

FORKFUL OF FACTS

Finnish Food Industry Statistics

2018

Ruokatieto

FOR THE READER

Forkful of Facts – Food Industry Statistics contains a wide variety of figures concerning Finnish agriculture, covering the entire food chain, from field to fork.

Forkful of Facts presents figures about food chain practices and value-adding factors, which can be utilised to enhance the competitiveness of the Finnish food chain, which relies on responsible practices. The statistics have been divided under headings environment, product safety, nutrition, work and well-being at work, animals and animal well-being, locality and economy. This division follows the seven dimensions of food chain sustainability. Nevertheless, it must be noted that the selected statistics do not measure the level of sustainability, as research on the subject is still at an early stage.

The latest information in this Forkful of Facts is mainly from 2017. We have also included information from earlier years as well as international data for comparison.

A paper copy of Forkful of Facts is available in three languages (Finnish, Swedish, English) and it is also available online at www.ruokatieto.fi/tietohaarukka.



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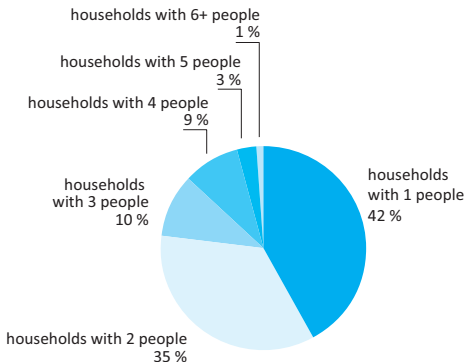
Explanation of symbols:

p. = preliminary data

.. = data not available

HOUSEHOLDS BY SIZE

In 2016 there were 2 677 000 households in Finland.



Source: Statistics Finland

On January 1st 2018 the population of Finland was 5 513 130.

On January 1st 2018 the population density of Finland was approximately 18.14 people per square kilometer.

In the year 2016 the average size of a household was approximately 2.02 people.

Source: Statistics Finland

GROSS DOMESTIC PRODUCT

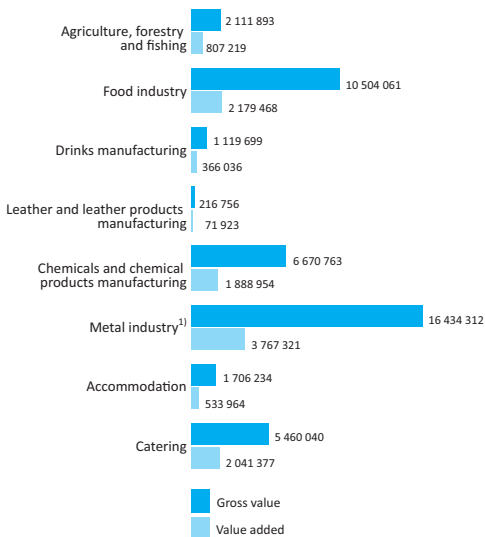
| Distribution by field of activity % ¹⁾ | 2005 | 2010 | 2016 | 2017 p. |
|---|-------------|-------------|-------------|----------------|
| Agriculture, forestry and fishing | 2.6 | 2.7 | 2.8 | 2.7 |
| of which agriculture | 1.1 | 0.9 | 0.7 | 0.6 |
| Manufacturing | 24.3 | 19.5 | 17.0 | 17.6 |
| of which food industry | 1.5 | 1.3 | 1.4 | 1.4 |
| Construction | 6.4 | 6.4 | 6.9 | 7.1 |
| Wholesale and retail trade ¹⁾ | 9.8 | 9.4 | 7.6 | 7.5 |
| Transportation and storage | 5.7 | 5.1 | 4.8 | 4.8 |
| Accommodation and food service activities | 1.6 | 1.6 | 1.7 | 1.8 |
| of which food service activities | 1.2 | 1.3 | 1.4 | 1.4 |
| Information and communication | 5.0 | 5.0 | 5.8 | 5.8 |
| Financial and insurance activities | 2.7 | 2.6 | 2.9 | 2.9 |
| Real estate activities | 10.2 | 11.2 | 12.7 | 12.7 |
| Human health and social work activities | 8.2 | 9.3 | 9.9 | 9.4 |
| ¹⁾ selected fields of activity included in the gross domestic product. | | | | |
| Gross value added at basic prices, billion EUR | 143.6 | 163.6 | 186.0 | 193.3 |
| GDP in purchasers' values, billion EUR | 164.4 | 187.1 | 216.1 | 223.8 |

Source: Statistics Finland. National Accounts

GROSS VALUE OF AND VALUE ADDED TO PRODUCTION BY INDUSTRY BRANCH 2016

Gross value (thousand euros)

Value added (thousand euros)



Source: Statistics Finland, Standard industrial classification TOL 2008

¹⁾ The metal industry includes metal refining and manufacture of metal products (excl. machines and equipment).

The gross value of production measures the actual production of the site. All revenues related to production are included in production activity, also manufacturing for its own use, and manufacturing which is supplied to the other sites of the company.

The value added measures the total added value of the site produced in its actual production activity by the various producers. The value added is calculated as the difference between the revenues obtained from production activity and the costs incurred from the activity.

BIOECONOMY IN 2016 p.

| | Output. MEUR | Value added. MEUR | Em- ployed. 1 000 persons | Export of goods MEUR |
|-------------------------------------|-----------------|-------------------------|------------------------------------|-------------------------------|
| Agriculture | 4 386 | 1 287 | 75.2 | 462 |
| Food industry | 10 927 | 2 608 | 37 | 1 249 |
| Forestry | 4 855 | 3 509 | 21.7 | 44 |
| Chemical industry | 2 423 | 678 | 3.3 | 1 657 |
| Water treatment and distribution | 733 | 426 | 2.7 | .. |
| Bioeconomy services | 3 540 | 1 590 | 35.4 | 23 |
| of which nature tourism | 3 254 | 1 395 | 33.8 | .. |
| of which hunting | 76 | 76 | 0 | 0 |
| of which fishing | 210 | 119 | 1.6 | 23 |
| Bioeconomy total | 64 432 | 22 136 | 304.2 | 16 437 |
| National economy total | 395 580 | 185 649 | 2 510.40 | 52 957 |
| Share of bioeconomy. % | 16 | 12 | 12 | 31 |

Source: Natural Resources Institute Finland

Output, value added and export expressed in current prices.

LABOUR FORCE

| Field of activity | 2000 % | 2005 % | 2016 % | 2017 % | 2017 1 000 persons |
|---|-----------|-----------|-----------|-----------|--------------------------|
| Agriculture, forestry, fish- ing, mining and quarrying | 6 | 5 | 4 | 4 | 99 |
| of which agriculture | 5 | 4 | 3 | 3 | 71 |
| of which forestry | 1 | 1 | 1 | 1 | 21 |
| Industry ¹⁾ | 20 | 17 | 13 | 13 | 326 |
| of which food and beverage industry | 2 | 2 | 2 | 1 | 35 |
| Construction | 6 | 7 | 7 | 8 | 187 |
| Wholesale and retail trade ²⁾ | 12 | 12 | 12 | 11 | 282 |
| Transport and storage | 7 | 6 | 6 | 6 | 139 |
| Accommodation and food service activities | 3 | 3 | 3 | 3 | 85 |
| Other services and fields of activity | 45 | 49 | 54 | 55 | 1 358 |
| Unknown field of activity | 0.3 | 0.2 | 0.3 | 0.2 | 5 |
| Employed total | 100 | 100 | 100 | 100 | |
| in thousands | 2 335 | 2 401 | 2 448 | 2 473 | 2 473 |
| Total labour force in thousands | 2 589 | 2 621 | 2 685 | 2 707 | 2 707 |
| of which unemployed % | 9.8 | 8.4 | 8.8 | 8.6 | 8.6 |

Source: Statistics Finland, Standard industrial classification TOL 2008

¹⁾ including electricity, water supply, waste management etc.²⁾ including repair of motor vehicles and motorcycles.

OCCUPATIONAL DISEASES BY INDUSTRY 2014

| Occupational diseases | pcs | per 10 000 employed |
|--|-----|---------------------|
| Crop farming, animal husbandry, game husbandry | 141 | 18.5 |
| Production of foodstuff | 50 | 14.7 |
| Bevegare industry | 1 | 3.2 |
| Food service activities | 25 | 3.5 |

Source: Finnish Institute of Occupational Health

NUMBER OF OCCUPATIONAL ACCIDENTS

| Occupational accidents ¹⁾ per 100,000 working in the industry | 2005 | 2010 | 2014 | 2015 |
|--|-------|-------|-------|-------|
| Agricultural entrepreneurs | 5 962 | 4 882 | 4 854 | 4 309 |
| Food and drink industry employees | 7 696 | 6 919 | 3 228 | 2 869 |
| All occupations ²⁾ | 2 581 | 2 103 | 1 782 | 1 703 |

Source: Statistics Finland, Workers' Compensation Center

The accident frequency has been calculated as per the industry of the employer.

¹⁾ occupational accidents leading to at least 4 days of incapacity for work.

²⁾ occupational groups with at least 10 000 employees.

AVERAGE AGE AND NUMBER OF AGRICULTURAL ENTREPRENEURS

| | 1995 | | 2005 | | 2017 | |
|---|-----------|---------|-----------|--------|-----------|--------|
| | aver. age | number | aver. age | number | aver. age | number |
| Agricultural entrepreneurs | 45.1 | 142 000 | 47.6 | 90 000 | 48.7 | 59 000 |
| Start-up entrepreneurs ¹⁾ | 29.9 | 70 | 29.8 | 760 | 29.2 | 120 |
| Retiring entrepreneurs ²⁾ | 60.2 | 6 600 | 60.8 | 3 900 | 62.4 | 2 000 |
| Recipients of farmers' early retirement aid ³⁾ | 57.8 | 560 | 58.6 | 1 420 | 58.8 | 160 |

Source: Farmers' Social Insurance Institution Mela, statistics based on data on agricultural entrepreneurs covered by insurance under the Farmers' Pensions Act (MYEL)

¹⁾ entrepreneurs taking up farming through succession within the farmers' early retirement aid scheme.

²⁾ covering those retiring on old-age, disability and unemployment pension.

³⁾ those giving up farming through succession within the farmers' early retirement aid scheme.

MOST IMPORTANT REASONS FOR RETIREMENT ON DISABILITY PENSION AMONG AGRICULTURAL ENTREPRENEURS

| % | 1995 | 2005 | 2016 | 2017 |
|----------------------------|-------------|-------------|-------------|-------------|
| Respiratory diseases | 7 | 3 | 2 | 2 |
| Mental illnesses | 14 | 20 | 17 | 17 |
| Musculoskeletal disorders | 46 | 47 | 44 | 46 |
| Injuries, poisonings, etc. | 6 | 9 | 7 | 6 |
| Cardiovascular diseases | 15 | 8 | 9 | 6 |
| Tumours | .. | .. | 7 | 10 |
| Nervous system disorders | .. | .. | 8 | 7 |

Source: Farmers' Social Insurance Institution Mela

% = share of the entire year's disability pensions among agricultural entrepreneurs.

AGRICULTURE

MEAN PRECIPITATION 1981–2017, mm

| | spring | summer | autumn | winter |
|-----------------------------------|--------|--------|--------|--------|
| Helsinki | 106 | 204 | 204 | 149 |
| Jyväskylä | 115 | 231 | 176 | 128 |
| Oulu | 84 | 195 | 133 | 95 |
| Sodankylä | 100 | 197 | 138 | 101 |
| Frankfurt ¹⁾ , Germany | 145 | 180 | 159 | 149 |
| Padova ¹⁾ , Italy | 195 | 183 | 221 | 149 |

Source: Finnish Meteorological Institute

¹⁾ average years 1981–2015.

MEAN TEMPERATURES 1981–2017, °C

| | spring | summer | autumn | winter |
|-----------------------------------|--------|--------|--------|--------|
| Helsinki | 4.5 | 16.3 | 6.8 | -3.2 |
| Jyväskylä | 2.5 | 14.8 | 3.7 | -7.3 |
| Oulu | 1.6 | 14.7 | 3.4 | -8.3 |
| Sodankylä | -0.9 | 12.7 | 0.1 | -12.3 |
| Frankfurt ¹⁾ , Germany | 10.7 | 19.2 | 10.6 | 2.5 |
| Padova ¹⁾ , Italy | 13.6 | 23.5 | 14.4 | 4.2 |

Source: Finnish Meteorological Institute

¹⁾ average years 1981–2015.

WEATHER CONDITIONS DURING THE GROWING SEASON

| | Effective temperature comparative period | | | Precipitation comparative period | | |
|-------------------------|---|-------|-----------|-------------------------------------|------|-----------|
| | 2017 | 2016 | 1981–2010 | 2017 | 2016 | 1981–2010 |
| Jokioinen | 1 174 | 1 416 | 1 307 | 397 | 282 | 341 |
| Kauhava | 1 059 | 1 304 | 1 185 | 279 | 378 | 286 |
| Oulu | 1 007 | 1 245 | 1 170 | 265 | 325 | 257 |
| Sodankylä | 753 | 996 | 795 | 207 | 413 | 227 |
| Frankfurt ¹⁾ | 2 647 | .. | 2 411 | 351 ¹⁾ | .. | 496 |
| Padova ¹⁾ | 3 558 | .. | 3 368 | 784 ¹⁾ | .. | 643 |

Source: Finnish Meteorological Institute

¹⁾ in 2015.

DAY LENGTH, hours

| | spring | summer | autumn | winter |
|--------------------|--------|--------|--------|--------|
| Helsinki | 14.5 | 17.5 | 10.2 | 7.2 |
| Kauhava | 14.9 | 18.4 | 9.9 | 6.4 |
| Oulu | 15.3 | 19.1 | 9.7 | 5.8 |
| Sodankylä | 15.8 | 21.1 | 9.3 | 4.3 |
| Frankfurt, Germany | 13.7 | 15.5 | 10.8 | 8.9 |
| Padova, Italy | 13.4 | 15.0 | 11.0 | 9.4 |

Source: Finnish Meteorological Institute

ORGANIC PRODUCTION AREA AND NUMBER OF ORGANIC FARMS

| Area, ha | 1995 | 2005 | 2016 | 2017 |
|---|--------|-------------------------|------------------|---------|
| Certified organic area, ha | 23 139 | 135 223 | 199 552 | 216 693 |
| In-conversion area, ha | 21 557 | 12 364 | 41 063 | 42 759 |
| Total organically farmed area, ha | 44 696 | 147 588 | 240 614 | 259 451 |
| Percentage of organically farmed area of the total area of production % | .. | 6.7 | 10,7 | 11,4 |
| Organic farm size, ha/farm | 20 | 34 | 55 | 57 |
| Organic farms, number | 2 793 | 4 296 | 4 415 | 4 587 |
| Percentage of organically farmed area of the total area of production % | .. | 3.6 ¹⁾ | 6,7 ^p | .. |
| EU 28 | .. | 3.6 ¹⁾ | 6,7 ^p | .. |
| Total organically farmed area, EU 28 | .. | 6 475 828 ¹⁾ | 11 931 589 | .. |

Source: Finnish Food Safety Authority Evira, Eurostat

¹⁾ the 2005 figure is for the EU 27.

Locality

NUMBER OF ORGANIC PRODUCERS

| | 2008 | 2011 | 2016 | 2017 |
|--|-------|-------|-------------------|-------------------|
| Organic primary production ¹⁾ | 3 758 | 3 975 | 4 356 | 4 509 |
| from which organic animal farms | 511 | 643 | 959 | 974 |
| Organic foodstuff producers | 401 | 487 | 697 ²⁾ | 742 ²⁾ |
| Organic feedstuff producers | 16 | 33 | 47 | 45 |
| Organic seed packing plants | .. | 31 | 25 | 25 |
| Total | 4 175 | 4 526 | 5 241 | 5 437 |
| Organic primary production EU 28 | .. | .. | 295 618 | .. |

Source: Finnish Food Safety Authority Evira, Eurostat

¹⁾ includes, in addition to farms, also greenhouse, mushroom farms and beekeepers.

²⁾ this figure includes subcontractors.

USE OF ARABLE LAND ON ORGANIC FARMS

| Certified organic area, ha | 1995 ¹⁾ | 2005 | 2016 | 2017 |
|-----------------------------------|---------------------------|----------------|---------------------|---------------------|
| Grass | 11 431 | 60 195 | 120 724 | 136 694 |
| Cereals | 8 158 | 46 362 | 54 179 | 58 147 |
| wheat | 724 | 6 629 | 4 901 | 5 074 |
| rye | 1 616 | 4 594 | 4 685 | 3 306 |
| barley | 2 118 | 6 760 | 5 042 ²⁾ | 5 110 |
| oats | 2 447 | 23 134 | 28 750 | 32 428 |
| mixed : straw grains | 302 | 2 798 | 3 114 | 3 148 ²⁾ |
| mixed: legumes+straw grains | 927 | 1 842 | 7 557 | 8 284 |
| Peas | 120 | 1 289 | 2 003 | 2 298 |
| Buckwheat | 23 | 185 | 527 ²⁾ | 599 ²⁾ |
| Caraway | 9 | 355 | 142 ²⁾ | 158 ²⁾ |
| Flax | 22 | 277 | 167 | 123 ²⁾ |
| Turnip rape | 64 | 2 419 | 1 676 | 1 539 |
| Potatoes | 423 | 440 | 607 | 761 |
| Vegetables, open land | 197 | 211 | 317 | 468 |
| Greenhouse vegetables | 2 | 9 | 8 | 8 |
| Leafherbs | 17 | 16 | 7 | 10 ²⁾ |
| Berries and fruit | 256 | 800 | 677 | 714 |
| Other crops | 395 | 3 672 | 14 605 | 5 214 |
| Fallow | 2 022 | 19 178 | 3 913 | 10 650 |
| Total | 23 139 | 135 223 | 199 552 | 216 784 |

Source: Finnish Food Safety Authority Evira, The Government of Åland

¹⁾ Åland's data not included.

²⁾ no production in Åland.

Figures for the traditional use of arable land are on page 19.

ORGANIC PRODUCTION

| | 2007 mil- lion kg | % of total product- ion | 2016 million kg | % of total product- ion | 2017 million kg | % of total product- ion |
|-----------------------------------|----------------------------|----------------------------------|-----------------------|----------------------------------|-----------------------|----------------------------------|
| Beef | .. | .. | 2.9 | 3.4 | 2.6 | 3.1 |
| Pork | .. | .. | 1.0 | 0.5 | 0.8 | 0.5 |
| Lamb | .. | .. | 0.3 | 24.1 | 0.3 | 24.8 |
| Poultry | .. | .. | 0.2 | 0.1 | .. | .. |
| Eggs | 1.1 | 2 | 3.3 | 4.6 | 3.88 | 5.7 |
| Bread grain (wheat and rye) | 18.2 | 2.1 | 15.4 | 1.7 | 16.9 | 1.9 |
| Potato | 0.3 | 0 | 7.2 | 1.2 | 9.4 | 1.5 |
| Peas | 1.2 | 18.8 | 3.6 | 14.4 | 1.9 | 21.3 |
| Milk, million litres | 26.8 | 1.2 | 55.1 | 2.3 | 62.6 | 2.7 |

Source: Kantar TNS Agri Ltd, Pro Luomu, Natural Resources Institute Finland

In 2017, the market share of organic produce (€) in grocery trade was 2.3 %.

Source: Pro Luomu

ENVIRONMENTAL AID

| Farms committed to environmental aid | 2012 | 2017 |
|--------------------------------------|--------|--------|
| Number | 56 143 | 43 111 |
| % of farms | 91 | 85 |
| % of areable area | 90 | 90 |

Source: Agency for Rural Affairs

VOLUME OF PESTICIDES SALES

| | 1995 | 2005 | 2015 | 2016 |
|----------------------------------|-------|-------|-------|-------|
| Active ingredient sales (tonnes) | | | | |
| fungicides | 114 | 255 | 231 | 201 |
| agricultural insecticides | 57 | 47 | 29 | 29 |
| agricultural herbicides | 791 | 1 077 | 1 368 | 1 265 |
| growth regulations | 73 | 52 | 102 | 79 |
| Product sales (tonnes) | | | | |
| fungicides | 236 | 718 | 857 | 725 |
| agricultural insecticides | 160 | 147 | 141 | 187 |
| agricultural herbicides | 1 768 | 2 639 | 3 375 | 3 274 |
| growth regulations | 131 | 107 | 184 | 150 |

Source: Finnish Safety and Chemicals Agency

Product safety

PESTICIDE RESIDUE CONTROL 2017 ¹⁾

| Source of sample | Random samples | Non-compliant % |
|------------------|----------------|-----------------|
| Domestic | 453 | 0.4 |
| EU | 1 003 | 0.8 |
| Outside of EU | 552 | 7.1 |
| Total | 2 008 | 2.4 |

Source: Finnish Food Safety Authority Evira

¹⁾ samples from fruits, plants, grains, processed foodstuffs, baby food and products of animal origin.

SUBSTITUTING FOR AGRICULTURAL ENTREPRENEURS

| | 2000 | 2005 | 2016 | 2017 |
|--|---------|--------|--------|--------|
| MYEL ¹⁾ -insured agricultural entrepreneurs | 105 993 | 90 007 | 59 597 | 58 225 |
| Those using annual leave ²⁾ | 45 254 | 34 719 | 18 716 | 16 988 |
| Those using substitutes | 14 934 | 14 624 | 5 959 | 5 732 |
| Those using substituting subject to subsidised charge | 10 995 | 13 521 | 9 490 | 9 146 |
| Those using substituting subject to total charge | 643 | 314 | 377 | 393 |

Source: Mela

¹⁾ TYEL employee's pension insurance for farmers, forest owners, fishermen and reindeer herders and their families.

²⁾ to receive annual leave, a farmer must have at least four domestic animal units, and they must be a full-time agricultural entrepreneur.

Locality

NUMBER OF AGRICULTURAL AND HORTICULTURAL ENTERPRISES

| Farm size Hectares of arable land | 1995 pcs | 2005 pcs | 2016 ¹⁾ pcs | 2017 ¹⁾ pcs | % of farms | % of arable land |
|--|-------------|-------------|---------------------------|---------------------------|---------------|------------------------|
| 0–5 | 9 988 | 5 228 | 1 755 | 1 624 | 3 | 0 |
| 5–10 | 17 049 | 8 765 | 6 287 | 6 241 | 13 | 2 |
| 10–15 | 16 918 | 8 481 | 5 163 | 5 006 | 10 | 3 |
| 15–25 | 25 634 | 13 989 | 8 514 | 8 230 | 17 | 7 |
| 25–50 | 23 870 | 19 660 | 12 639 | 12 137 | 25 | 19 |
| 50–75 | 4 508 | 7 549 | 6 488 | 6 317 | 13 | 17 |
| 75–100 | 1 209 | 3 116 | 3 645 | 3 600 | 7 | 14 |
| 100–150 | 622 | 1 990 | 3 213 | 3 262 | 7 | 17 |
| 150– | 166 | 739 | 2 003 | 2 145 | 4 | 21 |
| Total | 99 964 | 69 517 | 49 707 | 48 562 | 100 | 100 |

Source: Natural Resources Institute Finland

In 1995 farms with over 1 ha arable land.

¹⁾ the definition of an agricultural and horticultural enterprise was revised. The figures cannot be compared with figures from previous years.

CHANGE IN NUMBER OF AGRICULTURAL AND HORTICULTURAL ENTERPRISES

| Farms | 2000 | 2016 ¹⁾ | 2017 ¹⁾ | Change 16/17 % |
|-------|--------|--------------------|--------------------|----------------|
| pcs | 78 434 | 49 707 | 48 562 | -2.3 % |

Source: Natural Resources Institute Finland

¹⁾ after the definition reform in 2013, agricultural and horticultural enterprises include estates whose economic size is more than EUR 2 000.

OWNERSHIP OF AGRICULTURAL AND HORTICULTURAL ENTERPRISES

| Category | 1995 ¹⁾ pcs | 2005 pcs | 2016 ²⁾ pcs | 2017 ²⁾ pcs | % of farms |
|----------------------|---------------------------|-------------|---------------------------|---------------------------|---------------|
| Private individuals | 86 933 | 61 477 | 42 899 | 41 878 | 86.2 |
| Heirs | 12 468 | 7 297 | 5 532 | 5 405 | 11.1 |
| State, communes etc. | 563 | 743 | 1 276 | 1 279.0 | 2.6 |
| Total | 99 964 | 69 517 | 49 707 | 48 562 | 100 |

Source: Natural Resources Institute Finland

¹⁾ only farms with over 1 ha of arable land.

²⁾ after the definition reform in 2013, agricultural and horticultural enterprises include estates whose economic size is more than EUR 2 000.

AGRICULTURAL LABOUR FORCE

| Labour force in thousands | 1995 | 2005 | 2016 | 2017 |
|------------------------------|------|------|------|------|
| Farmers ¹⁾ | 116 | 73 | 54 | 53 |
| of which women | 37 | 22 | 15 | 15 |
| Permanent employees | 25 | 20 | 17 | 18 |
| of which women | 12 | 9 | 7 | 8 |
| Total | 141 | 93 | 71 | 71 |

Source: Statistics Finland / Labour force survey

¹⁾ farmers and farmer family members total.

SPECIALIZATION IN AGRICULTURAL AND HORTICULTURAL ENTERPRISES

| Number of farms | 1995 ¹⁾ | 2010 | 2016 | 2017 | % |
|---------------------------------------|--------------------|---------------------|-------------------|--------|------|
| Dairy farms | 32 480 | 10 205 | 7 276 | 6 704 | 13,8 |
| Other cattle husbandry | 9 394 | 1 270 ²⁾ | 572 ²⁾ | 555 | 1,1 |
| Beef farms | .. | 3 080 | 2 931 | 2 930 | 6,0 |
| Pig farms | 6 249 | 1 355 | 689 | 607 | 1,2 |
| Poultry farms | 2 239 | 375 | 438 | 436 | 0,9 |
| Other grazing livestock ³⁾ | .. | 3 544 | 2 451 | 2 249 | 4,6 |
| Plant production | 42 287 | .. | .. | .. | .. |
| of which grain growing | .. | 20 927 | 17 493 | 16 240 | 33,4 |
| Other plant production | .. | 13 092 | 13 360 | 14 379 | 29,6 |
| Others | 7 315 | .. | .. | .. | .. |
| Greenhouse production | .. | 1 371 | 878 | 836 | 1,7 |
| Outdoor horticultural production | .. | 1 696 | 1 456 | 1 477 | 3,0 |
| Mixed production | .. | 2 568 | 2 163 | 2 149 | 4,4 |
| Total | 99 964 | 58 213 | 49 135 | 48 562 | 100 |

Source: Natural Resources Institute Finland

¹⁾ the figures cannot be compared with figures from 1995.

²⁾ includes combined suckler cow production and cattle fattening.

³⁾ includes sheep, goat and horse production.

INCOME OF AGRICULTURAL AND HORTICULTURAL ENTERPRISES PER PRODUCTION SECTOR

| | Taxable income total spouses together | | | Farm economy's income spouses together | | |
|----------------------|---------------------------------------|--------|--------|--|--------|--------|
| | 2000 | 2015 | 2016 | 2000 | 2015 | 2016 |
| | € | € | € | € | € | € |
| Dairy farms | 31 746 | 57 500 | 61 599 | 24 812 | 43 593 | 46 805 |
| Other cattle farms | 30 129 | 53 892 | 61 402 | 15 878 | 27 053 | 34 170 |
| Poultry farms | 45 752 | 97 740 | 97 557 | 28 624 | 56 907 | 61 437 |
| Pig farms | 41 644 | 65 041 | 74 462 | 28 421 | 38 916 | 45 437 |
| Sheep, goats, horses | 29 434 | 60 327 | 55 929 | 3 704 | 8 702 | 11 365 |
| Crop farms (grain) | 38 623 | 62 951 | 64 599 | 10 999 | 15 045 | 16 397 |
| Other crop farms | 35 760 | 62 505 | 60 070 | 11 695 | 15 048 | 16 476 |
| Other farms | 28 901 | 59 657 | 64 468 | 6 524 | 10 611 | 13 913 |
| Average | 35 235 | 64 952 | 67 511 | 16 324 | 26 984 | 30 750 |

Source: Statistics Finland

OTHER ENTREPRENEURSHIP ON AGRICULTURAL AND HORTICULTURAL ENTERPRISES

| Number of farms | 2000 ¹⁾ | 2005 ¹⁾ | 2010 | 2016 |
|--|---------------------------|---------------------------|-------------|-------------|
| Industry | 4 786 | 3 753 | 2 747 | 1 970 |
| food processing | 1 065 | 684 | 479 | 430 |
| other agricultural products processing | 134 | 152 | 94 | 80 |
| timber processing | 1 349 | 889 | 583 | 360 |
| making handicrafts for sale | 274 | 277 | 155 | 80 |
| energy production | 959 | 1 037 | 907 | 690 |
| other industrial production | 1 005 | 714 | 529 | 320 |
| Construction industry | ²⁾ | 881 | 438 | 330 |
| Trade | 1 056 | 1 298 | 850 | 670 |
| Services | 15 252 | 16 547 | 13 793 | 10 510 |
| tourism, accommodation and recreation services | 2 272 | 1 865 | 1 440 | 1 050 |
| contracting | 8 880 | 10 013 | 8 896 | 7 130 |
| other services | 4 100 | 4 669 | 3 457 | 2 330 |
| Other primary production | 744 | 1 815 | 981 | 790 |
| fish, crayfish etc. farming | 112 | 65 | 48 | 40 |
| fur farming | 632 | 510 | 315 | 220 |
| reindeer husbandry | ²⁾ | 573 | 365 | 250 |
| fishing industry | ²⁾ | 144 | 104 | 110 |
| other primary production | ²⁾ | 523 | 149 | 170 |
| Farms whose line of business is unknown | | | 721 | .. |
| Number of farms with other entrepreneurship | 21 838 | 24 294 | 19 530 | 14 280 |

Source: Natural Resources Institute Finland

¹⁾ figures for 2000 and 2005 do not include horticultural enterprises engaged exclusively in greenhouse production.

²⁾ the classification is somewhat different; the industry in question was not included in that particular year.

NB The line of business with the largest turnover.

USE OF ARABLE LAND

| | 1995 1 000 ha | 2005 1 000 ha | 2016 ¹⁾ 1 000 ha | 2017 ¹⁾ 1 000 ha |
|--------------------|------------------|------------------|--------------------------------|--------------------------------|
| Grassland | 755 | 620 | 688 | 717 |
| Cereals. total | 978 | 1 188 | 1 109 | 1 071 |
| wheat | 101 | 215 | 223 | 219 |
| rye | 21 | 14 | 27 | 32 |
| barley | 516 | 595 | 486 | 437 |
| oats | 329 | 346 | 332 | 337 |
| mixed grain | 11 | 16 | 40 | 43 |
| other cereals | 1 | 1 | 2.6 | 3.4 |
| Oil plants | 85 | 77 | 62 | 65 |
| Sugar-beets | 35 | 31 | 12 | 12 |
| Potatoes | 36 | 29 | 22 | 22 |
| Other crops | 29 | 49 | 91 | 101 |
| Area in production | 1 918 | 1 993 | 1 983 | 1 988 |
| Fallow | 223 | 241 | 261 | 254 |
| Cultivated area | 2 141 | 2 235 | 2 244 | 2 242 |

Source: Natural Resources Institute Finland

¹⁾ includes only enterprises that exceed the threshold value (SO 2000 EUR).

| | 1995 ha | 2005 ha | 2016 ha | 2017 ha |
|------------------|------------|------------|------------|------------|
| Mean arable land | 22 | 33 | 46 | 47 |

Source: Natural Resources Institute Finland

CROP

| | 1995 | 2005 | 2016 | 2017 |
|----------------------------------|--------|--------|--------|--------|
| Wheat | | | | |
| area (in 1 000 ha) | 101 | 215 | 215 | 194 |
| total yield (M kg) | 380 | 801 | 824 | 802 |
| yield kg/ha | 3 770 | 3 730 | 3 830 | 4 130 |
| Rye | | | | |
| area (in 1 000 ha) | 21 | 14 | 26 | 29 |
| total yield (M kg) | 58 | 32 | 87 | 114 |
| yield kg/ha | 2 770 | 2 290 | 3 340 | 3 920 |
| Barley | | | | |
| area (in 1 000 ha) | 516 | 594 | 436 | 358 |
| total yield (M kg) | 1 764 | 2 103 | 1 581 | 1 460 |
| yield kg/ha | 3 420 | 3 540 | 3 630 | 4 070 |
| Oats | | | | |
| area (in 1 000 ha) | 329 | 345 | 305 | 270 |
| total yield (M kg) | 1 097 | 1 073 | 1 035 | 1 014 |
| yield kg/ha | 3 330 | 3 110 | 3 390 | 3 760 |
| Sugar-beets | | | | |
| area (in 1 000 ha) | 35 | 31 | 12 | 12 |
| total yield (M kg) | 1 110 | 1 181 | 434 | 430 |
| yield kg/ha | 31 900 | 37 870 | 37 340 | 36 550 |
| Oil plants | | | | |
| area (in 1 000 ha) | 85 | 77 | 60 | 55 |
| total yield (M kg) | 128 | 106 | 96 | 91 |
| yield kg/ha | 1 500 | 1 380 | 1 550 | 1 650 |
| Peas | | | | |
| area (in 1 000 ha) | 5 | 4 | 10 | 4 |
| total yield (M kg) | 11 | 8 | 25 | 9 |
| yield kg/ha | 2 420 | 93 | 2 470 | 2 180 |
| Potatoes | | | | |
| area (in 1 000 ha) | 36 | 29 | 22 | 21 |
| total yield (M kg) | 798 | 743 | 588 | 612 |
| yield kg/ha | 22 110 | 25 700 | 27 120 | 28 860 |
| Vegetables | | | | |
| total yield (M kg) | 234 | 248 | 262 | 254 |
| tomatoes | 31 | 38 | 41 | 39 |
| cucumber (greenhouse) | 24 | 32 | 39 | 43 |
| cabbage | 24 | 19 | 19 | 23 |
| carrots | 61 | 67 | 73 | 62 |
| onions | 17 | 21 | 26 | 26 |
| Potted vegetables (M pcs) | 30 | 64 | 100 | 102 |

Source: Natural Resources Institute Finland

AGRICULTURAL PRODUCTION COSTS

| | 2000 MEUR | 2005 MEUR | 2015 MEUR | 2016 MEUR |
|------------------------------------|--------------|--------------|--------------|--------------|
| Material costs | 1 525 | 1 628 | 2 050 | 1 851 |
| Fertilizer, lime | 193 | 185 | 264 | 259 |
| Other crop production costs | 264 | 324 | 367 | 313 |
| Fuel and lubricants | 189 | 207 | 298 | 235 |
| Electricity | 114 | 102 | 191 | 149 |
| Forage costs | 482 | 454 | 515 | 507 |
| Livestock costs | 282 | 357 | 415 | 388 |
| Farm operating costs ¹⁾ | 318 | 314 | 488 | 441 |
| Machinery cost | 757 | 885 | 1 036 | 1 003 |
| Depreciation of machines | 445 | 545 | 551 | 507 |
| Other machinery costs | 311 | 340 | 485 | 496 |
| Building costs | 301 | 329 | 380 | 327 |
| Depreciation of buildings | 237 | 273 | 307 | 285 |
| Other building costs | 64 | 57 | 73 | 43 |
| Other cost | 641 | 785 | 930 | 932 |
| Insurance cost paid | 227 | 262 | 320 | 319 |
| Fixed rents paid | 82 | 104 | 163 | 183 |
| Other depreciations | 44 | 45 | 47 | 48 |
| Other costs | 288 | 373 | 401 | 381 |
| Wages costs | 1 493 | 1 771 | 1 421 | 1 358 |
| Wages paid | 190 | 180 | 244 | 207 |
| Wages claim | 1 303 | 1 591 | 1 177 | 1 151 |
| Interest costs | 598 | 622 | 667 | 730 |
| Interest paid | 133 | 114 | 113 | 101 |
| Interest claim of equity | 465 | 508 | 554 | 630 |
| Total costs | 5 631 | 6 335 | 6 972 | 6 642 |

Source: Luke Economydoctor. Total Calculation of Agriculture.

Data: Luke Profitability bookkeeping results

¹⁾ costs of feedstuff and seeds produced and used on the farm.

AGRICULTURAL GROSS RETURN

| Income from | 2000 MEUR | 2005 MEUR | 2015 MEUR | 2016 MEUR |
|---|----------------------|----------------------|----------------------|----------------------|
| Crop revenues total | 881 | 720 | 1 094 | 1 324 |
| Rye and wheat | 84 | 74 | 175 | 143 |
| Barley | 171 | 155 | 267 | 247 |
| Oats and other cereals | 139 | 80 | 137 | 196 |
| Oilseeds | 15 | 19 | 40 | 41 |
| Grass crops | 269 | 218 | 381 | 613 |
| Potato and sugar beet | 183 | 158 | 53 | 45 |
| Pulses and other crops | 21 | 16 | 40 | 37 |
| Livestock revenues total | 1 612 | 1 653 | 1 844 | 1 802 |
| Cattle revenue | 1 089 | 1 094 | 1 258 | 1 278 |
| Pig production | 311 | 360 | 301 | 239 |
| Poultry revenues | 204 | 194 | 234 | 247 |
| Sheep and goat revenues | 9 | 6 | 51 | 38 |
| Glasshouse and outdoor horticultural revenues total | 549 | 517 | 675 | 445 |
| Financial yields | 16 | 14 | 8 | 10 |
| Other income | 147 | 168 | 201 | 182 |
| The sum of subsidies | 1 776 | 1 966 | 1 897 | 1 818 |
| CAP subsidies | 385 | 514 | 580 | 535 |
| LFA- and environmental subsidies | 721 | 747 | 855 | 859 |
| National and investment subsidies | 667 | 702 | 432 | 361 |
| Gross return total | 4 981 | 5 038 | 5 719 | 5 549 |

Source: Luke Economydoctor. Total Calculation of Agriculture.

Data: Luke Profitability bookkeeping results

The value of feedstuff and seeds produced and used on the farm is included in the calculation.

BEEKEEPING FIGURES

| | 2016 | 2017 |
|--|--------|--------|
| The Finnish Beekeepers' Association members | 2 565 | 2 590 |
| Professional beekeepers ¹⁾ | 77 | 74 |
| Organic beekeepers | 63 | 61 |
| Number of productive beehives | 64 000 | 67 000 |
| Number of organic beehives | 4 398 | 4 079 |
| Yield per beehive, kg | 24 | 38 |
| Honey production, tonnes | 1 200 | 2 100 |
| Imported honey, tonnes | 1 755 | 1 970 |
| Honey consumption, tonnes | 3 849 | 3 168 |
| Honey consumption, g/person | 700 | 576 |
| Winter beehive losses ²⁾ , % | 14 | 15 |
| Gross profit, beekeeping ³⁾ , € | 29 000 | 30 000 |
| The share of organic production and consumption, % | 8 | 7 |

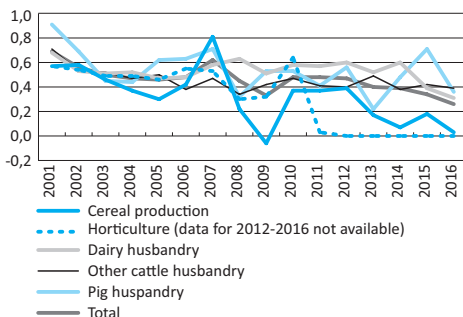
Source: Suomen Mehiläishoitajain Liitto SML ry (The Finnish Beekeepers' Association), Natural Resources Institute Finland, Finnish Food Authority Evira, National Board of Customs

¹⁾ beekeepers with more than 100 hives according to hive grant statistics.

²⁾ percentage of bees that died during the winter.

³⁾ estimates from 2016 and 2017.

PROFITABILITY COEFFICIENT ON THE FINNISH FARMS 2001–2016



Source: Total Calculation of Luke Economic Research

ENTREPRENEURIAL INCOME

| | 2000 MEUR | 2005 MEUR | 2015 MEUR | 2016 MEUR |
|------------------------|--------------|--------------|--------------|--------------|
| Entrepreneurial income | 1 114 | 808 | 472 | 310 |

Source: Luke Economydoctor. Total Calculation of Agriculture.

Data: Luke Profitability bookkeeping results

PRODUCER PRICES

| Annual average | | 1995 | 2005 | 2016 | 2017 | Change 16/17 % |
|------------------------------|----------|-------|-------|--------|--------|-------------------|
| Milk | c/ltr | | | | | |
| producer price ¹⁾ | | 31.3 | 31.5 | 33.62 | 34.00 | 1.1 |
| surplus payment | | 1.5 | 2.2 | 0.44 | 0.53 | 20.5 |
| Meat | €/kg | | | | | |
| beef | | 2.4 | 2.1 | 2.84 | 2.98 | 4.9 |
| pork | | 1.3 | 1.3 | 1.40 | 1.48 | 5.7 |
| chicken | | 1.1 | 1.1 | 1.31 | 1.29 | -1.5 |
| lamb | | 1.9 | 2.6 | 3.67 | 3.71 | 1.1 |
| horse | | 1.3 | 0.3 | .. | .. | |
| Eggs | €/kg | 0.5 | 0.6 | 1.00 | 0.96 | -3.2 |
| Grain and rootcrops | | | | | | |
| wheat ²⁾ | €/tn | 147.0 | 106.2 | 150.65 | 156.49 | 3.9 |
| rye ²⁾ | €/tn | 149.5 | 118.4 | 170.52 | 164.02 | -3.8 |
| barley ²⁾ | €/tn | 122.3 | 99.5 | 124.08 | 130.22 | 4.9 |
| oats ²⁾ | €/tn | 118.4 | 87.1 | 128.76 | 134.69 | 4.6 |
| malt ²⁾ | €/tn | 142.1 | 115.3 | 153.50 | 156.63 | 2.0 |
| food | | | | | | |
| potatoes ³⁾ | €/100 kg | .. | .. | 20.02 | 17.97 | -10.2 |
| oil plants ²⁾ | €/tn | .. | 200.1 | 361.97 | 382.51 | 5.7 |

Source: Natural Resources Institute Finland

¹⁾ 1st class milk 4.3/3.3 %, without production aid.

²⁾ the basic price paid to farmers, including transportation to the first reception point.

³⁾ the price paid to farmers per 100 kg net, delivered to the packing facilities. Does not include early potatoes.

LIVESTOCK

| In thousands | 1995 | 2005 | 2016 | 2017 |
|------------------------|--------|--------|--------|--------|
| Horses | 50 | 64 | 74 | 74 |
| Cattle | 1 148 | 959 | 909 | 893 |
| dairy cows | 399 | 319 | 282 | 275 |
| suckler cows | 29 | 35 | 59 | 60 |
| Sheep ¹⁾ | 159 | 87 | 157 | 156 |
| ewes | 69 | 52 | 76 | 76 |
| lambs and rams | 90 | 35 | 80 | 80 |
| Pigs ²⁾ | 1 400 | 1 401 | 1 235 | 1136 |
| sows | 161 | 177 | 95 | 85 |
| fattening pigs | 451 | 460 | 575 | 536 |
| piglets | 476 | 451 | 543 | 494 |
| Poultry ³⁾ | 10 358 | 10 538 | 13 445 | 13 136 |
| hens | 4 179 | 3 128 | 3 599 | 3 595 |
| broilers | 4 276 | 5 472 | 8 272 | 8 047 |
| turkeys | 80 | 495 | 260 | 292 |
| Goats | 6 | 7 | 5 | 5 |
| Reindeer ⁴⁾ | 208 | 207 | 191 | 193 |

Source: Natural Resources Institute Finland, Statistics Finland,
The Finnish trotting and breeding association

¹⁾ from 2015 onwards, the number of sheep is not directly comparable to the previous years.

²⁾ the definitions of pigs changed from 2015. Only class 'Pigs' is comparable with previous year.

³⁾ from 2016 onwards, the number of poultry is not directly comparable to the previous years.

⁴⁾ calculated reindeer that have been left to live + calves.

AVERAGE NUMBER OF ANIMALS IN FARMS

| Animals pcs/farms | 2012 | 2016 ¹⁾ | 2017 ¹⁾ |
|-------------------|--------|--------------------|--------------------|
| Pigs | 1 175 | 1 792 | 1 871 |
| Cattle | 70 | 84 | 88 |
| Poultry | 32 412 | 30 696 | 30 128 |

Source: Natural Resources Institute Finland

¹⁾ the definition of an agricultural and horticultural enterprise was revised in 2013. The figure for 2012 has been counted retrospectively. The figures cannot be compared with figures from previous years.

PROTECTION OF ANIMALS INSPECTIONS BASED ON SAMPLE

| Item | Inspections | | | Cases of neglect | | |
|------------------|-------------|-----------------|------|------------------|-----------------|------|
| | 2011 | 2016 | 2017 | 2011 | 2016 | 2017 |
| Pigs | 52 | 36 | 10 | 13 | 10 | 3 |
| Cattle | 362 | 162 | 288 | 97 | 27 | 43 |
| Poultry | 26 | 19 | 3 | 5 | 5 | 0 |
| Broiler chickens | .. | 5 | 2 | .. | 0 | 0 |
| Goats | 12 | 8 | .. | 0 | 0 | .. |
| Ducks and geese | 8 | 7 ¹⁾ | .. | 0 | 1 ¹⁾ | .. |
| Sheep | 32 | 56 | 13 | 8 | 10 | 1 |

Source: Finnish Food Safety Authority Evira

¹⁾ in 2015.

PREVENTION OF CRUELTY TO ANIMALS INSPECTIONS IN COMMERCIAL ANIMAL DELIVERIES

| | 2005 | 2011 | 2016 | 2017 |
|----------------------|------|------|------|------|
| Inspections (no.) | 451 | 387 | 411 | 357 |
| Cases of neglect (%) | 24 | 16 | 9 | 7 |

Source: Finnish Food Safety Authority Evira

FARMS RECEIVING ANIMAL WELL-BEING SUBSIDIES ¹⁾

| Number of farms | 2015 | % of farms | 2016 | % of farms | 2017 | % of farms |
|------------------|-------|------------|-------|------------|-------|------------|
| Beef farms | 4 842 | 51 | 4 888 | 52 | 4 841 | 52 |
| Pork farms | 767 | 69 | 698 | 68 | 773 | 72 |
| Sheep/goat farms | 340 | 53 | 318 | 53 | 307 | 47 |
| Poultry farms | 326 | 70 | 304 | 70 | 357 | 81 |

Source: Agency for Rural Affairs

¹⁾ subsidised farms

% of farms that are able to apply for well-being allowance (sufficient number of animals).

IMPLEMENTATION OF ANIMAL WELFARE ON PIG AND COW FARMS

| | Health care agreement with a vet | | Coverage % | | At special level ¹⁾ | | At national level ²⁾ | | At basic level ³⁾ | | Passive ⁴⁾ | | Health care visits | |
|------------------------------------|----------------------------------|-------|------------|------|--------------------------------|------|---------------------------------|------|------------------------------|------|-----------------------|------|--------------------|-------|
| | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 |
| Pig farms (places of keeping pigs) | 1 220 | 1 153 | 88 | 85 | 42 | 39 | 1 094 | 990 | 37 | 67 | 39 | 57 | 5 577 | 5 174 |
| Cow farms | 7 504 | 7 508 | 60 | 67 | .. | .. | .. | .. | .. | .. | .. | .. | 6 749 | 9 041 |

Source: ETT (the Association for Prevention of Animal Diseases), Sikava (Health Classification Register for Pig Farms) and Naseva (Health Classification Register for Cow Farms)

¹⁾ meets the voluntary special requirements set by the industry for pig breeding farms www.sikava.fi.

²⁾ meets the voluntary health care requirements set by the industry.

³⁾ some of the voluntary national requirements are not met.

⁴⁾ empty pens.

Amount of pens in different healthcare levels at end of each year.

RESPONSIBLE PRODUCTION LIMIT VALUES
IN PORK PRODUCTION

| Period | Farms ¹⁾ | | RPI exceeded ¹⁾ , fattening pigs | | | RPI exceeded ¹⁾ , sows | |
|--------|---------------------|--------------|--|--------------|-----------|--------------------------------------|-----------|
| | under RPI | RPI exceeded | whole carcass | part-carcass | mortality | whole carcass | mortality |
| 2_2016 | 95.8 | 4.2 | 0.6 | 1.1 | 1.5 | 0.2 | 0.8 |
| 1_2017 | 91.8 | 8.2 | 2.3 | 1.6 | 2.4 | 0.5 | 0.9 |

Source: Animal Health ETT, Sikava (Health classification register for pig farms)

RPI (responsible production indicator) is part of the national pork production criteria (sikava.fi/terveysluokitus). The values are inspected every six months. The limit for whole carcass condemnation: sows 7 % and fattening pigs 1.1 %. The limit for part-carcass condemnation: fattening pigs 12 %. The limit for mortality: sows 25 % and fattening pigs 4 %.

¹⁾ percentage of farms in proportion to all farms.

USE OF ANTIMICROBIAL AGENTS IN FOOD-PRODUCING
ANIMALS

| | EU/EEA, average | | | Finland | | |
|----------------------|--------------------|--------------------|--------------------|---------|------|------|
| | 2010 ²⁾ | 2014 ³⁾ | 2015 ⁴⁾ | 2010 | 2014 | 2015 |
| mg/PCU ¹⁾ | 131 | 153 | 136 | 25 | 22 | 20 |

Source: The European Medicines Agency EMA, ESVAC

¹⁾ the sales in mg active ingredient sold per population correction (PCU, population correction unit, calculated by taking into consideration the most common food-producing animal species) Results for EU/EEA were calculated by dividing the total sales of veterinary antimicrobials in all participating countries by the combined PCU of these countries.

²⁾ number of participating countries: 19

³⁾ number of participating countries: 29

⁴⁾ number of participating countries: 30

THE FOOTPAD DERMITITIS SCORE THAT REPRESENTS THE
WELL-BEING OF BROILER CHICKENS

| | 2012 | 2016 | 2017 |
|--|-------|-------|------|
| Share of flocks, %, with a score of less than 40 | 94.46 | 98.46 | 99.2 |
| Share of flocks, %, with a score of 40–80 | 4.91 | 1.38 | 0.75 |
| Share of flocks, %, with a score of more than 80 | 0.62 | 0.16 | 0.05 |

Source: Animal Health ETT

At least one footpad of a hundred chickens in every flock is analysed at the slaughterhouse. The seriousness of dermatitis is classified on a three-stage scale: 0, 1 and 2, where 0 refers to healthy footpad. Less than 40 points/flock is considered acceptable.

HENNERIES

| Henneries type | % of egg production | | |
|----------------|---------------------|------|------|
| | 2010 | 2016 | 2017 |
| Enriched cage | 89 | 62 | 62 |
| Floor | 9 | 33 | 32 |
| Organic | 2 | 5 | 5 |

Source: Finnish Poultry Association

BARN TYPES 2017

| | Number of barns | % | Cows | % | Average number of cows/ farm |
|-----------------|---------------------|-----|---------|-----|------------------------------|
| Tie stall barn | 2 984 | 62 | 83 372 | 41 | 28.1 |
| Free stall barn | 1 823 | 38 | 117 837 | 59 | 71.1 |
| Total | 4 807 ¹⁾ | 100 | 201 209 | 100 | 43.9 |

Source: ProAgria

¹⁾ All cows are not included.Tie stall barn: Cow is connected to stall from its head.Stall barn: Cows are on the loose in a building where they have separate feeding and resting area. Cows are milked in a milking station or by a robot.

GRAZING AND TIME OUTDOORS

| Cattle | 2010 | % | 2017 | % |
|--|-------|------|-------|------|
| | no. | | no. | |
| Graze in the summer, time outdoors in the winter | 455 | 7.9 | 430 | 9.1 |
| Graze in the summer, indoors in the winter | 3 895 | 67.8 | 2 984 | 63.4 |
| Fenced walking area in the summer, time outdoors in the winter | 103 | 1.8 | 110 | 2.3 |
| Fenced walking area in the summer, indoors in the winter | 347 | 6 | 293 | 6.2 |
| Indoors in the summer and in the winter | 946 | 16.5 | 891 | 18.9 |
| Total | 5 746 | 100 | 4 708 | 100 |

Source: ProAgria

MILKING MACHINES 2017

| Milking machine type | Farms | % |
|------------------------|-------|-------|
| Pipeline milking | 3 044 | 61.3 |
| Milking station | 956 | 19.3 |
| Robotic milking | 922 | 18.6 |
| Bucket milking machine | 42 | 0.8 |
| Total | 4 964 | 100.0 |

Source: ProAgria

AVERAGE YIELD PER COW AND MILK CONTENTS 2017

| Breed | Cows number | Average output kg/cow | Pro- tein | Milk contents % | | |
|------------------------|----------------|-----------------------------|--------------|-----------------|-------------------|---------------------|
| | | | | Fat | ECM ¹⁾ | Cells ²⁾ |
| Ayrshire | 98 049 | 9 228 | 3.56 | 4.45 | 9 850 | 164 |
| Holstein | 92 033 | 10 243 | 3.45 | 4.14 | 10 510 | 183 |
| Finncattle | 2 035 | 6 262 | 3.46 | 4.48 | 6 686 | 191 |
| Eastern Finncattle | 267 | 4 057 | 3.46 | 4.36 | 4 293 | 205 |
| Western Finncattle | 1 336 | 6 972 | 3.47 | 4.53 | 7 485 | 189 |
| Northern Finncattle | 432 | 5 429 | 3.43 | 4.35 | 5 695 | 193 |
| Jersey | 823 | 8 045 | 3.84 | 5.24 | 9 564 | 177 |
| Other | 266 | 8 771 | 3.52 | 4.23 | 9 155 | 164 |
| All | 201 135 | 9 675 | 3.50 | 4.30 | 10 129 | 174 |

Source: ProAgria

¹⁾ energy-corrected milk output (milk's butterfat, protein and lactose content is taken into account).

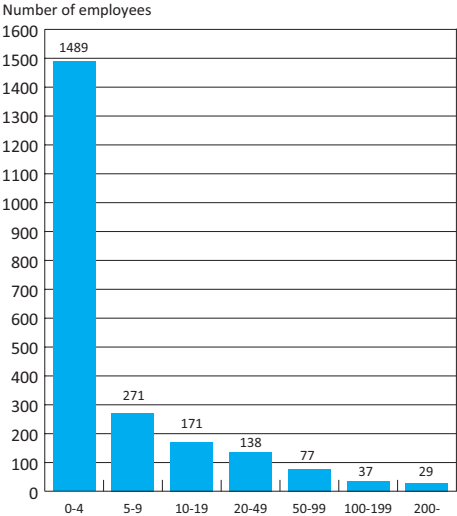
²⁾ somatic cell count, geometric mean.

FOOD MANUFACTURERS BY SECTOR

| Sector | 2000 | | 2014 | | 2017 | |
|---|----------------|----------------|----------------|----------------|----------------|----------------|
| | < 20 people | ≥ 20 people | < 20 people | ≥ 20 people | < 20 people | ≥ 20 people |
| Slaughter and meat processing | 330 | 50 | 385 | 42 | 391 | 44 |
| Fish processing | 243 | 13 | 300 | 15 | 313 | 19 |
| Processing of vegetables, berries and fruit | 373 | 22 | 433 | 27 | 437 | 28 |
| Dairy processing | 108 | 42 | 89 | 32 | 87 | 24 |
| Milling industry | 145 | 8 | 128 | 14 | 114 | 9 |
| Bakeries | 991 | 110 | 874 | 78 | 770 | 65 |
| Production of beverages | 85 | 14 | 128 | 19 | 105 | 11 |
| Processing of other foodstuffs | 330 | 48 | 343 | 43 | 389 | 53 |
| Total | 2 605 | 307 | 2 680 | 270 | 2 606 | 253 |

Source: Food Finland theme group

FOOD AND DRINK INDUSTRY PLANTS ACCORDING TO ENTERPRISE SIZE



Source: Statistics Finland

Food and drink industry is SME-based.

FOOD INDUSTRY KEY SECTORS

| Sector | Number of plants | | Employees total ¹⁾ | | Turnover 1 000 € | | Turnover 1 000 € / employee | |
|--|------------------|-------|-------------------------------|--------|-------------------------|-----------|-----------------------------|------|
| | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 |
| Slaughter and meat processing | 254 | 254 | 8 089 | 8 022 | 2 485 481 | 2 437 902 | 307 | 304 |
| Fish products | 153 | 146 | 881 | 859 | 329 173 | 346 997 | 374 | 404 |
| Fruit and vegetables | 162 | 155 | 1 834 | 1 936 | 491 107 | 567 744 | 268 | 293 |
| Processing and preserving of potatoes | 52 | 44 | 384 | 383 | 124 988 | 112 318 | 326 | 293 |
| Edible oils and fats | 20 | 20 | 154 | 147 | 50 485 | 59 233 | 329 | 403 |
| Dairy products and ice cream | 91 | 89 | 4 945 | 4 119 | 2 205 488 | 2 044 459 | 446 | 496 |
| Milling products and starch | 76 | 65 | 571 | 618 | 327 752 | 354 053 | 574 | 573 |
| Manufacture of bakery and farinaceous products | 882 | 799 | 7 500 | 7 352 | 999 520 | 1 007 091 | 133 | 137 |
| Manufacture of other food products | 274 | 269 | 5 842 | 5 886 | 1 769 420 | 1 814 545 | 303 | 308 |
| Sugar | 3 | 4 | 270 | 268 | 235 102 | 197 116 | 871 | 735 |
| Chocolate, cocoa and confect. | 49 | 48 | 1 562 | 1 567 | 380 659 | 378 605 | 244 | 242 |
| Processing of tea and coffee | 16 | 23 | 448 | 464 | 340 358 | 360 006 | 759 | 776 |
| Convenience food | 78 | 77 | 2 034 | 1 935 | 368 554 | 376 207 | 181 | 194 |
| Food preparations and dietetic food | 10 | 9 | 313 | 369 | 132 627 | 143 085 | 424 | 388 |
| Soft drinks | 155 | 177 | 2 918 | 2 807 | 1 174 437 | 1 214 119 | 402 | 433 |
| Alcoholic beverages ²⁾ | 125 | 148 | 2 656 ³⁾ | 2 517 | 1 061 936 ³⁾ | 1 096 973 | 400 ³⁾ | 436 |
| Food industry, total | 1 998 | 1 882 | 30 735 | 29 908 | 9 241 069 | 9 200 979 | 301 | 308 |

Source: Statistics Finland, regional and industrial statistics on manufacturing

- ¹⁾ includes paid employees and entrepreneurs. Employees are converted to annual full-time employees so that, for example, an employee working half-time represents one half of a person and two employees working half-time for one year represent one annual full-time employee.
- ²⁾ distilling and mixing of alcoholic beverages: production of ethanol by fermentation as well as manufacture of cider and fruit and berry wines, other distilled fermented beverages and beer production. ³⁾ the figures are indicative because some of the data is missing.

IMPORT AND EXPORT OF FOODSTUFFS

| Product group | Import MEUR | | |
|--|----------------|----------------|--------------------|
| | 1995 | 2005 | 2016 ¹⁾ |
| INDUSTRIAL PRODUCTS | | | |
| Drinks | .. | 333.3 | 418.23 |
| Alcoholic beverages ²⁾ | 99.5 | 267.8 | 325.35 |
| Beer | 7.4 | 20.6 | 37.70 |
| Soft drinks and mineral waters | 4.0 | 33.5 | 55.18 |
| Juices | 9.1 | 13.0 | 79.49 |
| Fats and oils | 31.1 | 41.2 | 150.78 |
| Butter | .. | 1.4 | 3.75 |
| Canola oil | .. | 5.0 | 7.53 |
| Margarin | 6.9 | 23.6 | 28.61 |
| Fruit preserves | .. | 42.5 | 78.27 |
| Other vegetable preserves | .. | 35.6 | 77.25 |
| Sugar and honey | 1.3 | 2.2 | 51.43 |
| Sugarchemical products | 3.5 | 6.4 | 3.90 |
| Honey | .. | 2.2 | 8.66 |
| Coffee (instant and roasted) | 11.3 | 19.7 | 59.58 |
| Fish products | .. | .. | 136.92 |
| Frozen fish products | .. | 6.9 | 27.21 |
| Soups and stocks | 8.5 | 12.8 | 41.28 |
| Babyfood | 2.0 | 9.3 | 19.79 |
| Meat | 57.3 | 102.8 | 314.27 |
| Pork | .. | 29.4 | 54.90 |
| Beef and veal | .. | 37.9 | 64.11 |
| Poultry | .. | 18.2 | 30.28 |
| Dairy products | 63.6 | 178.8 | 376.57 |
| Milk powder | .. | 1.9 | 1.82 |
| Cheese | .. | 123.1 | 265.10 |
| Malt | 1.7 | 0.4 | 3.91 |
| Frozen berries and vegetables | 23.6 | 59.0 | 99.41 |
| Frozen potatoes | .. | 16.4 | 28.05 |
| Flour and milling industry products | 1.4 | 3.0 | 120.93 |
| Rye flour | .. | .. | 0.23 |
| Feed products | 83.7 | 147.0 | 338.26 |
| Sweets | 90.9 | 134.7 | 220.58 |
| Chocolate | .. | 56.1 | 101.22 |
| Starch | 69.5 | 82.0 | 91.04 |
| All industrial products total ³⁾ | 860.1 | 1 781.6 | 3 238.44 |
| AGRICULTURAL PRODUCTS | | | |
| Tea | .. | .. | 12.25 |
| Fruits | 146.7 | 220.3 | 361.71 |
| Cocoa beans | 0.2 | 0.0 | 0.24 |
| Raw coffee | 124.3 | 115.7 | 210.48 |
| Birds' eggs | 0.1 | 1.3 | 4.16 |
| Fish and shellfish | .. | .. | 243.92 |
| Fresh fish | 14.4 | 65.6 | 232.71 |
| Berries | 2.6 | 5.7 | 17.58 |
| Blueberry | .. | 2.3 | 1.10 |
| Spices | 4.4 | 6.8 | 14.50 |
| Nuts | 7.4 | 9.5 | 38.21 |
| Raw sugar | 17.7 | 26.7 | 47.13 |
| Vegetables and potato | 62.5 | 113.6 | 213.98 |
| Grain | 37.2 | 28.5 | 28.23 |
| Oat | .. | 0.01 | 1.69 |
| All agricultural products total ³⁾ | 1 335.8 | 2 448.3 | 1 260.65 |

Source: National Board of Customs. Finnish Food and Drink Industries' Federation

¹⁾ Compilation of statistics changed in 2015. The figures are not comparable with the previous figures.

| | Change | | Export MEUR | | | Change | |
|----------|--------------------|---------|-------------|----------|--------------------|--------------------|---------|
| | 2017 ¹⁾ | 16/17 % | 1995 | 2005 | 2016 ¹⁾ | 2017 ¹⁾ | 16/17 % |
| 472.60 | 13.0 | | .. | 90.2 | 163.39 | 183.64 | 12.4 |
| 378.39 | 16.3 | | 40.1 | 73.4 | 139.37 | 151.17 | 8.5 |
| 36.20 | -4.0 | | 19.7 | 11.3 | 14.99 | 13.90 | -7.3 |
| 58.01 | 5.1 | | 7.4 | 4.8 | 9.03 | 18.58 | 105.6 |
| 79.81 | 0.4 | | 13.0 | 2.1 | 5.31 | 5.00 | -5.8 |
| 100.46 | -33.4 | | 7.0 | 26.5 | 136.42 | 157.16 | 15.2 |
| 5.43 | 44.9 | .. | .. | 85.1 | 108.44 | 137.01 | 26.3 |
| 9.00 | 19.5 | .. | .. | 22.7 | 8.56 | 4.63 | -45.9 |
| 28.56 | -0.2 | 30.7 | 32.7 | 6.02 | 6.51 | 6.51 | 8.1 |
| 70.28 | -10.2 | .. | 3.2 | 2.61 | 2.24 | 2.24 | -14.1 |
| 70.56 | -8.7 | .. | 4.7 | 4.48 | 3.75 | 3.75 | -16.3 |
| 63.83 | 24.1 | 0.0 | 0.0 | 105.89 | 104.12 | 104.12 | -1.7 |
| 4.34 | 11.4 | 13.4 | 81.5 | 78.75 | 85.64 | 85.64 | 8.8 |
| 9.56 | 10.3 | .. | 0.003 | 0.036 | 0.044 | 0.044 | 23.6 |
| 75.14 | 26.1 | 21.9 | 8.0 | 21.13 | 36.89 | 36.89 | 74.6 |
| 146.84 | 7.2 | .. | .. | 18.18 | 17.71 | 17.71 | -2.6 |
| 30.62 | 12.5 | .. | 6.1 | 12.08 | 12.05 | 12.05 | -0.3 |
| 35.91 | -13.0 | 0.4 | 0.4 | 2.83 | 2.24 | 2.24 | -20.9 |
| 19.75 | -0.2 | 7.4 | 4.9 | 6.13 | 6.64 | 6.64 | 8.3 |
| 325.78 | 3.7 | 26.4 | 91.5 | 121.09 | 118.05 | 118.05 | -2.5 |
| 55.87 | 1.8 | .. | 68.6 | 65.18 | 59.86 | 59.86 | -8.2 |
| 72.69 | 13.4 | .. | 6.4 | 14.65 | 14.92 | 14.92 | 1.9 |
| 31.48 | 3.9 | .. | 10.2 | 11.66 | 10.16 | 10.16 | -12.8 |
| 384.47 | 2.1 | 161.9 | 303.1 | 242.60 | 254.64 | 254.64 | 5.0 |
| 3.26 | 79.1 | .. | 28.7 | 77.68 | 87.52 | 87.52 | 12.7 |
| 269.08 | 1.5 | .. | 119.7 | 47.60 | 47.22 | 47.22 | -0.8 |
| 2.38 | -39.1 | 15.7 | 21.9 | 16.18 | 13.79 | 13.79 | -14.8 |
| 98.30 | -1.1 | 9.0 | 18.2 | 24.42 | 25.91 | 25.91 | 6.1 |
| 28.68 | 2.2 | .. | 0.2 | 0.56 | 0.32 | 0.32 | -41.9 |
| 132.01 | 9.2 | 4.3 | 7.7 | 45.56 | 45.66 | 45.66 | 0.2 |
| 0.20 | -11.1 | .. | .. | 0.42 | 0.32 | 0.32 | -22.9 |
| 320.68 | -5.2 | 15.0 | 21.7 | 54.98 | 73.80 | 73.80 | 34.2 |
| 246.64 | 11.8 | 94.9 | 86.3 | 100.20 | 100.43 | 100.43 | 0.2 |
| 119.98 | 18.5 | .. | 46.8 | 59.67 | 60.63 | 60.63 | 1.6 |
| 91.85 | 0.9 | 8.5 | 15.7 | 12.38 | 10.81 | 10.81 | -12.7 |
| 3 309.26 | 2.2 | 609.0 | 961.9 | 1 238.21 | 1 325.86 | 1 325.86 | 7.1 |
| 13.86 | 13.1 | .. | .. | 0.411 | 0.407 | 0.407 | -1.0 |
| 374.02 | 3.4 | 13.0 | 0.8 | 6.54 | 7.76 | 7.76 | 18.7 |
| 0.26 | 5.8 | 0.0 | 0.0 | 0.0006 | 0.0043 | 0.0043 | 616.7 |
| 210.19 | -0.1 | 2.3 | 0.0 | 30.59 | 24.13 | 24.13 | -21.1 |
| 3.38 | -18.8 | 7.1 | 6.6 | 10.46 | 11.21 | 11.21 | 7.2 |
| 349.77 | 43.4 | .. | .. | 33.27 | 122.52 | 122.52 | 268.2 |
| 337.84 | 45.2 | 2.3 | 0.0 | 33.22 | 122.38 | 122.38 | 268.3 |
| 20.04 | 14.0 | 0.8 | 0.2 | 4.59 | 0.54 | 0.54 | -88.2 |
| 1.40 | 27.3 | .. | .. | 1.99 | 0.41 | 0.41 | -79.3 |
| 15.33 | 5.7 | 1.5 | 1.9 | 10.99 | 10.26 | 10.26 | -6.6 |
| 35.83 | -6.2 | 0.1 | 0.0 | 0.62 | 0.53 | 0.53 | -14.6 |
| 32.89 | -30.2 | 0.01 | 0.8 | 0.94 | 1.03 | 1.03 | 10.2 |
| 220.78 | 3.2 | 7.2 | 3.9 | 4.99 | 6.39 | 6.39 | 28.0 |
| 36.96 | 30.9 | 35.8 | 42.3 | 121.40 | 109.26 | 109.26 | -10.0 |
| 6.28 | 270.9 | .. | 35.9 | 55.35 | 56.88 | 56.88 | 2.8 |
| 1 378.72 | 9.4 | 683.1 | 1 022.8 | 226.80 | 295.49 | 295.49 | 30.3 |

²⁾ includes spirits and vinegar and vinegar substitutes made from acetic acid, in addition to weak and strong alcoholic beverages ³⁾The sum total of processed and agricultural products is the total value of exports and imports.

FOOD EXPORTS BY COUNTRY

Percentage of the total value of exports

| 1995 | % | 2005 | % | 2016 ¹⁾ | % | 2017 ¹⁾ | % |
|-----------------|------|---------|------|--------------------|------|--------------------|------|
| Russia | 29.5 | Russia | 19.7 | Sweden | 19.9 | Sweden | 18.1 |
| Sweden | 14.2 | Sweden | 15.4 | Estonia | 9.2 | Estonia | 8.9 |
| Estonia | 6.9 | Estonia | 9.2 | Russia | 7.6 | Russia | 7.3 |
| Germany | 5.1 | U.S. | 5.9 | Germany | 4.9 | France | 6.0 |
| Belgium | 4.4 | Germany | 5.3 | The Netherlands | 4.4 | Germany | 4.6 |
| Norway | 3.7 | UK | 4.4 | Denmark | 3.7 | Denmark | 4.4 |
| U.S. | 3.6 | Poland | 3.2 | France | 3.1 | Poland | 3.7 |
| UK | 3.4 | Norway | 2.9 | U.S | 2.7 | The Netherlands | 3.4 |
| Denmark | 3.2 | Denmark | 2.8 | Poland | 2.6 | UK | 3.2 |
| The Netherlands | 2.8 | France | 2.8 | China | 2.6 | Lithuania | 2.7 |
| Others | 23.2 | Others | 28.4 | Others | 39.4 | Others | 37.6 |
| Total | 100 | Total | 100 | Total | 100 | Total | 100 |

Source: National Board of Customs, Finnish Food and Drink Industries' Federation

¹⁾ compilation of statistics changed from 2014. The figures are not comparable with the previous figures.

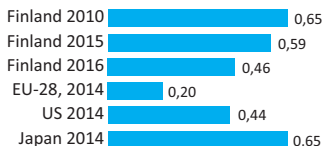
FOOD EXPORTS BY COUNTRY AND PRODUCT GROUP, EXPORTS 2017

| Russia | € thousand | EU | € thousand | Other countries | € thousand |
|---------------------------|------------|--|------------|--|------------|
| Coffee, raw | 24 015 | Butter and other fats and oils derived from milk | 120 603 | Milk powder | 64 305 |
| Compound feedingsuffs | 22 053 | Fish, fresh | 117 059 | Pork | 34 569 |
| Other foodstuffs | 10 046 | Alcoholic beverages | 115 351 | Other milk products | 28 849 |
| Alcoholic beverages | 8 054 | Oat | 50 781 | Alcoholic beverages | 27 761 |
| Other bakery products | 6 570 | Chocolate | 48 583 | Cheese | 22 028 |
| Malts | 5 448 | Other milk products | 39 421 | Wheat | 16 444 |
| Barley | 5 131 | Coffee, roasted | 34 077 | Butter and other fats and oils derived from milk | 16 404 |
| Other cereal products | 4 975 | Yoghurt | 28 344 | Raw materials for feedstuff | 14 870 |
| Chocolate | 4 953 | Other sweets | 26 243 | Other meat and animal parts | 9 501 |
| Other grain mill products | 4 218 | Pork | 25 290 | Chocolate | 7 095 |
| Other | 23 647 | Other | 415 514 | Other | 80 757 |
| Total | 119 110 | Total | 1 021 266 | Total | 322 583 |

Source: National Board of Customs, Finnish Food and Drinks Industries' Federation

THE SHARE OF FOOD INDUSTRY'S R&D COSTS

(% of production)



Source: Statistics Finland, FoodDrinkEurope

CONSUMPTION EXPENDITURE

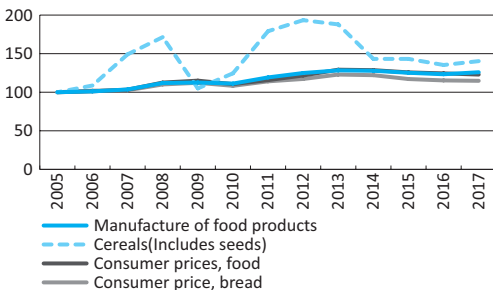
| Private consumption expenditure at current prices, MEUR | 1995 | 2005 | 2016 p. | 2017 p. |
|---|--------|--------|---------|---------|
| Food and non-alcoholic beverages | 7 411 | 9 381 | 13 528 | 13 403 |
| Share of food and non-alcoholic beverages in consumption expenditure, % | 15 | 12 | 12 | 12 |
| Alcoholic beverages and tobacco | 2 976 | 4 052 | 5 034 | 5 007 |
| Clothing and footwear | 2 218 | 3 771 | 4 785 | 4 805 |
| Housing and energy | 11 889 | 19 253 | 31 947 | 33 227 |
| Household equipment | 2 132 | 4 147 | 5 368 | 5 461 |
| Health | 1 631 | 3 367 | 5 240 | 5 419 |
| Transport | 5 924 | 10 438 | 13 254 | 13 766 |
| Telecommunications | 780 | 2 185 | 2 611 | 2 683 |
| Recreation and culture | 5 087 | 9 094 | 11 829 | 12 144 |
| Education | 228 | 333 | 447 | 460 |
| Hotels, cafés and restaurants | 3 383 | 5 259 | 7 243 | 7 642 |
| Other goods and services | 4 709 | 7 074 | 11 078 | 11 240 |

Source: Statistics Finland, National Accounts

FOOD EXPENDITURE

| Food expenditure of households, per capita | 1995 €/y | % | 2005 €/y | % | 2016 p. €/y | % | 2017 p. €/y | % |
|--|--------------|------------|--------------|------------|----------------|------------|----------------|------------|
| Bread and cereal products | 232 | 17 | 301 | 18 | 363 | 16 | 364 | 16 |
| Meat and meat products | 311 | 23 | 359 | 21 | 474 | 21 | 466 | 20 |
| Fish and fish products | 58 | 4 | 73 | 4 | 124 | 5 | 132 | 6 |
| Milk, cheese and eggs | 248 | 18 | 308 | 18 | 437 | 19 | 426 | 19 |
| Fats and oils | 42 | 3 | 39 | 2 | 40 | 2 | 40 | 2 |
| Fruit and vegetables | 190 | 14 | 287 | 17 | 441 | 19 | 437 | 19 |
| Potatoes and potato products | 45 | 3 | 45 | 3 | 58 | 3 | 55 | 2 |
| Sugar | 21 | 2 | 14 | 1 | 11 | 0 | 13 | 1 |
| Coffee, tea and cocoa | 69 | 5 | 45 | 3 | 74 | 3 | 76 | 3 |
| Other goods ¹⁾ | 150 | 11 | 203 | 12 | 281 | 12 | 264 | 12 |
| Total | 1 365 | 100 | 1 674 | 100 | 2 303 | 100 | 2 273 | 100 |

Source: Statistics Finland, National Accounts

¹⁾ other drinks are not included.REAL PRICE DEVELOPMENT OF FOOD IN FINLAND
2005–2017

Source: Statistics Finland

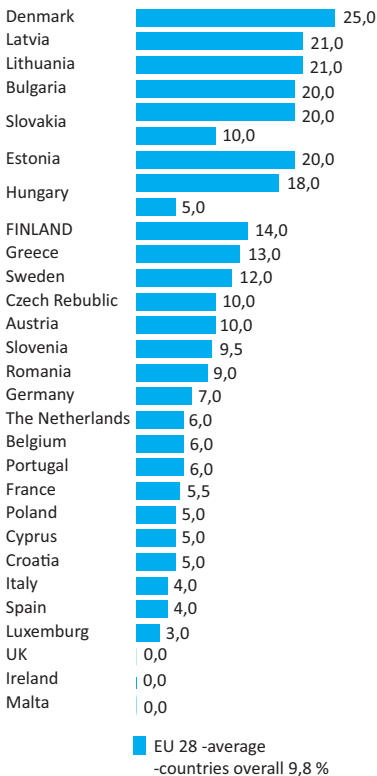
RETAIL PRICES

| Prices, €/kg, €/l | 1994 | 2005 | 2016 | 2017 |
|-------------------------------------|-------|--------------------|-------|-------|
| Milk | | | | |
| low-fat milk | 0.66 | 0.74 | 1.01 | 0.99 |
| fat free milk | 0.58 | 0.72 | 0.91 | 0.89 |
| sour milk ¹⁾ | 0.58 | 0.89 | 1.33 | 1.34 |
| Cheese | | | | |
| Emmentaler | 8.34 | 10.59 | 13.85 | 13.75 |
| Edam | 7.03 | 7.92 | 8.77 | 8.80 |
| Fat | | | | |
| butter | 5.28 | 4.96 | 4.92 | 5.16 |
| margarine | .. | 2.87 | 3.48 | 3.53 |
| Meat | | | | |
| roast of beef ²⁾ | 11.16 | 9.08 | 16.07 | 15.99 |
| minced beef | 7.86 | 7.44 | 9.95 | 9.95 |
| pork sirloin ³⁾ | 7.59 | 9.02 | 9.60 | 9.48 |
| broiler fillet ⁴⁾ | 4.10 | 2.03 | 13.02 | 12.84 |
| salami | 15.86 | 12.19 | 15.51 | 15.41 |
| frankfurter (skinless) | 5.82 | 4.68 | 7.26 | 7.27 |
| sausage | 3.70 | 3.43 | 4.30 | 4.26 |
| Eggs | 2.79 | 2.33 | 3.45 | 3.27 |
| Fish | | | | |
| rainbow trout ⁵⁾ | 5.84 | 8.29 ⁶⁾ | 9.70 | 12.22 |
| Grain and vegetable products | | | | |
| wheat flour | 0.90 | 0.59 | 0.66 | 0.65 |
| rye bread | .. | 3.68 | 3.59 | 3.54 |
| wheat bread | .. | 3.57 | .. | .. |
| wheat coffee bread | 5.63 | 5.79 | 6.79 | 6.79 |
| granulated sugar | 1.23 | 1.08 | 0.89 | 0.88 |
| food potatoes | 1.52 | 0.65 | 0.97 | 0.85 |
| carrots | 1.56 | 1.21 | 1.59 | 1.49 |
| tomatoes | 2.39 | 2.98 | 3.03 | 2.92 |
| roasted coffee | 5.56 | 5.04 | 7.32 | 7.98 |

Source: Statistics Finland

¹⁾ price calculations for 1994 based on fat free sour milk.²⁾ the average price for 1994 calculated from topside.³⁾ price calculations for 1994 based on pork chop.⁴⁾ price calculations for 1994 based on broiler, drumstick-thigh.⁵⁾ gutted whole fish.⁶⁾ value for 2006.

THE MOST COMMON VALUE-ADDED TAX ON FOOD IN THE EU COUNTRIES 2018 (%)



Source: European Comission, Kantar TNS Agri Ltd

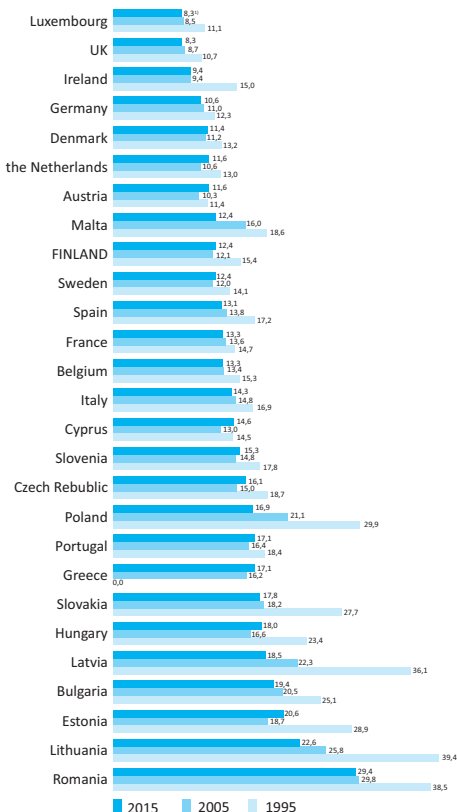
PRICE INDEXES 2016 (EU15=100)

| | Household consumption expenditure | Food and non-alcoholic beverages | Food | Bread and grain products | Meat and meat products | Fish and fish products | Milk, cheese and eggs | Fats and oils | Fruit, vegetables and potatoes | Other food-stuffs | Non-alcoholic beverages |
|-----------------|-----------------------------------|----------------------------------|-------|--------------------------|------------------------|------------------------|-----------------------|---------------|--------------------------------|-------------------|-------------------------|
| The Netherlands | 104.9 | 94.2 | 93.5 | 85.7 | 102.1 | 97.6 | 91.8 | 92.1 | 99.0 | 87.1 | 100.8 |
| Belgium | 102.8 | 105.0 | 105.0 | 104.1 | 109.6 | 112.3 | 114.3 | 113.9 | 93.7 | 99.9 | 105.1 |
| Spain | 85.7 | 89.0 | 89.2 | 99.1 | 77.8 | 87.4 | 95.2 | 86.5 | 91.0 | 98.1 | 85.9 |
| Ireland | 116.9 | 112.6 | 111.4 | 103.8 | 94.9 | 104.9 | 125.9 | 112.7 | 124.2 | 120.8 | 124.8 |
| UK | 113.8 | 91.6 | 89.8 | 79.4 | 86.7 | 87.5 | 100.4 | 91.3 | 92.5 | 96.7 | 109.4 |
| Italy | 94.0 | 104.3 | 105.4 | 112.2 | 103.3 | 105.5 | 119.1 | 96.2 | 96.9 | 106.3 | 92.1 |
| Austria | 102.6 | 115.5 | 116.6 | 131.8 | 122.8 | 123.9 | 102.8 | 124.6 | 115.4 | 104.8 | 108.1 |
| Greece | 76.6 | 97.9 | 96.9 | 109.7 | 80.3 | 111.0 | 129.2 | 118.4 | 72.5 | 121.6 | 108.9 |
| Luxembourg | 128.8 | 112.8 | 113.9 | 109.3 | 121.8 | 113.4 | 121.4 | 118.7 | 108.9 | 109.9 | 106.0 |
| Portugal | 75.7 | 90.0 | 89.0 | 89.4 | 71.2 | 91.8 | 100.0 | 101.6 | 87.5 | 126.8 | 102.9 |
| France | 98.8 | 105.1 | 106.3 | 106.7 | 117.2 | 107.5 | 91.6 | 102.2 | 111.3 | 99.6 | 93.2 |
| Sweden | 125.3 | 118.2 | 119.2 | 123.3 | 120.1 | 116.3 | 113.8 | 124.2 | 128.1 | 114.7 | 110.4 |
| Germany | 95.8 | 99.2 | 99.0 | 96.4 | 107.2 | 108.6 | 88.3 | 103.5 | 105.8 | 93.9 | 101.0 |
| Finland | 113.5 | 112.6 | 111.9 | 118.2 | 110.0 | 113.8 | 115.0 | 92.3 | 116.8 | 110.3 | 120.1 |
| Denmark | 130.8 | 138.0 | 135.6 | 154.9 | 122.2 | 127.5 | 124.8 | 145.3 | 127.3 | 167.1 | 161.4 |
| EU-15 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Eurostat/ Kantar TNS Agri Ltd

HOUSEHOLDS CONSUMPTION OF FOOD AND NON-ALCOHOLIC BEVERAGES 2015

% from households total consumption



Source: CIAA, Eurostat, Kantar TNS Agri Ltd

¹⁾ in 2012

MEAT

| Million kg | 1995 | 2005 | 2016 | 2017 |
|--------------------------|------|------|------|------|
| Pork | | | | |
| total production | 166 | 204 | 190 | 182 |
| consumption | 165 | 176 | 191 | 184 |
| exports ¹⁾ | 9 | 40 | 38 | 32 |
| imports ¹⁾ | 10 | 15 | 35 | 33 |
| Beef and veal | | | | |
| total production | 95 | 87 | 87 | 86 |
| consumption | 96 | 98 | 105 | 107 |
| exports ¹⁾ | 6 | 2 | 4 | 4 |
| imports ¹⁾ | 8 | 14 | 21 | 26 |
| Poultry meat | | | | |
| production | 43 | 87 | 125 | 130 |
| consumption | 45 | 84 | 129 | 137 |
| exports ¹⁾ | 3 | 10 | 20 | 17 |
| imports ¹⁾ | 0.3 | 7 | 21 | 22 |
| Mutton | | | | |
| production | 2.0 | 0.6 | 1.3 | 1.3 |
| consumption | 2.0 | 1.9 | 3.8 | 3.9 |
| exports ¹⁾ | 0.0 | 0.0 | 0.0 | 0.0 |
| imports ¹⁾ | 1.0 | 1.4 | 2.5 | 2.6 |
| Horse meat | | | | |
| production | 0.4 | 0.1 | 0.3 | 0.3 |
| consumption | 0.5 | 1.0 | 1.7 | 1.8 |
| Reindeer meat | | | | |
| Production ²⁾ | 2.8 | 2.9 | 2.0 | 1.9 |
| consumption | 2.6 | 3.1 | 2.8 | 2.5 |
| exports | .. | 0.04 | 0.2 | 0.2 |
| imports | .. | 0.2 | 0.9 | 0.7 |
| Meat total | | | | |
| production | 306 | 378 | 404 | 399 |
| consumption | 308 | 361 | 431 | 434 |
| exports ¹⁾ | 15 | 52 | 62 | 53 |
| imports ¹⁾ | 21 | 39 | 81 | 85 |
| Meat products export | 3.7 | 2.1 | 1.3 | 2.3 |

Source: Kantar TNS Agri Ltd., Natural Resources Institute Finland, National Board of Customs, Reindeer Herders' Association

¹⁾ estimated meat in carcass, incl. bones and spoilage. Amount of meat eaten is approx. half of carcass weight.

²⁾ statistics are compiled for the reindeer husbandry year, from 1st June to 31st May.

EGGS

| Million kilos | 1995 | 2005 | 2016 | 2017 |
|---------------|------|------|------|------|
| Production | 74.7 | 58.2 | 72.6 | 73.5 |
| Consumption | 61.0 | 48.8 | 65.6 | 66.7 |
| Exports | 14.0 | 11.2 | 11.8 | 10.7 |

Source: Kantar TNS Agri Ltd

MILK PRODUCTS AND EDIBLE FATS

| | 1995 | 2005 | 2016 | 2017 |
|-------------------------------------|-------|-------|-------|-------|
| Milk (M litres) | | | | |
| production | 2 397 | 2 362 | 2 359 | 2 336 |
| yield litres/cow | 5 981 | 7 505 | 8 406 | 8 534 |
| received at dairies | 2 296 | 2 293 | 2 320 | 2 297 |
| consumption of liquid milk products | 1 012 | 995 | 914 | 881 |
| Butter (M kg) | | | | |
| production | 45 | 50 | 56 | 53 |
| consumption | 27 | 14 | 18 | 19 |
| exports | 19 | 37 | 38 | 34 |
| Cheese (M kg) | | | | |
| production | 96 | 97 | 84 | 86 |
| consumption | 78 | 98 | 147 | 143 |
| exports | 29 | 37 | 16 | 13 |
| Milk powder, exports (M kg) | 7 | 15 | 45 | 46 |

Source: Kantar TNS Agri Ltd, Natural Resources Institute Finland

BREAD GRAIN

| Wheat | 1995 | 2005 | 2016 | 2017 |
|---|-------|-------|-------|-------|
| Total yield (M kg) | 379.5 | 801.3 | 823.9 | 802.0 |
| First grade product % ¹⁾ | .. | 32 | 26 | 14 |
| Imports (M kg) | 131.6 | 23.2 | 3.3 | 20.6 |
| Exports (M kg) | 8.4 | 25.5 | 249.7 | 164.4 |
| Consumption as food, M kg ²⁾ | 229.5 | 253.7 | 245.6 | 245.3 |
| Annual consumption, kg/person | 45.0 | 49.0 | 44.7 | 44.5 |
| Rye | | | | |
| Total yield (M kg) | 57.7 | 32.4 | 86.8 | 113.5 |
| First grade product % ³⁾ | .. | 28 | 49 | 42 |
| Imports (M kg) | 61.4 | 80.4 | 7.1 | 7.8 |
| Exports (M kg) | .. | 2.4 | 0.6 | 0.3 |
| Consumption as food, M kg ²⁾ | 79.2 | 88.2 | 85.6 | 85.3 |
| Annual consumption, kg/person | 16.0 | 15.0 | 15.6 | 15.5 |

Source: Natural Resources Institute Finland, National Board of Customs

¹⁾ hectolitre weight $\geq 78,0$ kg, falling number ≥ 180 , protein (N*5,7) $\geq 12,5$ %.

²⁾ consumption of ground grains expressed in flour weight.

³⁾ hectolitre weight $\geq 71,0$ kg, falling number ≥ 120 .

FISH

| Fish caught, million kg ¹⁾ | 1995 | 2005 | 2016 ²⁾ | 2017 ⁴⁾ |
|---|-------------|------------------|---------------------------|---------------------------|
| Baltic herring (<i>Clupea harengus membras</i>) | 96 | 67 | 136 | 135 |
| Vendace (<i>Coregonus albula</i>) | 4 | 5 | 4 | 4 |
| Lavaret (<i>Coregonus lavaretus</i>) | 6 | 3 | 2 | 2 |
| Atlantic salmon (<i>Salmo salar</i>) | 2 | 1 | 1 | 1 |
| European perch (<i>Perca fluviatilis</i>) | 17 | 13 | 9 | 9 |
| Pike-perch (<i>Sander lucioperca</i>) | 2 | 3 | 5 | 5 |
| Commercial fishing, total | 111 | 94 | 163 | 161 |
| Recreational fishing, total | 57 | 38 | 30 | 30 |
| Fish farming | 17 | 14 ³⁾ | 14 ³⁾ | 15 ³⁾ |

Source: Natural Resources Institute Finland

¹⁾ the species named are the most important for commercial fishing (recreational fishing included).

²⁾ commercial inland fishing figures are from 2014.

³⁾ share of rainbow trout more than 90 %.

⁴⁾ commercial inland fishing figures are from 2014 and recreational fishing figures are from 2016.

FISH CONSUMPTION

| Domestic fish (kg/person) | 2000 | 2005 | 2015 | 2016 |
|--|-------------|-------------|-------------|-------------|
| Farmed rainbow trout (<i>Oncorhynchus mykiss</i>) | 1.6 | 1.4 | 1.3 | 1.2 |
| Baltic herring (<i>Clupea harengus membras</i>) | 1.2 | 0.7 | 0.3 | 0.3 |
| Pike (<i>Esox lucius</i>) | 0.7 | 0.7 | 0.5 | 0.4 |
| European perch (<i>Perca fluviatilis</i>) | 0.7 | 0.6 | 0.5 | 0.4 |
| Vendace (<i>Coregonus albula</i>) | 0.7 | 0.7 | 0.6 | 0.5 |
| Lavaret (<i>Coregonus lavaretus</i>) | 0.4 | 0.3 | 0.2 | 0.3 |
| Pike-perch (<i>Sander lucioperca</i>) | 0.2 | 0.3 | 0.3 | 0.4 |
| Other domestic fish | 0.6 | 0.5 | 0.4 | 0.4 |
| Imported fish (kg/person) | | | | |
| Farmed rainbow trout (<i>Oncorhynchus mykiss</i>) | 0.3 | 0.6 | 0.8 | 0.9 |
| Farmed Atlantic salmon (<i>Salmo salar</i>) | 0.9 | 1.9 | 4.1 | 3.5 |
| Tuna (<i>Thunnus thynnus</i>) (preserved and prepared) | 1.2 | 1.6 | 1.6 | 1.4 |
| Saithe (<i>Pollachius virens</i>) (frozen fillets) | 0.6 | 0.4 | 0.5 | 0.4 |
| Shrimps and prawns | 0.4 | 0.5 | 0.5 | 0.4 |
| Herring (<i>Clupea harengus</i>) and preserved herring | 0.5 | 0.5 | 0.5 | 0.5 |
| Other imported fish | 2.3 | 2.4 | 2.3 | 1.9 |

Source: Natural Resources Institute Finland

Domestic fish consumption (kg/person) as filleted weight.

Imported fish consumption (kg/person), with Atlantic salmon and rainbow trout as filleted weight, others as product weight.

Imported freshwater fish (such as lavaret, pike-perch etc.) not reported by species included under other imported fish.

VEGETABLES AND FRUIT

| 1000 kg | 1995 | 2005 | 2016 ¹⁾ | 2017 ¹⁾ |
|---------------------------------|-------------|-------------|---------------------------|---------------------------|
| Potato | | | | |
| exports | 2 895 | 4 853 | 6 917 | 7 814 |
| imports | 3 909 | 19 304 | 12 470 | 11 501 |
| Tomato | | | | |
| exports | 2 368 | 58 | 17 | 281 |
| imports | 16 130 | 19 471 | 26 998 | 24 836 |
| Onions | | | | |
| exports | .. | 117 | 5 | 26 |
| imports | .. | 8 264 | 15 322 | 16 007 |
| Cauliflower | | | | |
| exports | 75 | .. | .. | 0.1 |
| imports | 2 166 | 2 407 | 3 706 | 4 068 |
| White and red cabbage | | | | |
| exports | 2 447 | 3 | .. | 0.1 |
| imports | 1 660 | 1 608 | 2 523 | 2 244 |
| Head lettuce | | | | |
| exports | 104 | 35 | 3 | 12 |
| imports | 5 672 | 11 056 | 18 889 | 18 012 |
| Carrots and turnips | | | | |
| exports | 1.5 | 21 | 0.5 | 5 |
| imports | 2 643 | 4 816 | 8 197 | 7 999 |
| Cucumber | | | | |
| exports | 498 | 66 | 6 | 1 |
| imports | 11 107 | 11 256 | 9 965 | 9 728 |
| Pepper | | | | |
| exports | 354 | 5 | 31 | 39 |
| imports | 5 438 | 9 538 | 15 703 | 15 699 |
| Other fresh vegetables | | | | |
| exports | .. | 1 372 | 127 | 236 |
| imports | .. | 12 353 | 26 341 | 26 961 |
| Banana | | | | |
| exports | 2 352 | .. | 5 766 | 7 530 |
| imports | 6 619 | 65 491 | 110 535 | 114 030 |
| Citrus fruit ²⁾ | | | | |
| exports | 3 968 | 91 | 304 | 504 |
| imports | 62 100 | 63 749 | 79 227 | 71 681 |
| Apple | | | | |
| exports | 11 480 | 100 | 197 | 278 |
| imports | 54 001 | 49 719 | 44 428 | 43 761 |
| Other fresh fruit ³⁾ | | | | |
| exports | .. | 373 | 3 794 | 885 |
| imports | .. | 58 775 | 96 881 | 99 215 |

Source: National Board of Customs, Statistics Service

¹⁾ compilation of statistics changed in 2015.²⁾ fresh and dried.³⁾ incl. berries and dried dates, figs, pineapples, avocados, guavas, mangos and mangosteens.

BERRIES AND MUSHROOMS

| Total crops of garden berries, mill. kg | 2005 | 2010 | 2016 | 2017 |
|---|---------------|--------------|---------------|--------------|
| Strawberry | 10.1 | 10.3 | 11.9 | 13.8 |
| of which organic | .. | 0.2 | 0.3 | 0.3 |
| Black- and greencurrant | 1.8 | 1.0 | 1.0 | 1.4 |
| Red- and whitecurrant | 0.5 | 0.4 | 0.4 | 0.5 |
| Raspberry | 0.6 | 0.5 | 1.3 | 1.1 |
| of which organic | .. | 0.01 | 0.03 | 0.02 |
| Gooseberry | 0.03 | 0.06 | 0.07 | 0.05 |
| Total | 13.1 | 12.5 | 14.9 | 17.1 |
| Supply of wild berries, 1 000 kg | | | | |
| Blueberry | 3 111 | 2 780 | 5 512 | 3 617 |
| of which organic | .. | 1 036 | 3 272 | 825 |
| Lingonberry | 8 544 | 6 057 | 11 240 | 5 243 |
| of which organic | .. | 1 232 | 1 471 | 292 |
| Cloudberry | 321 | 152 | 248 | 222 |
| of which organic | .. | 1 | 94 | 130 |
| Other berries | 51 | 108 | 198 | 49 |
| Total | 12 027 | 9 097 | 17 198 | 9 131 |
| Supply of wild mushrooms, 1 000 kg ¹⁾ | | | | |
| Chanterelle | 16 | 5 | 39 | 12 |
| Cep | 181 | 747 | 383 | 67 |
| Milk caps | 152 | 98 | 160 | 122 |
| Other wild mushrooms | 77 | 5 | 16 | 37 |
| Total | 426 | 855 | 597 | 238 |

Source: Natural Resources Institute Finland, Kantar TNS Agri Ltd, Finnish Association of Fruit and Berry Growers, Agency for Rural Affairs

¹⁾ weighted fresh.

GAME BAG

| Amount and face value of game meat | | 2006 | 2010 | 2016 |
|------------------------------------|----------------------------------|-----------|-----------|-----------|
| Number | Hares | 268 800 | 248 200 | 181 800 |
| | Moose | 75 587 | 68 423 | 49 674 |
| | Other artiodactyla ¹⁾ | 25 777 | 29 113 | 39 546 |
| | Wild boar | 3 | 100 | 502 |
| | Waterfowl | 586 000 | 533 800 | 367 300 |
| | Grouse | 459 200 | 306 200 | 129 100 |
| | Other game birds | 245 400 | 278 000 | 270 500 |
| | Total ²⁾ | 1 664 867 | 1 470 315 | 1 043 600 |
| Quantity 1 000 kg | Hares | 525 | 501 | 364 |
| | Moose | 10 018 | 9 124 | 6 525 |
| | Other artiodactyla ¹⁾ | 1 086 | 1 227 | 1 604 |
| | Wild boar | 0 | 8 | 40 |
| | Waterfowl | 327 | 305 | 212 |
| | Grouse | 308 | 204 | 91 |
| | Other game birds | 84 | 97 | 92 |
| | Total ²⁾ | 12 400 | 11 559 | 9 005 |
| Value EUR 1 000 | Hares | 2 608 | 7 446 | 5 443 |
| | Moose | 51 526 | 54 744 | 42 416 |
| | Other artiodactyla ¹⁾ | 5 681 | 6 348 | 8 427 |
| | Wild boar | 1 | 80 | 402 |
| | Waterfowl | 5 157 | 6 146 | 4 258 |
| | Grouse | 4 515 | 5 921 | 2 783 |
| | Other game birds | 1 480 | 1 775 | 1 659 |
| | Total ²⁾ | 71 175 | 83 029 | 65 914 |

Source: The Natural Resources Institute Finland

¹⁾ white-tailed deer, Finnish forest reindeer, fallow deer and roe deer.²⁾ Totals include bears and beavers.

LEVEL OF SELF-SUFFICIENCY IN FOOD PRODUCTS

| Ratio of production to consumption (%) | 1994 | 2005 | 2016 | 2017 |
|---|------|------------------|------|------|
| Bread grain | 75 | 102 | 102 | 109 |
| Dairy products, liquid milk | 112 | 106 | 97 | 99 |
| Beef and veal | 111 | 89 | 82 | 81 |
| Pork | 113 | 116 | 100 | 99 |
| Eggs | 130 | 119 | 112 | 112 |
| Sugar | 68 | 83 | 44 | 40 |
| Tomato | .. | 62 | 60 | 61 |
| Cucumber | .. | 74 | 80 | 81 |
| Carrot and turnip | .. | 94 | 92 | 92 |
| Yellow onion | .. | 80 ¹⁾ | 71 | 69 |
| Cauliflower | .. | 62 | 39 | 38 |
| Strawberry | .. | 67 | 66 | 65 |
| Raspberry | .. | 24 | 37 | 38 |
| Apple ²⁾ | .. | 21 | 13 | 15 |
| Apple (includes private garden- ing) | .. | 31 | 16 | 29 |

Sources: Kantar TNS Agri Ltd, Finnish Horticultural Products Society, Finnish Association of Fruit and Berry Growers, National Board of Customs, The Central Union of Agricultural Producers and Forest Owners, Natural Resources Institute Finland

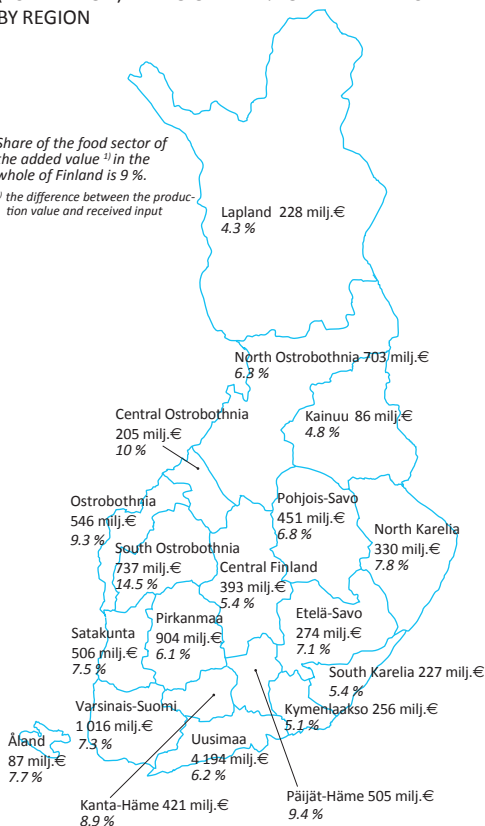
¹⁾ onions excluding garlic and leek.

²⁾ numbers are estimates (do not include private gardening).

ADDED VALUE IMPACT OF THE FOOD SECTOR (EUR MILLION) BY REGION AND % OF ADDED VALUE BY REGION

Share of the food sector of the added value ¹⁾ in the whole of Finland is 9 %.

¹⁾ the difference between the production value and received input



Source: Natural Resources Institute Finland. Ruokaketjun merkitys kansantaloudelle ja alueille Suomessa 2010–2016

NON-COMPLIANT FOODS 2017

| Inspected foods | Inspected batches ¹⁾ , number | Batches issued a notice ²⁾ , number | Non-compliant batches ²⁾ , number |
|--|--|--|--|
| Grain and cereal products | 149 | 16 | 10 |
| Vegetables and vegetable products | 556 | 65 | 33 |
| Starchy roots and tubers | 18 | 0 | 0 |
| Leguminous plant seeds and leguminous products | 45 | 1 | 10 |
| Fruit and fruit products | 617 | 29 | 11 |
| Fish and fish products | 18 | 0 | 0 |
| Sweets and chocolate | 65 | 20 | 4 |
| Fruit, vegetable and plant juices, drinks and spreads etc. | 85 | 9 | 5 |
| Water, water-based soft drinks etc. | 64 | 13 | 4 |
| Ingredients for hot drinks and groats | 133 | 15 | 12 |
| Alcoholic beverages | 21 | 4 | 2 |
| Foodstuff for adolescents | 46 | 2 | 3 |
| Foodstuff for people with special diet (incl. dietary supplements) | 80 | 14 | 36 |
| Compiled dishes | 100 | 22 | 9 |
| Spicing products and dinner sauces | 111 | 16 | 13 |
| Purified and isolated ingredients | 33 | 10 | 1 |
| Cereal dough based products | 187 | 18 | 11 |
| Nuts and nut products | 115 | 13 | 5 |
| Oil seeds and fruit | 102 | 5 | 2 |
| Herbs, spices and similar | 174 | 22 | 19 |
| Products imitating meat and dairy products | 17 | 1 | 1 |
| Total | 2 736 | 295 | 191 |

Source: Customs Laboratory

¹⁾ 36% of the batches were from countries outside the EU and the origin of 100 products was unknown.

²⁾ 7% were found to be non-compliant with the regulations, and lesser defects (reason for reprimand) were found in 11% of the investigated lots.

CAUSES OF NON-COMPLIANCE 2017

| Cause of non-compliance | Number of batches | % |
|------------------------------|-------------------|-------|
| Labelling | 63 | 37.1 |
| Plant protection products | 53 | 31.2 |
| Microbiological causes incl. | | |
| Salmonella | 14 | 8.2 |
| Additives | 14 | 8.2 |
| Salt content | 8 | 4.7 |
| Warning labels | 6 | 3.5 |
| Allergens | 4 | 2.4 |
| Nutrients | 4 | 2.4 |
| Irradiation | 4 | 2.4 |
| Total | 170 | 100.0 |

Source: Customs Laboratory

VETERINARY MEDICINAL PRODUCT RESIDUES AND OTHER SUBSTANCES IN LIVE ANIMALS AND ANIMAL PRODUCTS

| | EU-27 average | | Finland | | |
|----------------------------|---------------|---------|---------|-------|-------|
| | 2010 | 2015 | 2010 | 2016 | 2017 |
| Number of targeted samples | 418 081 | 411 677 | 4 344 | 4 334 | 4 218 |
| Non-compliant samples % | 0.33 | 0.34 | 0.00 | 0.00 | 0.28 |

Source: EFSA and Finnish Food Safety Authority Evira

Contaminants are prohibited substances, permissible medicinal products and contaminants from the environment. The EU results include all samples examined in the programme, including contaminants from the environment. The results for Finland take into account the residues of prohibited substances and permissible medicinal products but not all results that exceed the limit, such as heavy metals found in game.

FOOD CONTROL FIGURES 2017

| Inspections, number | Primary production ¹⁾ | Manufacture and packaging | Distribution and transport | Retail sales | Service sector | Total |
|---|----------------------------------|---------------------------|----------------------------|--------------|----------------|--------|
| Number of establishments | 10 098 | 3 377 | 2 246 | 11 799 | 34 302 | 61 822 |
| Number of establishments inspected | 783 | 1 479 | 395 | 3 819 | 13 729 | 20 205 |
| Number of inspections | 757 | 3 151 | 536 | 5 066 | 17 009 | 26 519 |
| Number of establishments committing infringements | 75 | 279 | 32 | 499 | 1 673 | 2 558 |
| Type of infringement | | | | | | |
| Hygiene (HACCP, training) | .. | 130 | 8 | 168 | 712 | 1 018 |
| General hygiene | .. | 339 | 21 | 432 | 1 909 | 2 701 |
| Composition | .. | 8 | 10 | 15 | .. | 33 |
| Contamination (other than microbiological) | .. | 14 | .. | 9 | 39 | 62 |
| Labelling and presentation | .. | 78 | 23 | 213 | 81 | 395 |
| Other | .. | 49 | 2 | 74 | 80 | 205 |

Source: Finnish Food Safety Authority Evira, Report on the implementation of the Multi-annual National Food Chain Control Audit Plan 2015–2019 in 2017

¹⁾ primary production data of foods missing as comprehensive information not available in 2017.

NUMBER OF RECALLS

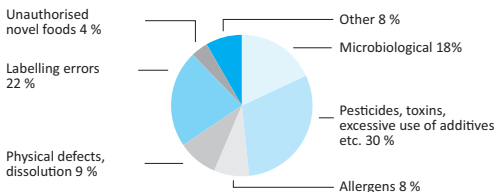
| | 2005 | 2010 | 2016 | 2017 |
|--------------------------------|------|------|------|------|
| Recalls ¹⁾ , number | 28 | 84 | 131 | 158 |

Source: Finnish Food Safety Authority Evira

¹⁾ incl. both retailer and mass caterer recalls. The statistics for different years are not fully comparable, as recording methods have been defined.

Includes even incidents where there were no more products available on the markets as the information reached Finland.

REASONS FOR PRODUCT WITHDRAWALS 2017



Source: Finnish Food Safety Authority Evira

FOOD AND WATER BORNE OUTBREAKS AND NUMBER OF PERSONS AFFECTED 2017

| Disease-causing agent | Number of outbreaks N=39 | Number of persons affected N=532 | % |
|----------------------------------|-----------------------------|-------------------------------------|------------|
| Food borne | | | |
| Norovirus | 10 | 295 | 62 |
| Salmonella | 1 | 23 | 5 |
| Clostridium perfringens | 3 | 19 | 4 |
| Campylobacter | 3 | 13 | 3 |
| Other bacteria/beetroot | 1 | 10 | 2 |
| Sodium nitrate | 1 | 4 | 1 |
| Verocytotoxigenic E. coli (VTEC) | 1 | 3 | 1 |
| Unknown | 18 | 107 | 23 |
| Total | 38 | 474 | 100 |
| Waterborne | | | |
| Norovirus | 1 | 58 | |
| Total | 1 | 58 | |

Source: Finnish Food Safety Authority Evira

FOOD BORNE OUTBREAKS BY FOOD VEHICLE 2017

| Food vehicle | Unknown or several foodstuffs | Meat and meat products | Vegetables and vegetable products | Fish and fish products, shellfish | Cereals and cereal products | Bakery products | Total |
|----------------------------------|-------------------------------------|------------------------------|---|---|-----------------------------------|--------------------|-------|
| Causative agent | | | | | | | |
| Norovirus | 6 | | 2 | 1 | | 1 | 10 |
| Clostridium perfringens | 3 | | | | | | 3 |
| Campylobacter jejuni | | 3 | | | | | 3 |
| Salmonella | | | 1 | | | | 1 |
| Verocytotoxigenic E. coli (VTEC) | | 1 | | | | | 1 |
| Beetroot | | | 1 | | | | 1 |
| Sodium nitrate | | 1 | | | | | 1 |
| Unknown | 17 | | | | 1 | | 18 |
| Total | 26 | 5 | 4 | 1 | 1 | 1 | 38 |
| % | 68 | 13 | 11 | 3 | 3 | 3 | 100 |

Source: Finnish Food Safety Authority Evira

FOOD CONSUMPTION PER CAPITA IN FINLAND AND IN THE EU

| Consumption kg/ capita | 1995 | 2005 | 2011 | 2016 | 2017 | EU-28 ¹⁾ |
|--|-------|-------|-------|--------------------|--------------------|---------------------|
| Grain | 69.8 | 78.8 | 78.8 | 79.7 | 80.3 | 127.3 |
| Meat. total | 60.3 | 73.0 | 77.6 | 81.1 | 81.0 | 81.3 |
| beef and veal | 18.8 | 18.6 | 18.6 | 19.2 | 19.4 | 14.9 |
| pork | 32.0 | 33.5 | 36.4 | 34.7 | 33.4 | 39.0 |
| poultry meat | 9.0 | 16.1 | 18.2 | 23.5 | 24.9 | 22.5 |
| other meat | 0.6 | 4.8 | 4.4 | 3.7 | .. | 2.8 |
| Liquid milk products. total (litres) | 203.0 | 187.8 | 181.8 | 166.2 | 159.9 | 236.4 |
| milk | 145.6 | 134.6 | 127.6 | 121.6 | 115.6 | .. |
| sour milk products | 37.1 | 36.8 | 40.7 | 32.7 | 31.9 | .. |
| cream (incl. sour cream products) | 6.8 | 6.6 | 8.8 | 8.9 | 9.3 | 3.9 |
| Butter | 5.5 | 2.6 | 4.0 | 3.5 | 3.5 | 3.7 |
| Vegetable oils | 4.3 | 5.3 | 5.5 | 3.4 ⁷⁾ | .. | 19.6 |
| Cheese ²⁾ | 14.8 | 17.2 | 21.0 | 26.4 | 25.8 | 17.2 |
| Eggs | 11.8 | 9.3 | 10.0 | 11.9 | 11.9 | 12.0 |
| Sugar | 35.4 | 32.0 | 30.1 | 29.1 | 30.6 | 31.7 |
| Fruit ³⁾ | 43.6 | 54.5 | 58.8 | 67.3 | 65.4 | 103.7 |
| Vegetables ⁴⁾ | 61.7 | 68.3 | 62.6 | 63.7 | 63.8 | 109.4 |
| Fish (fillet/product weight) | 14.0 | 14.1 | 14.9 | 13.1 | .. | .. |
| Coffee (roasted) | 8.3 | 9.8 | 9.7 | 9.9 | 9.6 | 4.8 |
| Soft drinks (litres) | 45.8 | 52.0 | 56.0 | 52.0 ⁵⁾ | 52.8 ⁵⁾ | .. |
| Beer (litres) ⁶⁾ | 82.5 | 84.0 | 85.4 | 76.6 | 75.0 | 67.1 |
| Wine (litres) ⁶⁾ | 8.2 | 10.8 | 12.6 | 11.5 | 11.6 | 22.8 |
| Spirits (litres) ⁶⁾ | 4.9 | 6.6 | 5.4 | 4.4 | 4.4 | .. |

Source: Source: Kantar TNS Agri Ltd, Natural Resources Institute Finland, FAO -Statistics Division - Food Balance Sheet, Canadean, ICO (International Coffee Organization), The Finnish Food and Drink Industries' Federation, Federation of The Brewing and Soft Drinks Industry

¹⁾ in 2013. Food product group specifications do not concern EU figures.

²⁾ includes non-flavoured curd and cottage cheese.

³⁾ excluding fruit juices and berries.

⁴⁾ from 2011 onwards, no frozen or preserved vegetables.

⁵⁾ the number is an estimate from the previous year.

⁶⁾ the numbers don't include private imports.

⁷⁾ in 2015.

AVERAGE DAILY INTAKE OF ENERGY-YIELDING NUTRIENTS AND FIBRE AND PERCENTAGE OUT OF THE TOTAL ENERGY INTAKE

| | Intake per day | | E % ¹⁾ | | Recom- menda- tion |
|---------------------------------------|----------------|----------------|-------------------|-------|--------------------------|
| | Men | Women | Men | Women | |
| Protein, g | 95.0 | 72.0 | 17.3 | 17.2 | 10–20 E% |
| Fat ²⁾ , g | 93.0 | 71.0 | 37.0 | 35.9 | 25–40 E% |
| Saturated fat ³⁾ , g | 39.0 | 30.0 | 15.5 | 15.1 | < 10 E% |
| Monounsaturated fat ³⁾ , g | 36.0 | 27.0 | 14.5 | 13.8 | 10–20 E% |
| Polyunsaturated fat ³⁾ , g | 17.2 | 13.4 | 6.9 | 6.9 | 5–10 E% |
| Carbohydrates, g | 230.0 | 186.0 | 42.2 | 43.9 | 45–60 E% |
| Sucrose, g | 51.0 | 43.0 | 9.2 | 10.0 | ≤ 10 E% |
| Fibre g/MJ | 2.4 | 2.9 | | | 3 g/MJ |
| Energy, MJ (kcal) | 9.4 (2 243) | 7.3 (1 733) | | | |

Source: The National Findiet 2012 Survey
25–64 years old

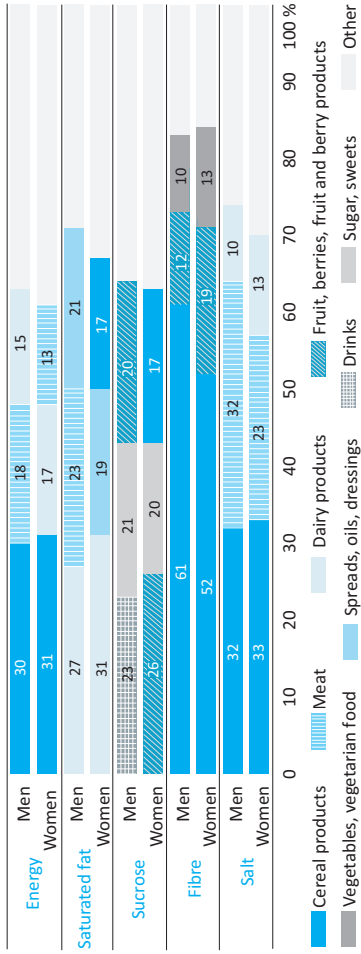
Energy includes fibre and alcohol.

¹⁾ percentage of nutrient intake out of the total energy intake.

²⁾ crude fat.

³⁾ as triglycerides.

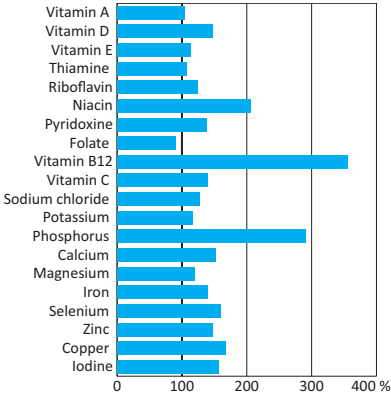
MOST IMPORTANT SOURCES OF ENERGY AND NUTRIENTS



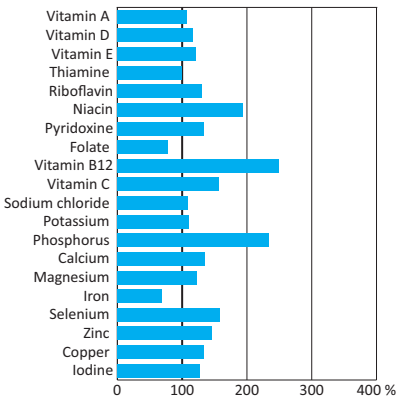
Source: The National FINDIET 2012 Survey
25–64 years old

ACTUAL VITAMIN AND MINERAL INTAKE COMPARED TO THE RECOMMENDATIONS (% of recommendations)

Men



Women



Source: The National FINDIET 2012 Survey
25–64 years old

FINNS' DAILY MEALS (percentage)

| | Children/teenagers ⁴⁾ | | | | Working-age population | | Older people | |
|--------------------------------|----------------------------------|-------|--------------------------------|------------------|--|-------|--------------|-------|
| | Primary school ⁵⁾ | | Secondary school ⁶⁾ | | Upper secondary school/vocational school ⁷⁾ | | | |
| | Boys | Girls | Boys | Girls | Boys | Girls | Men | Women |
| Breakfast | 90 | 91 | 63 ⁸⁾ | 67 ⁸⁾ | 60 | 63 | 91 | 95 |
| Lunch | 96 | 94 | 85 ⁸⁾ | 73 ⁸⁾ | | | 84 | 86 |
| Dinner | 86 | 91 | 77 ⁸⁾ | 67 ⁸⁾ | | | 83 | 81 |
| Snack ¹⁾ | 70 | 68 | 29 ⁸⁾ | 35 ⁸⁾ | | | 88 | 95 |
| Evening snack | 92 | 87 | 69 ⁸⁾ | 64 ⁸⁾ | | | 80 | 85 |
| Drink as a meal ²⁾ | | | | | | | 86 | 84 |
| School meal | | | 70 | 70 | 75 | 76 | | |
| Meal with family ³⁾ | | | 65 | 60 | 55 | 49 | | |

The National FINDIET 2012 Survey, Late-tutkimus 2010, Kouluterveystutkimus 2015 (Late Study, School Health Study 2017)

¹⁾ for children, snack in the afternoon.

²⁾ meal that only consists of a drink.

³⁾ evening meal, where the entire family eats together, at least 3 weekdays a week.

⁴⁾ for children and teenagers, the meals eaten on weekdays.

⁵⁾ primary school classes 1 and 5.

⁶⁾ secondary school classes 8 and 9.

⁷⁾ 1st and 2nd year students at upper secondary and vocational schools.

⁸⁾ secondary school class 8.

HEALTH BEHAVIOUR 2017 (%)

| | All | aged 20–54 | aged 55–74 | 75+ |
|---|-----|---------------|---------------|-----|
| Access to a canteen at work or school | 59 | 62 | 49 | .. |
| Eat few vegetables | 23 | 22 | 24 | 32 |
| Do not eat fish every week | 20 | 27 | 11 | 9 |
| Butter or butter/ vegetable oil spread every day | 32 | 28 | 33 | 46 |
| Coffeebread, Danish pastries, biscuits etc. every day | 7 | 3 | 11 | 15 |
| Drink too much alcohol | 29 | 35 | 26 | 7 |
| Smoke every day | 13 | 14 | 13 | 4 |
| Obese BMI ≥ 30 | 20 | 18 | 23 | 18 |
| Do not exercise | 25 | 24 | 23 | 43 |
| Sleep ¹⁾ | | | | |
| Less than 6 hours | 4 | | | |
| 6–8.9 hours | 87 | | | |
| 9 hours or more | 9 | | | |

Source: National Study of the Finnish Adult Population (ATH) 2017,
The National Finrisk 2012 Study ¹⁾

NUMBER OF SHOPS BY SHOP TYPE

| Shop type | Total 1.1.2018 |
|--|-----------------------|
| Hypermarkets | 152 |
| Department stores | 86 |
| Supermarkets, large | 662 |
| Supermarkets, small | 433 |
| Self-service shops, large | 893 |
| Self-service shops, small | 309 |
| Small shops | 289 |
| Speciality shops | 782 |
| Market halls | 32 |
| Discount stores, part of the convenience goods offering ¹⁾ | 350 |
| Service station stores, part of the convenience goods offering ¹⁾ | 636 |
| Total 1.1.2018 | 4 624 |
| Mobile shops | 12 |
| Closed down | 438 |

Source: A.C. Nielsen Finland Oy

¹⁾ selling a limited range of convenience goods.

SALES OF DAILY CONSUMER GOODS BY SHOP TYPE

| MEUR | 2017 |
|--|---------------|
| Hypermarkets ¹⁾ | 4 923 |
| Department stores | 457 |
| Supermarkets, large | 6 497 |
| Supermarkets, small | 1 901 |
| Self-service shops, large | 2 151 |
| Self-service shops, small | 356 |
| Small shops | 203 |
| Speciality shops and market halls | 273 |
| Discount stores, part of the convenience goods offering | 385 |
| Service station stores, part of the convenience goods offering | 195 |
| Total | 17 340 |
| Mobile shops | 4 |
| Closed down | 247 |
| Total | 17 592 |

Source: A.C. Nielsen Finland Oy

¹⁾ includes chains K-citymarket, Prisma and Minimani.

NUMBER OF KITCHENS AND UNITS SERVED BY INDUSTRY, 2017

| | Number, pieces ¹⁾ | Servings, million |
|---|------------------------------|-------------------|
| Licenced restaurants ²⁾ | 2 760 | 103 |
| Cafés | 1 295 | 39 |
| Other restaurants | 1 243 | 47 |
| Primary, secondary and upper secondary schools | 1 157 | 112 |
| Hamburger and kebab restaurants, pizzerias | 1 069 | 57 |
| Care homes and children's homes, other care facilities | 838 | 69 |
| Staff restaurants | 702 | 35 |
| Nursery schools | 693 | 24 |
| Hotels and other accommodation providers | 690 | 28 |
| Cafés and restaurants operating in connection with other operations | 543 | 22 |
| Service stations | 541 | 31 |
| Vocational schools, colleges and universities | 388 | 40 |
| Catering and meal services | 338 | 21 |
| Hospitals | 201 | 57 |
| Other mass caterers | 28 | 17 |
| Industry not reported | 56 | .. |
| Total | 12 542 | 702 |

Source: Taloustutkimus Oy, Horeca register

¹⁾ does not include cafeterias.

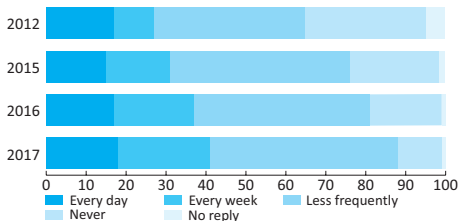
²⁾ all licensed cafés and restaurants.

In 2015, the share of organic products in public catering services was approx. 6 % (in kg).

Source: EkoCentria, Taloustutkimus Oy

Environment

FREQUENCY OF CONSUMPTION OF ORGANIC PRODUCE BY CATERING PROVIDERS, %



Source: Taloustutkimus Oy/Food Service Feedback 2017

Forkful of Facts can be ordered from Finnish Food Information by e-mail: ruokatieto@ruokatieto.fi or by phone +358 40 710 4170.

The publication is free, but postage are charged (handling 7 €+ shipping costs).

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