



METHODOLOGICAL EXPLANATION

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MILK AND MILK PRODUCTS, YEARLY

This methodological explanation relates to the data releases:

- Milk and milk products, Slovenia, yearly, (First Release)
- Milk and milk products, detailed data, Slovenia, yearly, (Electronic Release)



February 2025

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1 PURPOSE

The purpose of publishing data on milk and dairy products is to show the yearly milk production and production of milk and dairy products in dairies and export and import of milk and milk products. The data are the basis for monitoring developments in the dairy sector, which is considered to be one of the most important in both agriculture and the food industry.

The yearly publications show the quantities of cow's milk collected and the quantities of main dairy products produced in dairies and data on export and import of milk and milk products.

2 LEGAL FRAMEWORK

- [Annual Programme of Statistical Surveys \(LPSR\) \(only in Slovene\)](#)
- [National Statistics Act \(OJ RS, No. 45/95 and 9/01\)](#)
- [Regulation \(EU\) No. 1165/2008 of the European Parliament and of the Council of 19 November 2008 concerning livestock and meat statistics – for data up to the reference year 2024](#)
- [Regulation \(EU\) No. 2022/2379 of the European Parliament and of the Council of 23 November 2022 on statistics on agricultural input and output](#)
- [Commission Implementing Regulation \(EU\) 2023/2745 of 8 December 2023 laying down rules for the application of Regulation \(EU\) 2022/2379 of the European Parliament and of the Council as regards animal production statistics – for data from to the reference year 2025 on](#)
- [Guidelines on implementing statistical surveys of milk and milk products \(OJ RS, No. 52/05\) \(only in Slovene\)](#)
- [Rules on records for the dairy sector and on the market information system for the milk and milk products market](#)

3 UNIT DESCRIBED BY THE PUBLISHED DATA

The unit described by the published data is the amount of milk and milk products.

In purchased milk and produced milk products the fat and protein content is also monitored.

With data on export and import of milk and milk products also data on value is published.

4 SELECTION OF OBSERVATION UNIT

Purchase of cows milk: Observation units are registered purchasers of milk.

Production of milk and milk products in dairies: Observation units are dairies.

Purchase of cows milk: Data are collected with the Purchase and Sale of Agricultural Products survey (KME-OPKP/M). Around 80 units are reporting collected milk.

Production of milk and milk products in dairies: Data are collected with the Chamber of Commerce and Industry (Chamber of Agricultural and Food Enterprises). This dairies represents around 99% of all milk processed in Slovenia.

Exports and imports of milk and milk products: Data are collected with the International Trade in Goods Survey (INTRASTAT-EKSTRASTAT/M).

5 SOURCES AND METHODS OF DATA COLLECTION

Data are collected yearly.

Statistical sources for data on milk and milk products:

- Statistical survey: Purchase and Sale of Agricultural Products (KME-OPKP/M) (printed questionnaire):
 - Data on the amount of purchased milk
- Statistical survey: International trade in goods (INTRASTAT-EKSTRASTAT/M)

Administrative sources for data on milk and milk products:

- Chamber of Commerce and Industry Chamber of Agricultural and Food Enterprises (CCIS – CAFE):
 - data on obtained milk products and on fat and protein content of that products in dairies (data collection in takes place in agreement with SURS),
- Agency of the Republic of Slovenia for Agricultural Markets and Rural Development (ARSAMRD):
 - Data from registered purchasers of milk on the amount of purchased milk (on the basis of the article 3. of Rules on records for the dairy sector and on the market information system for the milk and milk products market),
 - Data from dairies on collected milk (on the basis of the article 6. of Rules on records for the dairy sector and on the market information system for the milk and milk products market)

6 DEFINITIONS

Milk is cows, goats, ewes or buffalos milk.

Drinking milk: raw milk, whole milk, semi-skimmed and skimmed milk containing no additives. The term relates only to milk directly intended for consumption, normally in containers of 2 litres or less. Also included is milk with vitamin additives.

Raw milk: milk produced by the secretion of the mammary glands of one or more cows, ewes, goats or buffalos, which has not been heated beyond 40 °C or has not undergone any treatment that has an equivalent effect.

Whole milk: milk that has been subject to one heat treatment or an authorized treatment of equivalent effect by a milk processor and whose fat content is either at least 3.0% naturally or has been brought to at least 3.5%.

Semi-skimmed milk: milk that has been subject to at least one heat treatment or an authorized treatment of equivalent effect by a milk processor and whose fat content has been brought to at least 1.50% and at most 1.80%.

Skimmed milk: milk that has been subject to at least one heat treatment or an authorized treatment of equivalent effect by a milk processor and whose fat content has been brought to not more than 0.30%.

Pasteurized milk: pasteurized milk must be obtained by means of a treatment involving a high temperature for a short time (at least 71.7 °C for 15 seconds or any equivalent combination) or pasteurization process using different time and temperature combinations to obtain an equivalent effect.

Sterilized milk: sterilized milk must be heated and sterilized in hermetically sealed wrappings or containers, the seal of which must remain intact, in the event of random sampling, be of preservability such that no deterioration can be observed after it has spent 15 days in a closed container at a temperature of +30 °C.

Uperized milk: uperized milk (or UHT milk) must be produced by applying a continuous flow of heat using a high temperature for a short time (not less than 135 °C for not less than 1 second).

Buttermilk is a residual product (may even be acid or acidified) of the processing of milk or cream into butter (by continuous churning and separation of the solid fats). Buttermilk with additives must be included in drinks with a milk base.

Cream: a film of fat which forms naturally on the surface of the milk by slow agglomeration of emulsifying fat globules. If it is removed by skimming it from the surface of the milk or extracted from the milk by centrifuging in a cream separator, it has, in addition to the other components of the milk, a relatively high fat content (usually exceeding 10% of the weight of the product). Cream:

cream which has been processed and is available for delivery outside dairies (i.e. for human consumption, as raw material for manufacturers of chocolate, ice cream, etc.). In the same way as for other products, it does not include intermediate production intended for the manufacture of other dairy products. Cream of a fat content by weight over 29%: pasteurized, sterilized or uperized; also includes acidified cream as well as cream in cartons or tins.

Acidified milk: milk products with a pH of between 3.8 and 5.5. Relates to yoghurts, drinkable yoghurts, prepared yoghurts, heat-treated fermented milk and others. Also included are products based on or containing bifidus. Acidified milk without additives: also included is acidified milk with the addition of sugar and/or sweeteners.

Drinks with a milk base: other liquid products containing at least 50% of milk products, including products based on whey. Included are chocolate milk, buttermilk with additives or flavoured, etc.

Other fresh products: the group includes fresh milk products not elsewhere specified, mainly milk-based desserts (jellied milks, custard tarts, cream desserts, mousses, etc.) and ice cream (and similar products) manufactured in the reporting enterprises. Also included are desserts in tins as well as fresh farm products collected from agricultural holdings and placed on the market without processing (excluding packaging).

Concentrated milk: a product obtained by partial elimination of water, from whole milk, semi-skimmed or skimmed milk only. Also included are evaporated milk (heat-treated) and concentrated milk with added sugar. Also included is concentrated milk used for the manufacture of 'Chocolate crumb'; dried product consisting of milk, sugar and cocoa paste in the following proportions: milk fat: more than 6.5% (content by weight) but less than 11% (content by weight), cocoa: more than 6.5% (content by weight) but less than 15% (content by weight), sucrose (including invert sugar calculated as sucrose) more than 50% (content by weight) but less than 60% (content by weight), non-fat dry matter of milk: more than 17% (content by weight) but less than 30% (content by weight), water: more than 0.5% (content by weight) but less than 3.5% (content by weight). Its composition is as given in Annex I to Commission Regulation (EEC) No 380/84 of 15 February 1984.

Powdered dairy products are products obtained by eliminating water from cream, whole milk, semi-skimmed milk, skimmed milk, buttermilk and acidified milk. Also included are additives to the raw material before the product is made into powder as well as milk powder manufactured in dairies and contained in powders for infants and in animal feeds.

Cream milk powder: milk powder with a milk fat content of not less than 42% by weight of the product.

Whole milk powder: milk powder with a milk fat content of not less than 26% and less than 42% by weight of the product.

Partly skimmed-milk powder: milk powder with a milk fat content of more than 1.5% and less than 26% by weight of the product.

Skimmed-milk powder: milk powder with a maximum milk fat content of 1.5% by weight of the product.

Buttermilk powder: powder product made from buttermilk.

Other powdered products: curdled milk and cream, kephir and other fermented or acidified milk and cream, whether or not containing added sugar or other sweetening matter or flavoured or containing added fruit or cocoa. Also included are mixtures of powdered cream, milk, buttermilk and/or whey, as well as protein-based powdered products.

Butter, total and other yellow fat dairy products: includes butter, rendered butter and butteroil, and other yellow fat products, expressed in butter equivalent with a milk fat content equal to 82% by weight of the product.

Butter: a product with a milk fat content of not less than 80% and less than 90%, a maximum water content of 16% and a maximum dry non-fat milk-material content of 2%. Also included is butter which contains small amounts of herbs, spices, aromatic substances, etc., on the condition that the product retains the characteristics of butter.

Butter and other yellow fat products: Reduced-fat butter: a product similar to butter with a milk fat content of less than 80% by weight (excluding all other fat) Other: fats composed of plant and/or animal products: products in the form of a solid, malleable emulsion principally of the water-in-oil type, derived from solid and/or liquid vegetable and/or animal fats suitable for human consumption, with a milk fat content of between 10% and 80% of the fat content.

Cheese is a fresh or matured, solid or semi-solid product, obtained by coagulating milk, skimmed milk, partly skimmed milk, cream, whey cream or buttermilk, alone or in combination, by the action of rennet or other suitable coagulating agents, and by partly draining the whey resulting from such coagulation.

Casein is the main protein constituent of milk. It is obtained from skimmed milk by precipitation (curdling), generally with acids or rennet. The heading covers various types of casein which differ according to the method of curdling, e.g. acid casein and rennet casein (paracasein).

Caseinates (salts of casein) include the sodium and ammonium salts known as 'soluble caseins'; these salts are normally used to prepare concentrated foods and pharmaceutical products. Calcium caseinate is used in the preparation of foodstuffs or as a glue, depending on its character.

Whey: by-product obtained during the manufacture of cheese or casein. In the liquid state, whey contains natural constituents (on average 4.8% lactose, 0.8% protein and 0.2% fats by weight of the product), which remain when the casein and the majority of the fat have been removed from the milk.

Total whey: also includes whey used in the dairy for manufacturing animal feedingstuffs.

Whey delivered in the liquid state: whey delivered to be used mainly for animal feeds. Amounts used as raw materials for other processes must be excluded.

Lactalbumin: one of the main components of whey protein.

7 EXPLANATIONS

7.1 CLASSIFICATIONS

Code and description	CN4 digit	CN8 digit
1. MILK	0401	04012XXX 04011XXX
1.1. Whole milk	0401	04012091
1.1.1 Whole milk in bulk	0401	04012099
1.2. Semi-skimmed and skimmed milk	0401	0401201X 04013XXX
2. CREAM	0401	04014XXX 04015XXX
3. ACIDIFIED MILK	0403	04031XXX 04039053 04039059 0403906X 0403909X
3.1 Acidified yogurt	0403	04031XXX
4. CHEESE	0406	0406XXXX
4.1 Cheese fresh	0406	04061XXX
4.2 Cheese grated	0406	04062XXX
4.3 Cheese melted	0406	04063XXX
4.4 Cheese Blue-veined	0406	04064XXX
4.5 Cheese other	0406	04069XXX
5. WHEY	0404	04041XXX
5.1 Whey powder	0404	0404100X 0404101X 0404102X 0404103X
5.2 Whey liquid	0404	0404104X 0404105X 0404106X 0404107X 0404108X 04049021
6. BUTTER AND DAIRY SPREADS	0405	0405XXXX
6.1 Butter natural	0405	0405101X
6.2 Dairy spreads 39-75	0405	04052XXX

6.3 Butter other	0405	'0405103X 0405105X 0405109X 04059XXX
7. OTHER MILK PRODUCTS	0402 0403 0404	04029XXX 04022XXX 04021XXX 04039011 04039031 04039071 04039013 04039019 04039033 04039039 04039073 04039079 04039051 04049023 04049029 0404908X
7.1. Concentrated milk	0402	04029XXX
7.2.1. Cream, whole milk and partly skimmed-milk powder	0402	04022XXX
7.2.2. Skimmed-milk powder	0402	04021XXX
7.2.3. Skimmed acidified milk powder	0403	04039011 04039031 04039071
7.2.4. Other acidified milk powder	0403	04039013 04039019 04039033 04039039 04039073 04039079
7.3. Remaining milk products (drinks with a milk base, buttermilk, icecream, desserts)	0403 0404	'04039051 04049023 04049029 0404908X

7.2 DATA PROCESSING

DATA EDITING

Data were edited by using appropriate individual corrections.

For more, see the general methodological explanations [Statistical data editing](#).

WEIGHTING

Weighting was not performed.

SEASONAL ADJUSTMENT

Seasonal adjustment is not applicable.

DATA PROCESSING OTHER

In processing the data that are received we check the internal consistency of data (including consistency with other sources) and consistency with data from previous periods. In case of larger discrepancies, the data are checked by contacting reporting units.

7.3 INDICES

In First release, we publish moving base time indices (chain indices). Chain indices show changes in quantity compared to the previous year.

For more, see the general methodological explanations [Index numbers](#).

7.4 PRECISION

The precision is not calculated.

7.5 OTHER EXPLANATIONS

Data that are statistically protected to respect the confidentiality of reporting units are replaced with the letter »z«.

8 PUBLISHING

- SiStat Database: [Agriculture, forestry and fishery](#) - Livestock, milk and milk products - Milk and milk products (results are published as absolute data).
- First Release (Agriculture, forestry and fishery, Livestock, milk and milk products): »Milk and milk products«.
- Electronic Release (Agriculture, forestry and fishery, Livestock, milk and milk products): »Milk and milk products, detailed data«.
- EUROSTAT (Statistical Office of the European Union)
- The Food and Agriculture Organization of the United Nations (FAO)

9 REVISION OF THE DATA

9.1 PUBLISHING OF PRELIMINARY AND FINAL DATA

Provisional data are not disseminated. Only final data are published.

9.2 FACTORS INFLUENCING COMPARABILITY OVER TIME

There are no breaks in time series, so all points in time are comparable.

10 OTHER METHODOLOGICAL MATERIALS

Methodological materials on SURS's website are available at <https://www.stat.si/statweb/en/Methods/QuestionnairesMethodologicalExplanationsQualityReports>.

- Questionnaire:
 - SURS does not collect data for this survey by using a questionnaire.
- Quality report for the survey:
 - Milk and milk products, yearly (KME-MLEKO/L)

Theme: Agriculture, forestry and fishery, SubTheme: Livestock, milk and milk products,

- Methodological explanations:
 - Price indices and purchase of agricultural products (methodological explanation for the Purchase and Sale of Agricultural Products survey)

Theme: Agriculture, Forestry and Fishery, Subtheme: Prices in Agriculture

- Exports and imports of goods (methodological explanation for the International Trade in Goods survey)

Theme: Foreign Economic Relations, Subtheme: Exports and imports of goods