for dairy products. FCDF establishes the fat and protein prices per quarter on the basis of the trend in milk prices in its 5 index companies. FCDF's protein/fat price ratio is approximately 1.4 and for Campina this ratio was between 1.7 and 1.8 in 2003.

Fixed cost deductions are € 29.50 (Campina) and € 117 (FCDF) per month. Per 100 kg deductions are € 5.20 and € 3.10 respectively for Campina and FCDF. Both companies have seasonality bonuses and deductions and a quality premium is calculated at € 0.04 per 100 kg. In the Campina milk price a quantity bonus of € 0.43 per 100 kg is included.

### Supplementary payments and capital investment by members

The milk prices paid by FCDF and Campina in 2003 are inclusive of calculated supplementary payments for end-of-year profits of € 1.73 and € 1.80, respectively.

For FCDF this supplementary payment include the so-called dividend A (0.63% of milk price paid in advance).

The Campina supplementary payments of € 0.13 per kg fat and € 0.44 per kg protein are corrected for capital investment through member suppliers by participating units, but include the distribution of subordinated bonds.

## 6.7 Kymppi (Finland)

### Milk payment

The fat and protein value is calculated by multiplying the contents by the fixed prices for fat (€ 2.40) and protein (€ 6.50) per kg. So the protein/fat price ratio is 2.7.

Seasonal and quality payments or deductions and a monthly compensation for interest loss are included in the calculated milk price of Kymppi.

### Supplementary payments and capital investment by members

The calculated supplementary payments for 2003 are € 1.92 per 100 kg.

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<sup>2</sup> The calculated milk prices are based on Dutch milk payment receipts. Although in principle all members receive the same milk price the payment system can differ from one country to another.

## 6.8 Arla Foods UK and First Milk (United Kingdom)

### Structure

After Express Dairies was taken over by Arla Foods in 2004, the name was changed to Arla Foods UK.

### Milk payment

Arla Foods UK limits milk payment for protein to a maximum of 3.30%. This is due to their high liquid milk sales, which makes it difficult to earn a return on higher protein contents.

In 2003 up to 3.30% 2.378 pence was paid per % protein and 1.349 pence per % fat. The protein/fat price ratio is thus 1.76. Because the volume bonuses apply from a supply of more than 999 litres per day, these are zero for a farm that supplies 350,000 kg per year

First Milk's milk prices are based on their "old" milk price system. The fat and protein value is based on an amount per % fat (1.40 pence from 1 April 2003) and % protein (2.51 pence from 1 April to end-November 2003 and 2.69 pence from December 2003). The protein/fat price ratio is thus 1.79 (April-November) and 1.92 (December). The protein/fat price ratio is thus 1.79 and 1.92.

The new dual pricing system of First Milk<sup>3</sup> was optional for members since April 2003, but fully replaced the 'old' system from April 2004 onwards. This system is designed to encourage milk production to be moved from the spring to the autumn. Dual pricing works on the basis of paying for the milk produced in each month at two different rates. There is the core milk price, which is constant, and paid for a certain volume. Then any milk produced above this volume is considered marginal volume and paid for at the marginal price. The core price is set at 18.72 pence per litre for milk with 4.1% fat, 3.3% protein and for a 600,000 litre per annum producer with standard quality. The marginal price is expressed as a percentage of the core milk price and varies from month to month.

### Marginal price % of the core prices

April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
70	60	60	80	110	135	140	140	110	100	100	90

The core volume for each member is dependent on the previous year's production. This volume is obtained by dividing the previous year's annual volume by 365 and then multiplying this figure with 80%. This daily core volume (litres/day) is then multiplied by the number of days in the month to arrive at each month's core volume, which will receive the core price. The marginal milk price is paid on all extra litres above this core volume.

The fact that this system gives a greater incentive to shift milk production than the old system with monthly bonuses and levies can be seen from the shift in milk production that has since taken place in the United Kingdom!

### Supplementary payments and capital investment by members

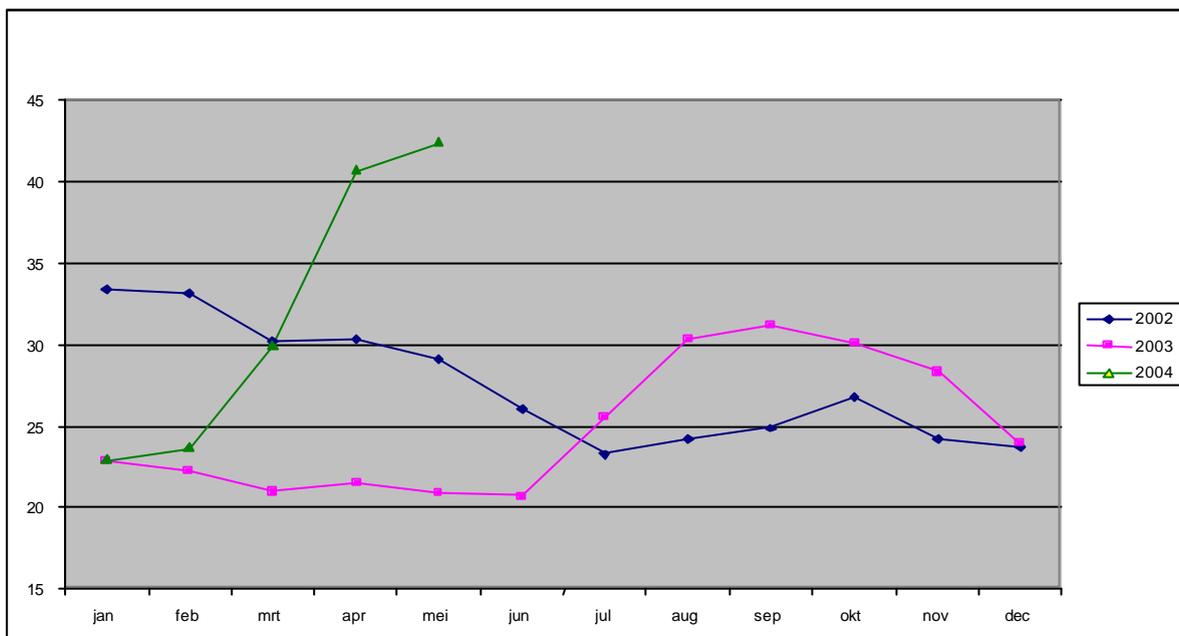
There have been no supplementary payments for 2003.

<sup>3</sup> Source: First Milk News issue February 2004

## 6.9 USA and New Zealand

The calculated milk prices for the USA are based on conversion of the so-called Class III prices for standard milk. The extreme rise in price in recent months is striking (see graph 4).

**Graph 4**  
**USA Class III prices (euro per 100 kg standard milk)**



The high USA milk price is a consequence of a lower production and a higher demand. The lower production is a consequence of, inter alia, the voluntary production limitation programme CWT (Cooperatives Working Together), fewer dairy cows as a consequence of more expensive heifers and limited availability of the milk production-stimulating hormone (BST). The higher demand is partially seasonal (ice cream consumption) and is partly caused by the increasingly healthy image of dairy products.

The prices for New Zealand are the milk prices paid by the dairy cooperative Fonterra.

## **Appendix 1      Aim, method and assumptions**

See appendix 1 of the previous report International Comparison of producer prices for milk 2002 for further information in detail. In this appendix the chosen method and assumptions are summarized.

### **Aim**

The aim of the LTO International Milk Price Comparison is to improve the transparency of the dairy market for farmers by presenting a monthly comparison of producer prices paid by various dairy companies in the EU.

### **Method**

The milk prices are based on the milk payment systems of the dairies and are calculated for standard fat and protein content, quality and quantity.

Chosen standards are:

- 4.20% fat and 3.35% protein;
- annual delivery of 350,000 kg;
- total bacterial count is 24,999 per ml and somatic cell count 249,999 per ml.

Milk payments receipts (one per dairy company) from 1999 onwards are collected by the European Dairy Farmers (EDF) from various members. These receipts constitute the main input of the project. The milk payment systems adopted by each company were analysed by means of these receipts. Together with additional information a calculation model is developed.

The monthly milk prices are weighted on the basis of the national seasonal pattern of deliveries to get a rolling 12-month average.

It must be emphasised that the result of these calculations is not a comparison of the average prices actually paid by the dairies, but the price each company would have paid for a certain standard quality and quantity of milk based on its own payment system.

## Appendix 2 Additional information

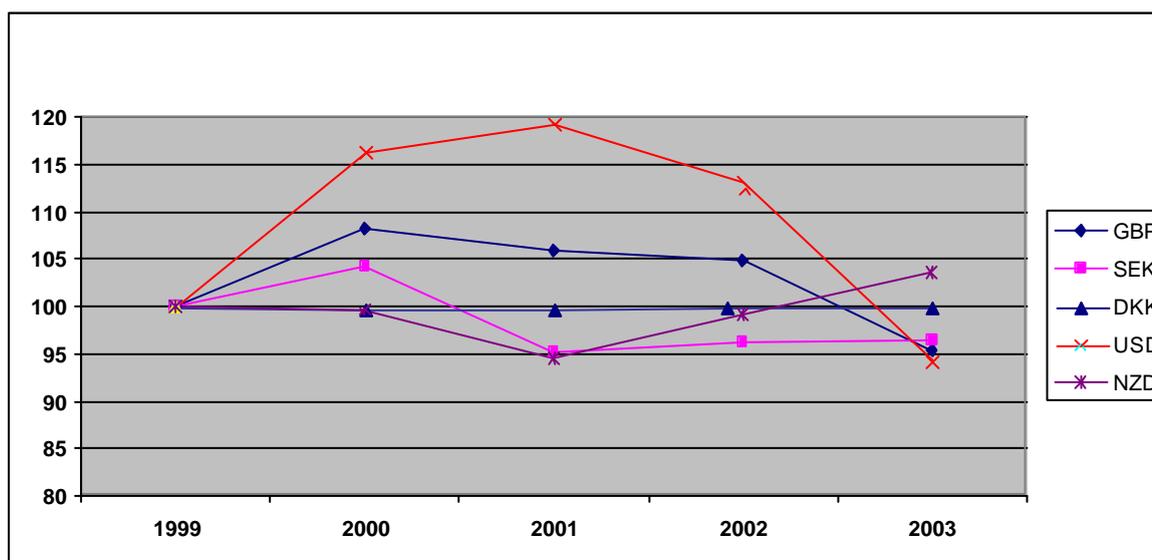
**Table 1**

*Producer prices calculated for standard milk in 1999 - 2003 (euro/100 kg)*

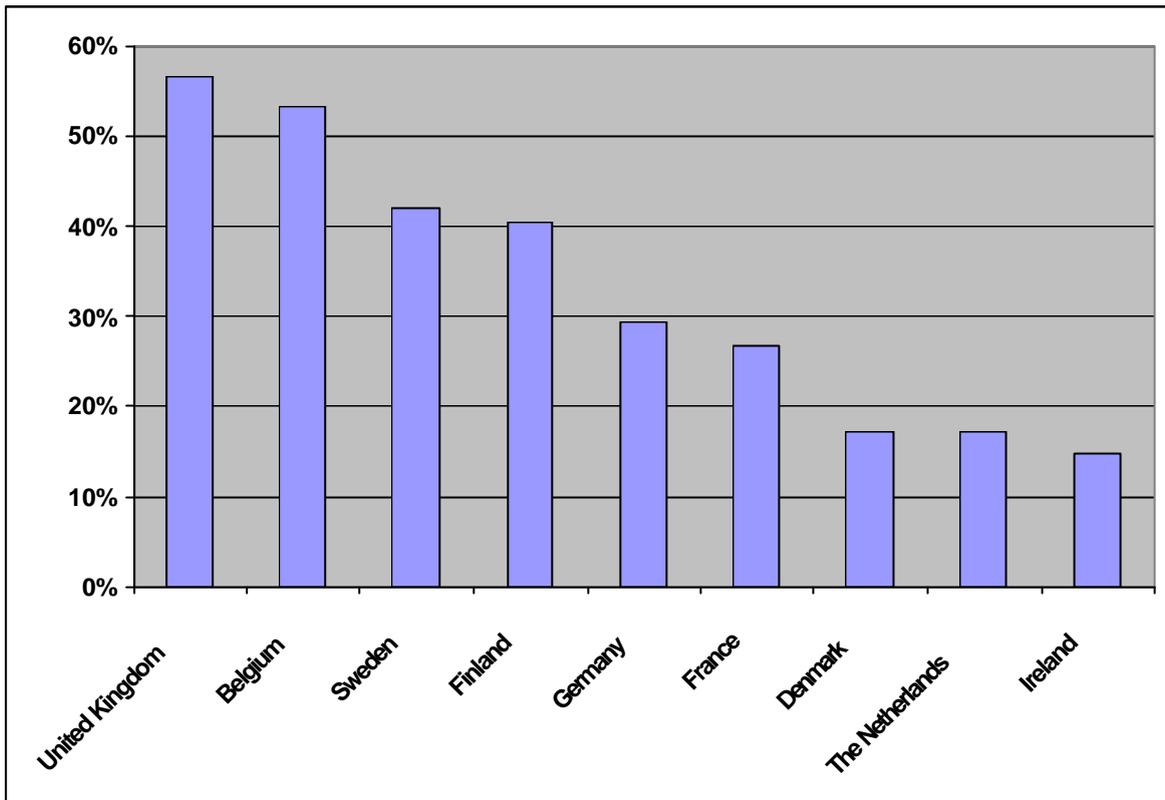
	average 1999-2003	1999	2000	2001	2002	2003
Kymppi	34.88	33.61	33.94	35.29	35.85	35.69
Arla Foods S	32.44	33.01	34.62	30.87	31.74	31.99
Arla Foods DK	32.11	31.45	31.91	32.69	32.71	31.77
Lactalis	31.58	30.73	31.46	32.79	31.58	31.32
Danone	31.57	30.73	31.50	32.68	31.68	31.26
Sodiaal	31.54	30.15	31.66	32.78	31.68	31.44
Bongrain	31.52	30.70	31.45	32.65	31.60	31.19
FCDF	31.50	30.26	31.55	33.60	31.68	30.41
Campina	31.28	30.45	30.48	32.88	32.51	30.11
Humana	30.55	29.23	30.49	32.90	30.81	29.34
Belgomilk	30.20	28.17	31.37	32.23	29.63	29.61
Glanbia	30.00	30.09	30.64	31.55	29.10	28.60
Nordmilch	29.47	28.71	29.90	32.76	28.67	27.34
Kerry	28.80	28.44	29.17	30.22	28.32	27.86
Arla Foods UK	27.75	27.76	26.74	30.27	27.84	26.13
First Milk	25.80	25.33	25.32	28.76	25.14	24.43
<b>average EU</b>	<b>30.69</b>	<b>29.93</b>	<b>30.76</b>	<b>32.18</b>	<b>30.66</b>	<b>29.91</b>
New Zealand	16.02	13.65	16.64	18.33	15.85	15.64
USA	28.83	28.76	26.42	36.66	27.50	24.82

**Graph 1**

*Exchange rates (1999=100)*



**Graph 2**  
**Proportion of milk deliveries processed into liquid milk (-products) per country**



**Graph 3**  
**Proportion of milk deliveries processed into cheese per country**

