

## First Release

Year: LXI.

Zagreb, 17 June 2024

POLJ-2024-3-6

ISSN 1334-0557



# PRODUCTION OF MILK AND DAIRY PRODUCTS, 2023

In 2023, as compared to 2022, the quantity of collected cows' milk decreased by 7.0%. The quantity of ewes' milk decreased by 20.2% and of goats' milk by 11.6%.

Expressed in quantities, it means that in 2023, approximately 28 400 t less cows' milk, 450 t less ewes' milk and 411 t less goats' milk were collected.

The quantity of whole milk imported by dairies in 2023, as compared to 2022, slightly decreased (by about 0.3%, i.e., by about 490 t), while the quantity of imported cream decreased by about 2 200 t (29.0%).

Compared to the previous year, the production of drinking milk decreased by about 24 900 t (9.0%), the production of cream by 344 t (1.1%) and of drinks with a milk base by about 2 200 t (11.1%), while the production of fermented products increased by 2 800 t (3.1%).

There was a decrease of 784 t (18.8%) in the production of butter and of 665 t (2.0%) in the total cows' cheese production in 2023 compared to 2022. The production of cheese from ewes' milk (pure) decreased by 8.6%, while the production of cheese from goats' milk (pure) increased by 52.9%.

Regarding the production of other types of cheese, the production of medium-hard cheese decreased by 8.3% (1 074 t), of hard cheese by 23.2% (193 t), and of extra hard cheese by 82.0% (1 896 t). The production of soft cheese increased by 5.9%, of medium-soft cheese by 10.8%, and of fresh cheese by 14.9%.

As compared to the previous year, the milk fat content in collected cows' milk decreased by 6.5%, in ewes' milk by 20.3%, and in goats' milk by 9.5%.

Regarding individual dairy products, the milk fat content in drinking milk decreased by 10.4%, in butter by 18.8% and in cheese from cows' milk (pure) by 14.8%. The milk fat content increased in cream by 11.9% and in fermented products by 0.3%.

The cows' milk protein content decreased in drinking milk by 11.0%, in cream by 1.1% and in cows' cheese by 26.4%.

# 1 MILK AND DAIRY PRODUCTS, 2023<sup>1)</sup>

	Quantities, t		Indices 2023 2022
	2022	2023	
<b>Availability</b>			
Cows' milk collected	405 425	376 980	93,0
Ewes' milk collected	2 231	1 781	79,8
Goats' milk collected	3 556	3 145	88,4
Cream	z	z	z
Whole milk import – only dairies	175 777	175 287	99,7
Skimmed milk import – only dairies	z	z	z
Cream import – only dairies	7 719	5 483	71,0
Other products (e.g. cheese, butter, yoghurt) – only dairies	z	z	z
<b>Production of fresh products</b>			
Drinking milk	277 769	252 898	91,0
Whole and raw milk	144 465	129 226	89,5
Semi-skimmed milk	130 208	120 610	92,6
Skimmed milk	3 096	3 062	98,9
Buttermilk	z	z	z
Cream	32 458	32 114	98,9
With fat content of < 29%	21 601	21 049	97,4
With fat content of > 29%	10 857	11 065	101,9
Fermented products (yoghurts, drinking yoghurts and other)	90 069	92 851	103,1
With additives	19 040	36 383	191,1
Without additives	71 029	56 468	79,5
Drinks with a milk base	20 012	17 784	88,9
Other fresh products (milk jelly and other)	z	12 177	z
<b>Production of other products</b>			
Powdered dairy products	z	z	z
Butter	4 172	3 388	81,2
Other yellow fat dairy products	z	1 738	z
Cheese from cows' milk (pure)	33 239	32 574	98,0
Cheese from ewes' milk (pure)	221	202	91,4
Cheese from goats' milk (pure)	136	208	152,9
Other cheese (mixed)	14	15	107,1
Soft cheese (> 68% of moisture)	538	570	105,9
Medium-soft cheese (62% – 68% of moisture)	166	184	110,8
Medium-hard cheese (55% – 62% of moisture)	12 942	11 868	91,7
Hard cheese (47% – 55% of moisture)	833	640	76,8
Extra hard cheese (< 47% of moisture)	2 313	417	18,0
Fresh cheese	16 818	19 320	114,9
Processed cheese	2 782	2 809	101,0
Whey – total	34 832	25 627	73,6
Export of milk and cream in bulk – only dairies	z	z	z

1) See Notes on Methodology.

## 2 MILK FAT CONTENT IN MAIN DAIRY PRODUCTS, 2023

	Milk fat content, t		Indices 2023 2022
	2022	2023	
<b>Availability</b>			
Cows' milk collected	16 390	15 325	93,5
Ewes' milk collected	153	122	79,7
Goats' milk collected	116	105	90,5
Cream	z	z	z
Whole milk import – only dairies	7 122	7 084	99,5
Skimmed milk import – only dairies	z	z	z
Cream import – only dairies	3 033	2 157	71,1
<b>Products</b>			
Drinking milk	7 341	6 579	89,6
Buttermilk	z	z	z
Cream	5 623	6 290	111,9
Fermented products (yoghurts, drinking yoghurts and other)	2 861	2 871	100,3
Drinks with a milk base	474	243	51,3
Other fresh products (milk jelly and other)	z	391	z
Concentrated milk	-	-	-
Powdered dairy products	z	z	z
Butter	3 421	2 778	81,2
Other yellow fat dairy products	z	417	z
Cheese from cows' milk (pure)	5 219	4 446	85,2
Whey – total	105	81	77,1
Export of milk and cream in bulk – only dairies	z	z	z

## 3 COWS' MILK PROTEIN CONTENT IN MAIN DAIRY PRODUCTS, 2023

Products	Protein content, t		Indices 2023 2022
	2022	2023	
Drinking milk	7 536	6 704	89,0
Whole milk	3 918	3 430	87,5
Semi-skimmed milk	3 535	3 193	90,3
Skimmed milk	83	81	97,6
Buttermilk	z	z	z
Cream	981*	970	98,9
Powdered dairy products	z	z	z
Butter and other yellow fat dairy products	z	30	z
Cheese from cows' milk	5 687	4 183	73,6
Processed cheese	342	329	96,2
Whey	190	187	98,4

## NOTES ON METHODOLOGY

### Sources and methods of data collection

Data on the annual production of milk and dairy products are taken over from the Croatian Agency for Agriculture and Food – the Central Laboratory for Milk Quality Control (SLKM). The data collected that way refer to the quantity of cows', ewes' and goats' milk collected, milk fat and protein contents, the production of dairy products from cows' milk and the foreign dairies' trade in milk and dairy products.

The Laboratory processes the collected data and submits them, according to the previously defined deadlines and in suitable form, to the Croatian Bureau of Statistics for further processing.

The methodology for carrying out the survey on milk and dairy products is based on the Methodological Basis for Gathering Data on Milk and Dairy Products Statistics (NN, No. 42/13).

### Coverage and comparability

There are about forty dairies operating in the Republic of Croatia for which the SLKM makes analysis of purchased milk and from which it collects data on the production. The coverage includes industrial and registered small dairies.

### Confidentiality

Aggregated data from which individual reporting units could be identified (due to their small number) or to which the dominance rule or secondary confidentiality rule apply, according to the Official Statistics Act (NN, No. 25/20) and to the Ordinance on the Statistical Data Protection Method of the Croatian Bureau of Statistics, are treated as confidential and therefore are not published.

## Definitions

**Drinking milk** comprises raw milk, whole milk, skimmed milk, semi-skimmed milk and skimmed milk containing no additives.

**Raw milk** comprises milk that has not been heated beyond 40 °C or undergone any treatment that has an equivalent effect.

**Whole milk (pasteurised, sterilised and uperised)** comprises milk with fat content  $\geq 3.5\%$ , subject to heat treatment.

**Semi-skimmed milk (pasteurised, sterilised and uperised)** comprises milk with fat content 1.5% – 2.8%, subject to heat treatment only once.

**Skimmed milk (pasteurised, sterilised and uperised)** comprises milk with fat content  $< 1.5\%$ , subject to one heat treatment.

**Pasteurised milk** – milk treated with high temperature (at least 72 °C for 15 seconds).

**Sterilised milk** – milk treated with high temperature (120 °C for 30 minutes) in hermetically sealed containers.

**Uperised milk** – milk treated with high temperature (135 °C for not less than 1 second).

**Buttermilk** is a residual product of the processing of milk or cream into butter.

**Cream** comprises cream for direct consumption, containing more or less than 29% of milk fat.

**Fermented products** include yoghurts, drinkable yoghurts, acidified milk and other fermented products either with or without additives.

**Drinks with a milk base** comprise products containing at least 50% milk equivalent (chocolate milk, buttermilk with additives, etc.).

**Other fresh products** comprise fresh milk products not elsewhere specified (mainly milk-based desserts).

**Concentrated milk** comprises milk obtained by partial elimination of water from whole milk, semi-skimmed or skimmed milk.

**Powdered dairy products** comprise products obtained by eliminating water from cream, all kinds of milk, buttermilk and fermented products.

**Butter** includes traditional butter, melted butter, butter oil and similar products containing more than 80% of milk fat.

**Other yellow fat products** comprise products based on butter with milk fat content of less than 80%.

**Cheese** includes fresh or matured, solid or semi-solid products, obtained by coagulating milk, cream, buttermilk or other products.

**Processed cheese** comprises products obtained by grinding, mixing, melting and emulsifying one or more varieties of cheese, with or without additives.

**Whey** includes liquid whey and whey in either powder or block form. It is a by-product obtained during the manufacture of cheese or casein.

## Abbreviations

°C	degree Celsius
NN	Narodne novine, official gazette of the Republic of Croatia
t	tonne
z	data are not published for confidentiality reasons

## Symbols

-	no occurrence
<	less than
>	more than
$\geq$	more than or equal to
*	corrected data

**Published by the Croatian Bureau of Statistics, Zagreb, Ilica 3, P. O. B. 80**

Phone: (+385 1) 48 06 111

Press corner: [press@dzs.hr](mailto:press@dzs.hr)

Persons responsible:

Edita Omerzo, Director of Spatial Statistics Directorate

Lidija Brković, Director General

Prepared by:

Mario Valentić and Ana Pavetić

**USERS ARE KINDLY REQUESTED TO STATE THE SOURCE.**

Customer Relations and Data Protection Department

Information and user requests

Phone: (+385 1) 48 06 138, 48 06 154, 48 06 115

E-mail: [stat.info@dzs.hr](mailto:stat.info@dzs.hr)

Subscription

Phone: (+385 1) 21 00 455

E-mail: [prodaja@dzs.hr](mailto:prodaja@dzs.hr)