Documentation of statistics for Sale of Organic Foods in Retail Shops 2018

## STATISTICS <br> DENMARK

## 1 Introduction

These statistics cover the size and composition of the turnover of organic food in supermarkets and department stores. The study was conducted for the first time for the year 2003, but since 2017 companies who exclusively sell online, including subscriptions, have been included in the survey.

## 2 Statistical presentation

'Sale of organic foods in retail shops' is an annual statement of the sale of organic food and beverages in the retail trade, calculated by quantity and value. The statistics are divided into product groups. Data basis for the survey is reports from the major supermarket chains and wholesalers, who sell food to retailers.

### 2.1 Data description

The retail sales of organic foods highlight the extent and composition of organic food sales in supermarkets and department stores, etc. The turnover is divided into a number of commodity groups and is measured in weight and value respectively.

The retail trade is handled by a number of supermarket chains and department stores as well as a number of independent merchants, kiosks and the like. The study population consists of two subpopulations: partly the supermarket chains and the warehouses, and a number of wholesalers who, in addition to their own chains, also supply to merchants, kiosks etc. The suppliers that participate in the survey estimate that they cover most of the total supply of goods to the sector. This concentration means that it is possible to reduce the industry's overall reporting burden without this having any significant impact on the study's coverage ratio and thus validity.

The supermarket chains and department stores report the actual sale of organic goods with the indication of the net weight in kg and turnover in DKK incl. VAT. The wholesale chains report sales to their own supermarket chains and other wholesale sales to the retail trade.

The product classification used is, with a few exceptions, identical to the product classification used by Statistics Denmark's consumption survey.

### 2.2 Classification system

The used product classification is, with some exceptions, identical to the product classification used by Statistics Denmark's consumer survey.

Definitions available in the questionnaire (in Danish), that can be downloadet from survey site for data suppliers.

### 2.3 Sector coverage

Companies in retail, selling food.

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### 2.4 Statistical concepts and definitions

Organic products: Products that meet Danish legislation on marketing of organic products.
Quantities: Turnover calculated in tonne (net weight).
Value: Turnover calculated in 1000 kr . Including VAT.
Commodity group: Covers a variety of related products. There is a total of 85 categories in the data collection which are aggregated to 51 in the Statbank. The commodity groups are defined in details in questionnaire to respondents under instructions (in Danish).

### 2.5 Statistical unit

The statistics are published on turnover (DKK, volume) from companies.

### 2.6 Statistical population

Supermarket chains and department stores as well as various wholesale chains that supplies smaller supermarkets and drug stores. Online-sales are included.

### 2.7 Reference area

Denmark.

### 2.8 Time coverage

2003-

### 2.9 Base period

Not relevant to this statistics.

### 2.10 Unit of measure

Revenue published in 1000 kr . incl. VAT (Value) as well as tons (volume).

### 2.11 Reference period

The statistics cover sales in the calendar year referred to.

### 2.12 Frequency of dissemination

Annual.

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### 2.13 Legal acts and other agreements

Act on Statistics Denmark $\S 6$ and $\S 8$. There is no EU regulation.

### 2.14 Cost and burden

Repondent's burden is less than 0,1 man-year.

### 2.15 Comment

Additional information can be obtained from Statistics Denmark.

## 3 Statistical processing

Survey population: the major supermarket chains and wholesalers, who sell food to retailers. Questionnaires are quality controlled (correlation between value and quantity, developments from previous years) and respondents are recontacted if necessary. Information from wholesalers is recalculated into retail prices, so the reported information is comparable with other reported data from supermarkets and department stores.

### 3.1 Source data

Survey population: the major supermarket chains and wholesalers, who sell food to retailers (in total less than 20 data suppliers).

Farmshops, specialised shops and web shops are not included. These cover less than 10 p.c. of the sale of organic turnover. Source: Økologisk Landsforening "Økologisk Markedsnotat 2018". These sales channels can be assumed to have a different composition of the organic turnover than the covered population.

### 3.2 Frequency of data collection

Annual.

### 3.3 Data collection

Data are collected in electronic form (spreadsheet). Questionnaire and guides available at survey site for data suppliers (in Danish)

### 3.4 Data validation

Questionnaires are quality controlled (correlation between value and quantity, developments from previous years) and respondents are recontacted if necessary.

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### 3.5 Data compilation

Information from wholesalers is recalculated into retail prices, so the reported information is comparable with other reported data from supermarkets and department stores. The following method is applied:

Total turnover from supermarkets and department stores is used to calculate kilo price of individual commodity groups.

The amount of sale from from wholesalers is multiplied with the corresponding retail prices.
Subsequently the calculated turnover in value terms for individual merchants is compared with the actual turnover, to check if the method is appropriate for all product categories. In case of doubt, the wholesalers have been re-contacted.

The prerequisite to use the turnover in wholesale trade as an estimate for the corresponding turnover in retail is that the retail shops that are members of DSK (plus other small chains/grosers/kiosks), get all or most of their goods from the wholesaler chains. Various experts estimate that this is the case to very large extent.

For fruits and vegetables is considered by experts that the wholesalers do not supply all the goods within these two groups. As a result, the quantities reported from wholesalers is increased for fruit and vegetables.

In few cases, shops that are members of the DSK get milk directly from the dairies bypassing wholesalers. There has not been corrected for this. Sales of dairy products may thus be underestimated a little.

The organic food and beverage share of the total retail sales for food and beverages is from 2017 estimated based on sales figures obtained directly from the companies included in the survey.

2018

- All goods (DKK 1,000): DKK 111,840,000.
- Organic goods (DKK 1,000): DKK 12,864,889.
- Share of organic products: 12 per cent

2017

- All goods (DKK 1,000): DKK 111,351,000.
- Organic goods (DKK 1,000): DKK 11,325,123.
- Share of organic products: 10 per cent

Up to 2016, the total retail sales of food and beverages were calculated using the study "Retail sales by industry and product group" and an index for the development of retail sales of food and beverages. "Retail sales by industry and product group" is no longer carried out. The new calculation basis is considered to be more accurate than the previous one. The shares from 2017 cannot be compared to previous years. This is partly due to the new calculation basis and partly to the expansion of the survey in 2017 with companies that exclusively sell on-line (including subscription sales).

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### 3.6 Adjustment

No corrections of data in addition to what has already been described during data validation and data processing.

## 4 Relevance

The statistics is used by interest groups, authorities etc. to assess the level and composition of organic consumption.

### 4.1 User Needs

The statistics are used by interest groups, authorities etc. to assess the level and composition of organic consumption.

### 4.2 User Satisfaction

User needs are covered in the User Committee for Food statistics. Statistics Denmark is also in regular contact with key users, including the Ministry of Food and research institutions.

### 4.3 Data completeness rate

No requirements from legal acts and guidelines.

## 5 Accuracy and reliability

Census, no sampling error.
There is some uncertainty in the calculation of data from the wholesalers. After a detailed analysis of the questionnaires received, Statistics Denmark asses that the information overall gives a true picture of retail sales of organic food and drinks in supermarkets and department stores, however, sales of dairy products can be underestimated.

The reported figures are estimated to be of good quality.

### 5.1 Overall accuracy

Census, no sampling error.
There is some uncertainty in the calculation of data from the wholesalers. After a detailed analysis of the questionnaires received, Statistics Denmark asses that the information overall gives a true picture of retail sales of organic food and drinks in supermarkets and department stores, however, sales of dairy products can be underestimated.

The reported figures are estimated to be of good quality.

### 5.2 Sampling error

Census, no sampling error.

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### 5.3 Non-sampling error

The study does not cover the following channels:

1. Yard and farm sales
2. Health food stores
3. Specialized shops such as greengrocers, bakers
4. Market sales

The above sales channels covered less than 5 p.c. of the organic turnover in 2016. Source: Økologisk Landsforening "Økologisk Markedsnotat 2017", Numbers from Gfk ConsumerScan. These sales channels can be assumed to have a different composition of the organic revenue than the covered population.

Retail shops where the turnover is collected via their wholesalers, can in some cases get their goods from other sources. E.g. sales of dairy products can be a little underestimate.

### 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

This is a census of supermarkets and department stores, ie without sampling errors. In addition the largest online stores are included. It is assumed that these account for a large proportion (95 per cent.) of the total sales of organic foods in retail.

### 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

Normally only final figures are published.

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## 6 Timeliness and punctuality

Dissemination 4-5 months after the survey year. The statistics is usually published as scheduled.

### 6.1 Timeliness and time lag - final results

Dissemination 4-5 months after the survey year.

### 6.2 Punctuality

The statistics is usually published as scheduled.

## 7 Comparability

There is no public comparable statistics. However, some comparison can be made to statistics on the the overall retail, for example, e.g. Retail Index.

In Sweden and Norway one can find partially comparable statistics. The Danish statistics are comparable from 2003 to now.

### 7.1 Comparability - geographical

Statistics Sweden (SCB) has a partly comparable statistics. There is some differences in the coverage of goods and sales channels.

Norway: Landbrugsdirektoratet. Statistics from various sources in 'Produksjon og omsetning av økologiske landbruksvarer'

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### 7.2 Comparability over time

The survey was conducted for the first time for the year 2003. The results from 2003-2016 are directly comparable. From 2017, stores that sell exclusively on-line (including subscription sales) included in the survey.

The organic food and beverage share of the total retail sales for food and beverages is from 2017 estimated based on sales figures obtained directly from the companies included in the survey.

2018

- All goods (DKK 1,000): DKK 111,840,000.
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### 7.3 Coherence - cross domain

There is no public comparable statistics. However, some comparison can be made to statistics on the the overall retail, for example, e.g. Retail Index.

### 7.4 Coherence - internal

Data are internally consistent in general, however, there is a special calculation of wholesalers turnover (see calculation) to make it comparable with the supermarkets.

## 8 Accessibility and clarity

The statistics are published in Statbank and in the News from Statistics Denmark, which can be viewed on topic page on organic statistics.

### 8.1 Release calendar

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

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### 8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

### 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

These statistics are published in a Danish press release.

### 8.5 Publications

- [Statistical Yearbook (https://www.dst.dk/en/Statistik/Publikationer.aspx) (selection of results from Statbank)


### 8.6 On-line database

The statistics are published in the StatBank in the following table:

- OEKO3: Turnover of organic foods in retail shops by commodities, unit and time


### 8.7 Micro-data access

Researcher's access is not relevant due to a little number of respondents.
Groups of commidities are published in detail in Stat.Bank.

### 8.8 Other

Groups of commidities are published in detail in Stat.Bank. More detailed commodities can be made available by appointment.

### 8.9 Confidentiality - policy

Confidentiality policy

### 8.10 Confidentiality - data treatment

The statistics are not published on a level that requires confidentialisation.

### 8.11 Documentation on methodology

Detailed information can be found in Statistiske Efterretninger (Landbrug) 2004:19.

### 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 statistic is in the division of Food Industries. The persons responsible are:

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### 9.1 Contact organisation

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