

**Documentation of statistics for  
Eggs Production 2022**

## 1 Introduction

The purpose of the statistics on egg production is to describe the quantity and value of eggs produced in Denmark. The statistics on eggs have a long history and date back to the 20th century. Since 1955, the statistics have been compiled on the same basis as is used today. From 1996 and onwards, the production of consumer eggs divided into production forms: i.e. eggs from caged hens, barn eggs, free-range eggs and organic eggs.

## 2 Statistical presentation

The statistics for eggs production are a quarterly and yearly measurement of the total production of eggs for human consumption and hatching eggs in Denmark. The total production of eggs includes sales to authorized packing companies and estimates for the producers' consumption of own eggs and their direct sales to consumers. The total production of eggs to authorized egg packaging centers is subdivided into the following production types: Eggs from caged hens, barn eggs, free-range eggs, and organic produced eggs. In addition, ungraded eggs sold (barn door sales) and used on agricultural holdings are estimated. . The statistics are published in statbank and occasionally figures are provided to the newsletter Nyt from statistics Denmark (in Danish only).

### 2.1 Data description

The statistics give information on total production of eggs for consumption as well as hatching in Denmark.

The production of eggs for consumption is provided for the following categories: Consumption eggs received by egg packing centers based on quarterly reports and an estimated values ungraded eggs sold and used on agricultural holdings. by the producer. chickens and organic eggs. The total production of eggs to authorized egg packaging centers is divided into the following production types: Eggs from caged hens, barn eggs, free-range eggs, and organic produced eggs. There is information on quantities and values as well as associated prices and quotations. For eggs for consumption the statistics are compiled as quantizes in kilo. Sales prices are calculated for the total amount of eggs for consumption as well as and separately for barn eggs and organic eggs.

In addition, information about the production of hatching eggs from hubs is given. Hatching eggs are the basis for future production of hens and slaughter poultry.

## 2.2 Classification system

The egg production is divided into hatching eggs and eggs for human consumption. In the [Combined Nomenclature \(CN\)](#) equal to:

**Eggs for hatching includes:** - I: 0407 11: Fertilised eggs for incubation, of domestic fowls  
- I: 0407 19: Fertilised birds' eggs for incubation (excl. of domestic fowls)

**Eggs for consumption include:** - I 0407 21: Fresh eggs of domestic fowls, in shell (excl. fertilised for incubation)

The production off eggs for human consumption is subdivided into:

- Received by packing centres - Ungraded eggs sold and used on agricultural holdings

The eggs for human consumption sold to egg packing centers is subdivided according to following four production form:

- Eggs from caged hens
- Barn eggs
- Free-range eggs
- Organic eggs

## 2.3 Sector coverage

Agricultural sector. In addition please also consult [DBOz](#), which is the National version of EU's nomenclature (NACE)], where the statistics falls under NACE 01.47 Raising of poultry.

## **2.4 Statistical concepts and definitions**

**Eggs for Human Consumption:** Eggs used for human consumption. This include: eggs from caged hens, free-range eggs, barn eggs and organic eggs

**Eggs from caged hens:** These are eggs from chickens that go in enriched cages with at least 750 cm<sup>2</sup> of cage area per hen and with no cage having a total area that is less than 2000 cm<sup>2</sup>. A cage must not exceed 10 hens. The cage must have a nest, adequate perches and litter allowing pecking and scratching.

**Barn Eggs:** Eggs from barn hens. Eggs from hens that go indoors in flocks of 3,000 to 10,000 pieces. The stocking density must not exceed nine laying hens per m<sup>2</sup> usable area. In the stable there are nests and adequate perches, without sharp edges and at least 1/3 of the floor area must be covered with litter enabling the hens to satisfy their ethological needs.

**Free-range eggs:** Free-range eggs are eggs produced from birds permitted access to outdoor areas but otherwise with the same minimum requirements as described for barn eggs. In the stable, the stocking density must not exceed nine laying hens per m<sup>2</sup> usable area. In the stable there are nests and adequate perches, without sharp edges and at least 1/3 of the floor area must be covered with litter enabling the hens to satisfy their ethological needs. The hens must have continuous daytime access to open-air runs. The maximum stocking density of open-air runs must not be greater than 2 500 hens per hectare of ground available to the hens or one hen per 4 m<sup>2</sup> at all times. The free-range hens live in flocks of 3000 to 10000 individuals.

**Organic Eggs:** Organic eggs is produced through organic means. The poultry are fed organic feed. In the stable, the stocking density must not exceed six laying hens per m<sup>2</sup> usable area. In the stable there are nests and adequate perches, without sharp edges and at least 1/3 of the floor area must be covered with litter enabling the hens to satisfy their ethological needs. The hens must have continuous daytime access to open-air runs. The maximum stocking density of open-air runs must not be greater than 2 500 hens per hectare of ground available to the hens or one hen per 4 m<sup>2</sup> at all times. There must be more than one open-air run provided. The organic hens live in flocks up to 3000 individuals.

**Hatching Eggs:** Eggs used to production of chicken.

## **2.5 Statistical unit**

Egg packing centers and hatcheries. In addition farmers own consumption of eggs as well as eggs sold by the producer to the final consumer are estimated.

## **2.6 Statistical population**

The production of eggs for consumption and eggs for hatching.

## **2.7 Reference area**

Denmark.

## **2.8 Time coverage**

The statistics cover the period from 1996 onwards.

## **2.9 Base period**

Not relevant for this statistics.

## **2.10 Unit of measure**

The production is measured in million kg eggs, the prices in DKK øre per kilogram of eggs and the value of the production in million DKK kr.

## **2.11 Reference period**

Quarter and calendar year.

## **2.12 Frequency of dissemination**

Quarterly.

## **2.13 Legal acts and other agreements**

Law on Statistics Denmark §8 secures the legal ground for collecting the data.

The statistics for hatching eggs fall within the scope of [Commission Regulation \(EC\) No. 617/2008](#) of 27 June 2008 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 as regards marketing standards for hatching eggs and chickens of poultry.

The statistics of Eggs for consumption is not based on an EU directive. The Survey is based on the [ESS Agreement on statistics on eggs for consumption](#), which means that the individual member states alone decide if they want to provide data.

The statistic falls under EU Council Regulation 2782/75/EEC and the Directive on Gross Domestic Production.

## **2.14 Cost and burden**

There statistics are based on administrative data. There is thus no direct response burden, in relation to the compilation of these statistics.

## **2.15 Comment**

Further information can be found at the [Subject page](#) for these statistics, or by contacting Statistics Denmark directly.

### **3 Statistical processing**

Data is collected quarterly from the egg packers on the sale of weighed eggs for consumption by types of eggs. Every month information about hatching eggs is collected from the hatcheries. Data comes from administrative records. The data received is checked for completeness and consistency as well as consistency with previous periods.

#### **3.1 Source data**

Data on eggs weighed in on egg packages comes from an administrative register in the Ministry of the Environment and Food with information on egg turnover in the packages.

All egg parcels are obliged to report, see [Egg conversion - Report for egg packing applications](#). The purpose is for all registered parcels to pay a fee that is used for the financing of controls, including supervision, authorization, registration, approval, notification, certification and examination of the eggs.

Data on hatching eggs are from the [Poultry Tax Fund](#) where the hatcheries are required to report data. The purpose is for all registered hatcheries to pay a fee that is used to fund control, including supervision, authorization, registration, approval, etc.

#### **3.2 Frequency of data collection**

Data on the number of eggs delivered to the egg packing centers are collected quarterly and hatched eggs on hatcheries every month. Prices of eggs are collected quarterly, but they are confidential data due to few reports.

#### **3.3 Data collection**

Data from registers is sent to Statistic Denmark.

#### **3.4 Data validation**

Material is subjected to a check for errors, by collecting data with earlier periods.

#### **3.5 Data compilation**

Data is checked, summarized and compiled into tables to the statistics bank. Home consumption and direct sale of eggs to consumers, are from 2020 12 million kilo per year, by far the largest part takes place with race and hobby herds. In the period of 2009 to 2019 it was 8 million kilo and before 2009 it was 16 million kilo per year. The price of these eggs is calculated as an average price for all eggs, irrespective of the type of production.

#### **3.6 Adjustment**

No correction of data is made except what has already been described during data validation and data processing. There is no seasonal adjustment.

## **4 Relevance**

It is of great interest to agricultural organizations, the Ministry of Environment and Food and the EU. The figures is used intern in Statistics Denmark to estimate quantity and price index, and the Account for Agriculture, which is included in the National Accounts.

### **4.1 User Needs**

The statistics on egg production are of great interest to the agricultural organizations, the Ministry of the Environment and Food and the EU. Data is used internally in Statistics Denmark for eg. to calculate the volume and price indices, as well as the agricultural gross factor income, which is included in the National Accounts.

### **4.2 User Satisfaction**

The statistics can be discussed at meetings of the User Committee for Food Statistics. Here the members can ask questions about the statistics. The user committee consists of the central users of the statistics, with representatives from the agricultural and fisheries organizations, the Ministry of Food and Research and Research. The main impression is that most users are happy with the statistics.

### **4.3 Data completeness rate**

The statistics comply with the requirements laid down in the regulations.

## **5 Accuracy and reliability**

Data on the eggs weighed in the packing centers has a high quality, as it is mandatory for egg producers to report this data with the Danish Veterinary and Food Administration. The same applies to the number of hatching eggs where it is compulsory for them to be registered in the Ministry of Food.

The estimation of eggs for own consumption and sales directly to consumers is estimated. This consumption is set at 12 million.

### **5.1 Overall accuracy**

Data on the eggs weighed in the packing centers has a high quality both regarding the type of egg and the amount of these, as it is mandatory for egg producers to report this data. The same applies to the number of hatching eggs, as this information is statutory to register and report to Food Enforcement.

The estimation of eggs for own consumption and sales directly to consumers is estimated - and there is some uncertainty as the average number of hens and thus eggs is unknown. This consumption is set at 12 million. and are listed in the table so that users can choose to use the numbers without this estimate. The estimate may be too high, as 10 per cent. of the total production is considered to be high.

## 5.2 Sampling error

Not relevant for this statistics.

## 5.3 Non-sampling error

The production of eggs does not cover eggs of private individuals outside the agricultural sector. The hatching eggs inventory only covers hatching eggs on hatcheries. There is an uncertainty in the estimate of consumption of eggs by the producers and sale of eggs directly to consumers, as we do not know this uncertainty, the figure is entered separately in the statistical bank. . The estimate may be too high -13 percent of total production is considered to be high consumption and direct sales to consumers.

It is not possible to check whether the calculation of hatching eggs at the end of the month falls in the correct month, but the starting point is that this happens. The same applies to the weighed eggs in the packing rooms

## 5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

## 5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

## 5.6 Quality assessment

The inventory of eggs weighed in on the egg packing centers is good, as well as the price and value of the different egg types. The largest uncertainty is the estimated consumption of egg producers and, in particular, sales directly to consumers. This uncertainty transfers something to the calculation of the total production of eggs both quantity and value, so data is shown both without and with own consumption and direct sales to consumers.

## 5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.



## 5.8 Data revision practice

Only final figures are published.

## 6 Timeliness and punctuality

The figures for quarters are usually published approx. 2 months after the end of the quarter. In recent years there has been trouble publishing both numbers to the pre-announced time, since data has first been available approx. 2 months after the end of the quarter.

### 6.1 Timeliness and time lag - final results

Figures for the quarter are published approx. 2 month after the end of the quarter.

### 6.2 Punctuality

The statistics are normally published without delay in relation to the advertised, but there have been delays in recent years due to problems with data.

## 7 Comparability

The statistics have been compiled since the 20th century but are in their present form comparable from 1997 onwards. Most European countries compile statistics on egg production and the statics are therefore comparable to statistics from other countries within the EU. Data enter into the Economic Accounts for Agriculture, which also enter into the National Account.

### 7.1 Comparability - geographical

Most European countries have independent statistics on egg production. In Eurostat data are published [Egg production](#). Prices for eggs are included in the price statistics and the value of total egg production is included in the national agricultural accounts included in the national accounts of all European countries. In Eurostat data are published [Activity on hatcheries] (<https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>).

### 7.2 Comparability over time

The statistics about eggs have a long history, and since the 1900s it has been possible to compare time series over the production of eggs. There has been an improvement in the statistics in 1932, where total production was divided into sales for egg packers and producer consumption and sales directly to consumers. Since 1955 the statistics have been prepared on the same basis as now. In 1997, the production of eggs was divided into production: Free-range eggs, Organic Eggs, Barn Egg, Scrapper Egg,

Long time series are possible. Older data can be found in the Publications [Agriculture](#) and [Agricultural Statistics](<https://www.dst.dk/en/Statistik/Publications/VisPub?cid=19733>)

### 7.3 Coherence - cross domain

Some statistics are published by [Danish Agriculture & Food Council](#)

#### **7.4 Coherence - internal**

No comment.

#### **8 Accessibility and clarity**

- StatBank Denmark: [Production of eggs and types of production by unit \(quarters\)](#)
- StatBank Denmark: [Production of eggs and types of production by unit \(year\)](#)

#### **8.1 Release calendar**

The publication date appears in the release calendar. The date is confirmed in the weeks before.

#### **8.2 Release calendar access**

The Release Calendar can be accessed on our English website: [Release Calendar](#).

#### **8.3 User access**

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

#### **8.4 News release**

There is no independent New from Denmark Statistics for this statistic, but it is mentioned under Animal production.

#### **8.5 Publications**

The production of eggs see the subject page: [Animalsk produktion](#).

#### **8.6 On-line database**

The statistics are published in the StatBank under the subjects in the following tables:

- [ANI8](#): Production of eggs and types of production by unit and time
- [ANI81](#): Production of eggs and types of production by unit and time

#### **8.7 Micro-data access**

There is no micro-data access.

#### **8.8 Other**

Not relevant for this statistics.

### **8.9 Confidentiality - policy**

In the compilation of the data, the confidentiality policy of Statistics Denmark is followed. [Datafortrolighedspolitik](#).

### **8.10 Confidentiality - data treatment**

We ensure that no companies and manufacturers can be identified. The discretionary reason has meant that from 2018 it was no longer possible to publish the prices of eggs.

### **8.11 Documentation on methodology**

There are no separate method descriptions for this statistic.

### **8.12 Quality documentation**

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

## **9 Contact**

The administrative placement of this statistics is in the division of Food Industries. The person responsible is Mona Larsen, tel. + 45 3917 3399, e-mail: [mla@dst.dk](mailto:mla@dst.dk)

### **9.1 Contact organisation**

Statistics Denmark

### **9.2 Contact organisation unit**

Food Industry, Business Statistics

### **9.3 Contact name**

Mona Larsen

### **9.4 Contact person function**

Responsible for the statistics

### **9.5 Contact mail address**

Sejrøgade 11, 2100 Copenhagen

**9.6 Contact email address**

mla@dst.dk

**9.7 Contact phone number**

+45 3917 3399

**9.8 Contact fax number**

N/A