



**An  
Phríomh-Oifig  
Staidrimh**

Central  
Statistics  
Office

# **Standard SIMS Report: Milk Statistics**



# **Single Integrated Metadata Structure (SIMS) Report**

**For**

**Milk Statistics**

**This documentation applies to the reporting period:  
2023**

**Last edited: 04/05/2023**



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## 2. Introduction

The Production of Milk and Milk Products survey is a relatively small monthly survey of approximately 32 dairy processors and supplier co-ops in the country. The survey is a de facto census as the dairy processors surveyed are responsible for the vast majority of the processing of milk and milk products within the state.

The survey was introduced in the seventies initially in response to Council Directive 72/280/EEC. This directive stated that in order for the Commission to carry out its duties under the Treaty and under Community provisions on the common organisation of the market in milk and milk products, there was a requirement for precise information about the production and use of milk and regular, specific, short-term information about the delivery of milk to undertakings or establishments which treat or process milk and about the production of milk products in the Member States of the Community.

Initially certain characteristics were required on a weekly basis however due to amendments to the directives, characteristics are now only required on a monthly basis. The directive was replaced in 1996 by [Council Directive 96/16/EC](#) in order to consolidate the previous directives.

In Ireland, due to the many mergers and acquisitions within the dairy sector, the number of processors has decreased significantly. However, the amount of annual production has increased from approximately 4,400 million litres of milk in 1980 to approximately 8,300 million litres in 2020. Some products such as cheese are surveyed on an annual basis due to difficulties with factories providing estimates on a monthly basis.

## 3. Contact

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## 4. Metadata Update

### 4.1. Metadata last certified

04/05/2023

### 4.2. Metadata last posted

May 2023

### 4.3. Metadata last update

04/05/2023



## 5. Statistical Presentation

### 5.1. Data Description

The survey's primary purpose is to provide information on the amount of cow's milk processed by dairy processors, which in turn gives an indication of the amount of milk being produced on Irish farms. It also provides information on the fat and protein content of the milk being processed.

Aggregated results are published monthly for the following variables:

- Domestic milk intake (and percentage fat and protein content)
- Total milk sold for human consumption (whole, semi-skim and skimmed milk).
- Butter
- Skimmed milk powder
- Cheese

At Eurostat level the statistics disseminated cover milk collected (cow's milk) and products obtained by dairies (monthly, table A), annual production and utilization of milk (all milk) in dairies (annual, tables B and H), statistics on the structure of dairies (every third year, tables D, E, F, G1, G2, G3, G4, G5) and annual production and utilization of milk (all milk) on farms (tables C and I). An annual methodological report is also collected.

### 5.2. Classification System

The list of items and their definition are from the Decision 97/80/EC and can be viewed in Annex I list of milk products and explanatory notes and Annex II list of tables and explanatory notes. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31997D0080&from=EN>

Regional data: The territorial classification of regional data is broken down according to the NUTS classification for Member States.

### 5.3. Sector Coverage

Dairy Sector

Statistics on farm production cover agricultural holdings in Member States.

Milk statistics in Dairies cover EU plants whose activity is milk collection and milk product production.

### 5.4. Statistical Concepts and definitions

**Milk intake by creameries and pasteurisers**

Whole milk purchased by creameries and pasteurisers from domestic producers through collection depots and separating stations. The fat and protein content of the whole milk is also collected. To convert milk intake from million litres to '000 tonnes use the following formula: 1 tonne liquid milk = 971.164 litres.

**Skimmed milk**

Milk with less than or equal to 0.3% fat content.

**Semi-skimmed milk**

Milk with between 1.0% and 1.8% fat content.

**Skimmed milk powder**

Milk powder with not more than 1.5% milk fat content.

**Cheese**

The data is entered on the publication and PXStat on a calendar month basis.



### **Imported Milk Intake**

Raw milk imports and imported milk for processing on contract. This does not include milk already packaged for retail sale.

## **5.5. Statistical Unit**

Dairy enterprises -- undertakings of two types:

- Collection centres collect milk or cream and transfer it in whole or in part to other enterprises without any processing. They are often defined as referred to in Article 2(2) of Council Directive 96/16/EC.
- Dairies and agricultural holdings purchase milk or milk products from agricultural holdings or collection centres with a view to transforming them into milk products. They are often defined as referred to in Article 2(1) of Council Directive 96/16/EC.

Some enterprises process milk products obtained from a dairy as defined above, e.g. skimmed milk into milk powder or yogurt, and may appear to be excluded from the definition of dairy enterprises. Nevertheless, non-packed intermediate products are considered as raw products and such dairies are therefore covered as statistical units for the purpose of some statistics, whatever the enterprise supplying them.

Agricultural holdings are the statistical units for milk production and its use on farm within the meaning of Article 2(a) of Regulation (EC) N°1166/2008 of the European Parliament and of the Council.

## **5.6. Statistical Population**

All dairies in Ireland.

## **5.7. Reference Area**

The reference area is the Republic of Ireland.

Regional breakdown is not published by CSO. NUTS2 (Nomenclature of Territorial Units for Statistics) data are submitted to Eurostat on a triannual basis however much of the data are marked as confidential. The Nomenclature of Territorial Units for Statistics (NUTS, for the French nomenclature d'unités territoriales statistiques) is a geocode standard for referencing the subdivisions of countries for statistical purposes.

## **5.8. Time Coverage**

1975-2023

## **5.9. Base period**

Not applicable.

## **6. Unit of Measure**

Milk production, imports of milk, and sales of milk are presented in million litres.  
Products obtained from milk are presented in thousands of metric tonnes.

## **7. Reference Period**

2022



## 8. Institutional Mandate

### 8.1. Legal Acts and other agreements

#### 8.1.1. National legal acts

Not applicable.

#### 8.1.2. European legal acts

At Eurostat level milk and milk product statistics are collected under Decision 97/80/EC implementing Directive 96/16/EC.

### 8.2. Data Sharing

Not applicable.

## 9. Confidentiality

### 9.1. Confidentiality – policy

All information supplied to the CSO is treated as strictly confidential. The Statistics Act, 1993 sets stringent confidentiality standards: Information collected may be used only for statistical purposes, and no details that might be related to an identifiable person or business undertaking may be divulged to any other government department or body.

These national statistical confidentiality provisions are reinforced by the following EU legislation: Council Regulation (EC) No 223/2009 on European statistics for data collected for EU statistical purposes. Further details are outlined in the CSO's Code of Practice on Statistical Confidentiality.

For more information on the CSO confidentiality policy please visit:

<https://www.cso.ie/en/aboutus/lqdp/csodatapolicies/statisticalconfidentiality/>

### 9.2. Confidentiality – data treatment

All data received are treated as strictly confidential as stated in the Statistics Act 1993. Care is taken to ensure that disclosure of potentially confidential results is avoided.

## 10. Release Policy

### 10.1. Release Calendar

The date of dissemination of all statistics released by CSO can be found in the Release Calendar published in CSO.ie. This calendar is regularly updated.

### 10.2. Release calendar access

The release calendar can be accessed via the CSO website, [www.cso.ie](http://www.cso.ie), or directly from this link:

<https://www.cso.ie/en/csolatestnews/releasecalendar/>

### 10.3. User access





In accordance with Principle 6 of the European Statistics Code of Practice all users of CSO statistics have equal access via the CSO website at the same time of 11 am on the day of publication. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality.

The CSO recognises that in very limited circumstances a business need for pre-release access may be substantiated. Any form of pre-release access is a privilege and a strict CSO pre-release access policy is adhered to for these special requests. The full pre-release access policy can be accessed at <https://www.cso.ie/en/aboutus/lqdp/csodatapolicies/cspolicyonpre-releaseaccess/>

The various results are published nationally on the CSO website (www.cso.ie). Selected extracts from the results are posted on the CSO's data dissemination database, PxStat.

## 11. Frequency of Dissemination

Monthly

## 12. Accessibility and clarity

### 12.1. News release

There is no news release associated with the Milk Statistics publication.

### 12.2. Publications

The Milk Statistics release is published monthly on the CSO website. The release can be accessed directly from this link: <https://www.cso.ie/en/statistics/agriculture/milkstatistics/>

### 12.3. On-line database

The Milk Statistics tables, released on the database PxStat on the CSO website, are updated monthly. The tables can be accessed directly from this link <https://data.cso.ie/product/ms>

#### 12.3.1. AC 1. Data tables – consultations

### 12.4. Micro-data Access

Microdata is not publicly available.

### 12.5. Other

Other aggregates are created on ad-hoc basis for specific user requests. Subject to maintaining confidentiality, all possible assistance is given to users. Decisions on whether to perform special analyses are taken on a case by case basis.

The data are used by Ornuia in their annual report and the Department of Agriculture, Food and the Marine reports.

The data is also used by Eurostat in many datasets available publicly. Eurostat produce thematic reports based on this data e.g. "From grass to glass; a look at the dairy chain " - Issue number 76/2008. <https://ec.europa.eu/>

#### 12.5.1. AC2. Metadata consultations



Not calculated.

## 12.6. Documentation on Methodology

Milk Statistics Survey and Methodology information is available on the CSO website:  
<https://www.cso.ie/en/methods/agricultureandfishing/milkstatistics/>

### 12.6.1. AC3 – Metadata completeness – rate

Not calculated.

## 12.7. Quality Documentation

Further information on the quality of this release is available from the CSO methods page:  
<https://www.cso.ie/en/methods/agricultureandfishing/milkstatistics/>

# 13. Quality Management

## 13.1. Quality Assurance

### Quality Management Framework

The CSO avails of an office wide Quality Management Framework (QMF). This framework allows all CSO processes and outputs to meet the required standard as set out in the European Statistics Code of Practice (ESCoP). The QMF foundations are based on establishing the UNECE's Generic Statistical Business Process Model (GSBPM) as the operating statistical production model to achieve a standardised approach to Quality Management. All and any changes implemented to CSO processes and outputs require adherence to the QMF.

## 13.2. Quality Assessment

As part of the overall CSO Quality strategy an annual self-assessment exercise is completed to evaluate the quality of processes and outputs. The latest iteration of this exercise showed that the methods used for processing the data and the final disseminated outputs are of sufficient quality to meet user needs.

# 14. Relevance

## 14.1. User Needs

The information is used at European level to monitor the operation of the milk market across the EU. The prime legal basis is Council Directive 96/16/EC which requires Ireland to conduct the survey. The results are used within the CSO for agriculture and national accounts. They are also used by the government departments, companies and semi state organisations to monitor trends within the industry.

### 14.1.1. Main National Users

- Department of Agriculture, Food and the Marine
- Other sections within the C.S.O.
- Semi-State organisations such as the National Milk Agency and Bord Bia.
- Private Companies such as Ornu

### 14.1.2. Principal External Users

- EU Commission
- Eurostat (the statistical service of European Commission)



## 14.2. User Satisfaction

Not measured.

## 14.3. Data Completeness

Most of the data requested by Eurostat is provided in the report. Where information is missing, this is due to data not being available to CSO or is confidential.

### 14.3.1. Data Completeness rate

Not calculated.

# 15. Accuracy and reliability

## 15.1. Overall accuracy

The overall accuracy of the disseminated figures is considered adequate.

## 15.2. Sampling Error

The release is based on a De-facto census methodology. Therefore, sampling is not applicable.

### 15.2.1. A1. Sampling error indicator

Not applicable.

## 15.3. Non-sampling Error

The main sources of non-sampling error associated with Milk statistics are discussed in the sections below.

### 15.3.1. Coverage error

The sample surveys must cover exhaustively dairies representing 95 % of the cows' milk collected by Member States, the balance being represented by sampling or other sources.

In general, the register covers the majority of significant creameries and pasteurisers in the country.

- a) The legislative framework is very wide ranging and also covers goat, ewe and buffalo milk production. This type of milk production is very small in Ireland and is not covered by our milk survey as it is not considered economically significant.
- b) Whilst aware of the growth of on-farm production of cheese, most production units are considered too small (even in aggregate form) to be of significant importance relative to the larger producers.

#### 15.3.1.1. A2. Over coverage rate

Not calculated.

#### 15.3.1.2. A3. Common units – proportion

Not calculated.

### 15.3.2. Measurement error



Measurement Error is not formally calculated for this survey. There is a very small likelihood of measurement error in Questionnaire, the terms used are standard for the dairy industry and are readily understood by respondents. The main source of this error might be where a respondent enters incorrect values. To ensure this is kept to a minimum, data are compared to previous returns and other edit checks are performed on data and any inconsistencies are investigated.

### 15.3.3. Non-Response Error

The dairy industry as a whole has been very co-operative with this survey. Occasionally there may be a delay in completion of a return (normally due to technical issue rather than non-response) which in turn leads to a temporary imputation based on recent trends and previous year's data for that month. There are some companies who refuse to complete the survey, these companies are imputed on the basis of administrative data for milk intake.

#### 15.3.3.1. Unit non-response rate

The response rate falls between 95.8% and 100%

#### 15.3.3.2. Item non-response rate

Not calculated

### 15.3.4. Processing error

After measurement errors are eliminated potential for processing errors are limited due to well defined processes. Standard operating procedures are maintained to ensure this. Macro year on year edit checks are performed on all results to ensure consistency and identify processing errors.

#### 15.3.5. Model assumption error

Not applicable.

## 16. Timeliness and punctuality

### 16.1. Timeliness

Final results are produced on a monthly basis within T + 40 days, with the exception of November results which are produced within T + 45 days due to the time constraint imposed by Christmas holidays within the Dairy Industry

#### 16.1.1. TP1. Time lag – First results

There are no provisional results.

#### 16.1.2. TP2. Time lag – Final results

T + 45 days for November results, T + 40 days other months.

### 16.2. Punctuality

The publication dates of all CSO releases are specified in the public release calendar available from CSO.ie. The 'Milk Statistics' release was disseminated in accordance with the date determined in the calendar.



#### 16.2.1. TP3. Punctuality – Punctuality - delivery and publication

0 days, the release was delivered within the time frame specified in the release calendar.

## 17. Comparability

### 17.1. Comparability – Geographical

As a common legislative framework is in place across the European Union for this survey, results are comparable against other European Union countries.

#### 17.1.1. CC1. Asymmetry for mirror flow statistics

Not applicable.

### 17.2. Comparability over time

In terms of times series, results are generally comparable for the entire series. However as there has been major consolidation and technological reforms in the Irish dairy industry, care should be taken in comparing data between the start and end of the time series.

- Consistent Macro edits are performed which compare totals over number of years.

#### 17.2.1. Length of Comparable Time series

47 years see comparability over time above.

### 17.3. Coherence – cross domain

Due to differing product definitions caution should be used when comparing against Prodcop results and non-EU countries.

#### 17.3.1. Coherence – Sub annual and annual statistics

Not applicable.

#### 17.3.2. Coherence with National Accounts

The results are used within the CSO for agriculture and national accounts.

### 17.4. Coherence – internal

Regular checks are carried out to ensure coherence between administrative sources and survey results.

## 18. Cost and Burden

Estimates of Cost and Burden can be obtained from the Response Burden Barometer <https://www.cso.ie/en/statistics/enterprisestatistics/responseburdenbarometer/>

Survey specific information is available via CSO's dissemination database PxStat. <https://data.cso.ie/product/RBB>

## 19. Data Revision



## 19.1. Data Revision Policy

Published statistics are subject to correction and revision for a variety of reasons. The most common reasons include the receipt of additional information (for example, late survey responses) and updated seasonal factors. Occasional revisions also occur as a result of changes to definitions, methodology, classifications and general updating of statistical series.

It is recognised internationally that the existence of a sound revisions policy maintains credibility in official statistics. The CSO General Revisions Policy, which details how revisions should be managed and communicated to users, outlines the three main types of revisions:

- Planned Routine Revisions
- Planned Major Revisions
- Unplanned Revisions.

One reason for unplanned revisions occurring can be when errors are detected after publication. The 'CSO Error Correction Policy – How to deal with Publication Errors' outlines the steps taken when these errors are detected. As required under Principle 6.3 of the European Statistics Code of Practice, errors detected in published statistics are corrected at the earliest possible date and users are informed. An important step in the process is the documentation and analysis of errors that have occurred and their causes. This allows the CSO to take measures preventing similar errors from occurring in the future and uniformity in dealing with them when they do. The data revision policy that CSO statistics adheres to can be found via the following link: <https://www.cso.ie/en/methods/quality/treatmentofrevisions/>

## 19.2. Data Revision Practice

Revisions are common up to the three months after publication. The main reason is due to responses being late. The category "Domestic Milk Intake by creameries and pasteurisers" tends to be the most adjusted category.

### 19.2.1. Data Revision – Average size

Not applicable.

## 20. Statistical processing

### 20.1. Source Data

Data is collected monthly through direct communication by email or phone.

Other national bodies that play a part in compiling milk statistics include:

- Ornu, Grattan House Mount Street Lower Dublin 2.
- Department of Agriculture, Food and Marine, Agriculture House Kildare Street Dublin 2
- National Milk Agency, Holly Park Studio, Holly Park Avenue, Blackrock, Co. Dublin

In very limited number of cases, department milk production data are used where volumes are not otherwise available due to unit non- response.

### 20.1.1. Population and sampling frame

A register of creameries and pasteurisers is kept in the CSO's Data Management System, this is sampled exhaustively monthly (except in cases where respondent has refused).

### 20.1.2. Sampling design

De-facto census, as majority of milk and milk products are covered by sample.



### 20.1.3. Survey size

Approximately 32 creameries.

### 20.1.4. Survey technique

The survey is carried out primarily by email and follow up to non-response by e-mail, telephone.

## 20.2. Frequency of data collection

Monthly

## 20.3. Data Collection

Data collection is carried out by means of an email survey with follow up reminders by telephone and email.

### 20.3.1. Type of Survey/Process

Monthly sample email survey.

### 20.3.2. Questionnaire (including explanations)

The survey also enquires as to the quantity produced of certain dairy products such as milk, butter and skimmed milk powder as well as the amount of milk imported by the processor for processing. The amount of milk imported excludes milk already pre packaged for human consumption.

The survey form can be found at this link <https://www.cso.ie/en/methods/surveyforms/milkstatistics/>

### 20.3.3. Survey Participation

The survey is a voluntary survey on respondents.

### 20.3.4. Data Capture

Data capture is performed manually.

## 20.4. Data Validation

The validation (edit) rules applied focus on difference between current and previous years returns.

Comparison checks are done by cross-reference returns against administrative sources in the Department of Agriculture. Any discrepancies are followed up with the company concerned.

## 20.5. Data Compilation

Outputs are calculated by simple aggregation of returns. Conversion factors are used in converting liquid milk volumes to weight (required by Eurostat).

Due to its production cycle, cheese production is calculated on a yearly basis.

### 20.5.1. Imputation (for Non-Response or Incomplete Data Sets)

Non-response is calculated using Excel on the basis of previous years return initially, with follow up in following month to ascertain actual figures. In a small number of cases where non-response is persistent, Department of Agriculture, Food and the Marine data is used for milk intake figures.



#### **20.5.1.1. A7. Imputation rate**

Not calculated.

#### **20.5.2. Grossing and Weighting**

Not applicable.

### **20.6. Adjustment**

Information collected on four or five week cycles are adjusted to a calendar month with care taken that total production for a concern over time corresponds with actual returns.

#### **20.6.1. Seasonal Adjustment**

Not applicable.

## **21. Comment**