

# **FORKFUL OF FACTS**

Finnish Food Industry Statistics

# **2019**

*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 2018. 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](http://www.ruokatieto.fi/tietohaarukka).



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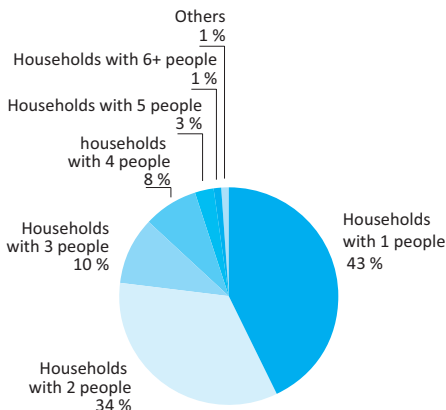
Explanation of symbols:

p. = preliminary data

.. = data not available

## HOUSEHOLDS BY SIZE

In 2017 there were 2 713 000 households in Finland.



Source: Statistics Finland

On January 1st 2019 the population of Finland was 5 517 919.

On January 1st 2019 the population density of Finland was approximately 18.2 people per square kilometer.

In 2017 the average size of a household was approximately 2.00 people.

Source: Statistics Finland

## GROSS DOMESTIC PRODUCT

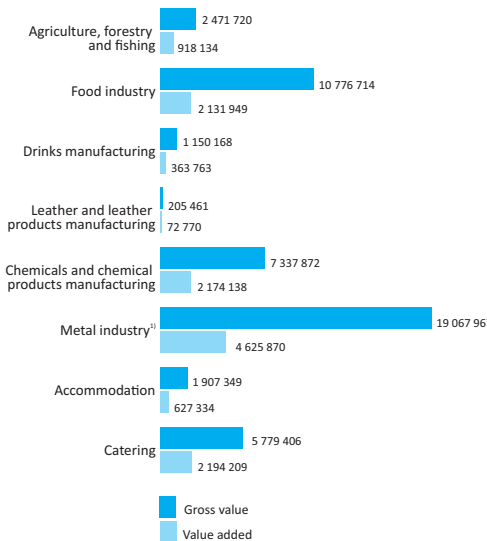
<b>Distribution by field of activity % <sup>1)</sup></b>	<b>2005</b>	<b>2010</b>	<b>2017</b>	<b>2018</b>
Agriculture, forestry and fishing	2.6	2.7	2.7	2.8
of which agriculture	1.1	0.9	0.6	..
Manufacturing	24.3	19.5	17.7	17.7
of which food industry	1.5	1.3	1.4	1.3
Construction	6.4	6.4	7.0	7.3
Wholesale and retail trade <sup>1)</sup>	9.8	9.4	7.5	7.4
Transportation and storage	5.7	5.1	4.7	4.7
Accommodation and food service activities	1.6	1.6	1.8	1.8
of which food service activities	1.2	1.3	1.4	..
Information and communication	5.0	5.0	5.9	5.9
Financial and insurance activities	2.7	2.6	2.9	2.7
Real estate activities	10.2	11.2	12.6	12.2
Human health and social work activities	8.2	9.3	9.4	9.3
<sup>1)</sup> Selected fields of activity included in the gross domestic product.				
Gross value added at basic prices, billion EUR	143.6	163.6	193.3	200.1
GDP in purchasers' values, billion EUR	164.4	187.1	223.9	232.1

Source: Statistics Finland. National Accounts

## GROSS VALUE OF AND VALUE ADDED TO PRODUCTION BY INDUSTRY BRANCH 2017

Gross value (thousand euros)

Value added (thousand euros)



Source: Statistics Finland, Standard industrial classification TOL 2008

<sup>1)</sup> 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 2017

	Output. MEUR	Value added. MEUR	Em- ployed. 1 000 persons	Export of goods MEUR
Agriculture	4 428	1 226	81.5	603
Food industry	11 140	2 624	37.8	1 184
Forestry	25 980	8 444	63.7	12 707
Chemical industry	2 516	736	3.3	1 933
Water treatment and distribution	768	460	2.6	..
Bioeconomy services	3 608	1 643	34.6	..
of which nature tourism	3 451	1 486	34.6	..
of which hunting	86	86	0	..
of which fishing	71	71	0	..
Bioeconomy total	67 681	23 548	315	17 874
National economy total	413 435	193 268	2 545.2	59 728
Share of bioeconomy. %	16	12	12	30

Source: Natural Resources Institute Finland

Output, value added and export expressed in current prices.



## LABOUR FORCE

Field of activity	2000 %	2005 %	2017 %	2018 %	2018 1 000 persons
Agriculture, forestry, fish- ing, mining and quarrying	6	5	4	4	101
of which agriculture	5	4	3	3	72
of which forestry	1	1	1	1	21
Industry <sup>1)</sup>	20	18	14	14	361
of which food and beverage industry	2	2	1	1	38
Construction	6	7	8	8	198
Wholesale and retail trade <sup>2)</sup>	12	12	11	11	292
Transport and storage	7	6	6	6	143
Accommodation and food service activities	3	3	3	3	86
Other services and fields of activity	45	49	55	54	1383
Unknown field of activity	0.3	0.2	0.2	0.3	7
Employed total	100	100	100	100	
in thousands	2 335	2 401	2 473	2 540	2540
Total labour force in thousands	2 589	2 621	2 707	2 742	2742
of which unemployed %	9.8	8.4	8.6	7.4	7.4

Source: Statistics Finland, Standard industrial classification TOL 2008

<sup>1)</sup> Including electricity, water supply, waste management etc.<sup>2)</sup> Including repair of motor vehicles and motorcycles.

## OCCUPATIONAL DISEASES BY INDUSTRY 2015

Occupational diseases	pcs	per 10 000 employed
Crop farming, animal husbandry, game husbandry	113	12.5
Production of foodstuff	51	14.9
Bevegare industry	2	5.6
Food service activities	42	5.9

Source: Finnish Institute of Occupational Health

## NUMBER OF OCCUPATIONAL ACCIDENTS

Occupational accidents <sup>1)</sup> per 100,000 working in the industry	2005	2010	2016	2017
Agricultural entrepreneurs	5 962	4 882	4 653	4 886
Food and drink industry employees	7 696	6 919	2 636	2 504
All occupations <sup>2)</sup>	2 581	2 103	1 673	1 697

Source: Statistics Finland, Workers' Compensation Center

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

<sup>1)</sup> Occupational accidents leading to at least 4 days of incapacity for work.

<sup>2)</sup> Occupational groups with at least 10 000 employees.

## AVERAGE AGE AND NUMBER OF AGRICULTURAL ENTREPRENEURS

	1995		2005		2018	
	aver. age	number	aver. age	number	aver. age	number
Agricultural entrepreneurs	45.1	142 000	47.6	90 000	48.9	57 000
Start-up entrepreneurs <sup>1)</sup>	29.9	70	29.8	760	29.3	180
Retiring entrepreneurs <sup>2)</sup>	60.2	6 600	60.8	3 900	62.2	1 400
Recipients of farmers' early retirement aid <sup>3)</sup>	57.8	560	58.6	1 420	59.7	280

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

<sup>1)</sup> Entrepreneurs taking up farming through succession within the farmers' early retirement aid scheme.

<sup>2)</sup> Covering those retiring on old-age, disability and unemployment pension.

<sup>3)</sup> Those giving up farming through succession within the farmers' early retirement aid scheme.

# **MOST IMPORTANT REASONS FOR RETIREMENT ON DISABILITY PENSION AMONG AGRICULTURAL ENTREPRENEURS**

<b>%</b>	<b>1995</b>	<b>2005</b>	<b>2017</b>	<b>2018</b>
Respiratory diseases	7	3	2	2
Mental illnesses	14	20	17	21
Musculoskeletal disorders	46	47	46	43
Injuries, poisonings, etc.	6	9	6	8
Cardiovascular diseases	15	8	6	8
Tumours	..	..	10	7
Nervous system disorders	..	..	7	7

Source: Farmers' Social Insurance Institution Mela

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

# AGRICULTURE

## Environment

### MEAN PRECIPITATION 1981–2018, mm

	spring	summer	autumn	winter
Helsinki	105	202	202	150
Jyväskylä	113	228	175	127
Oulu	85	194	131	94
Sodankylä	100	196	138	102
Frankfurt <sup>1)</sup> , Germany	145	180	159	149
Padova <sup>1)</sup> , Italy	195	183	221	149

Source: Finnish Meteorological Institute

<sup>1)</sup> Average years 1981–2015.

### MEAN TEMPERATURES 1981–2018, °C

	spring	summer	autumn	winter
Helsinki	4.5	16.4	6.8	-3.2
Jyväskylä	2.6	14.9	3.8	-7.3
Oulu	1.6	14.7	3.4	-8.3
Sodankylä	-0.9	12.8	0.1	-12.3
Frankfurt <sup>1)</sup> , Germany	10.7	19.2	10.6	2.5
Padova <sup>1)</sup> , Italy	13.6	23.5	14.4	4.2

Source: Finnish Meteorological Institute

<sup>1)</sup> Average years 1981–2015.

### WEATHER CONDITIONS DURING THE GROWING SEASON

	Effective temperature comparative period			Precipitation comparative period		
	2018	2017	1981–2010	2018	2017	1981–2010
Jokioinen	1 727	1 174	1 307	263	397	341
Kauhava	1 531	1 059	1 185	211	279	286
Oulu	1 448	1 007	1 170	259	265	257
Sodankylä	1 147	753	795	252	207	227
Frankfurt <sup>1)</sup>	2 647	..	2 411	351 <sup>1)</sup>	..	496
Padova <sup>1)</sup>	3 558	..	3 368	784 <sup>1)</sup>	..	643

Source: Finnish Meteorological Institute

<sup>1)</sup> In 2015.

### DAY LENGHT, 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

## ENVIRONMENTAL AID

<b>Farms committed to environmental aid</b>	<b>2012</b>	<b>2018</b>
Number	56 143	42 317
% of farms	91	85
% of areable area	90	89

Source: Finnish Food Authority

## VOLUME OF PESTICIDES SALES

	<b>1995</b>	<b>2005</b>	<b>2016</b>	<b>2017</b>
Active ingredient sales (tonnes)				
fungicides	114	255	201	195
agricultural insecticides	57	47	29	33
agricultural herbicides	791	1 077	1 265	1 007
growth regulations	73	52	79	92
Product sales (tonnes)				
fungicides	236	718	725	732
agricultural insecticides	160	147	187	168
agricultural herbicides	1 768	2 639	3 274	2 544
growth regulations	131	107	150	182

Source: Finnish Safety and Chemicals Agency

## Product safety

PESTICIDE RESIDUE CONTROL 2017<sup>1)</sup>

<b>Source of sample</b>	<b>Random samples</b>	<b>Non-compliant %</b>
Domestic	575	0.0
EU	920	0.04
Outside of EU	420	0.08
Total	1 915	3.4

Source: Finnish Food Authority

<sup>1)</sup> Samples from fruits, plants, grains, processed foodstuffs, baby food and products of animal origin.

## SUBSTITUTING FOR AGRICULTURAL ENTREPRENEURS

	2000	2005	2017	2018
MYEL <sup>1)</sup> -insured agricultural entrepreneurs	105 993	90 007	58 225	57 459
Those using annual leave <sup>2)</sup>	45 254	34 719	16 988	15 963
Those using substitutes	14 934	14 624	5 732	5 368
Those using substituting subject to subsidised charge	10 995	13 521	9 146	8 117
Those using substituting subject to total charge	643	314	393	332

Source: Mela

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

<sup>2)</sup> 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	2017 <sup>1)</sup> pcs	2018 <sup>1)</sup> pcs	% of farms
0–5	9 988	5 228	1 624	1 480	3
5–10	17 049	8 765	6 241	6 246	13
10–15	16 918	8 481	5 006	4 987	11
15–25	25 634	13 989	8 230	7 968	17
25–50	23 870	19 660	12 137	11 700	25
50–75	4 508	7 549	6 317	6 109	13
75–100	1 209	3 116	3 600	3 554	8
100–150	622	1 990	3 262	3 331	7
150–	166	739	2 145	2 258	5
Total	99 964	69 517	48 562	47 633	100

Source: Natural Resources Institute Finland

In 1995 farms with over 1 ha arable land.

<sup>1)</sup> 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	2017 <sup>1)</sup>	2018 <sup>1)</sup>	Change 17/18 %
pcs	78 434	48 562	47 633	-1.9 %

Source: Natural Resources Institute Finland

<sup>1)</sup> 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 <sup>1)</sup> pcs	2005 pcs	2017 <sup>2)</sup> pcs	2018 <sup>2)</sup> pcs	% of farms
Private individuals	86 933	61 477	41 878	41 013	86.1
Heirs	12 468	7 297	5 405	5 261	11.0
State, communes etc.	563	743	1 279.0	1 359.0	2.9
Total	99 964	69 517	48 562	47 633	100

Source: Natural Resources Institute Finland

<sup>1)</sup> Only farms with over 1 ha of arable land.

<sup>2)</sup> 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	2017	2018
Farmers <sup>1)</sup>	116	73	53	56
of which women	37	22	15	15
Permanent employees	25	20	18	16
of which women	12	9	8	7
Total	141	93	71	72

Source: Statistics Finland / Labour force survey

<sup>1)</sup> Farmers and farmer family members total.

## SPECIALIZATION IN AGRICULTURAL AND HORTICULTURAL ENTERPRISES

Number of farms	1995 <sup>1)</sup>	2010	2017	2018	%
Dairy farms	32 480	10 205	6 704	6 263	13.1
Other cattle husbandry	9 394	1 270 <sup>2)</sup>	555	516	1.1
Beef farms	..	3 080	2 930	2 868	6.0
Pig farms	6 249	1 355	607	577	1.2
Poultry farms	2 239	375	436	435	0.9
Other grazing livestock <sup>3)</sup>	..	3 544	2 249	2 160	4.5
Plant production	42 287	..	..	..	..
of which grain growing	..	20 927	16 240	15 197	31.9
Other plant production	..	13 092	14 379	15 533	32.6
Others	7 315	..	..	..	..
Greenhouse production	..	1 371	836	787	1.7
Outdoor horticultural production	..	1 696	1 477	1 402	2.9
Mixed production	..	2 568	2 149	1 895	4.0
Total	99 964	58 213	48 562	47 633	100

Source: Natural Resources Institute Finland

<sup>1)</sup> The figures cannot be compared with figures from 1995.<sup>2)</sup> Includes combined suckler cow production and cattle fattening.<sup>3)</sup> 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	2016	2017	2000	2016	2017
	€	€	€	€	€	€
Dairy farms	31 746	61 599	60 384	24 812	46 805	46 365
Other cattle farms	30 129	61 402	62 364	15 878	34 170	33 581
Poultry farms	45 752	97 557	96 765	28 624	61 437	58 754
Pig farms	41 644	74 462	73 513	28 421	45 437	45 854
Sheep, goats, horses	29 434	55 929	54 115	3 704	11 365	10 866
Crop farms (grain)	38 623	64 599	66 606	10 999	16 397	16 460
Other crop farms	35 760	60 070	60 896	11 695	16 476	16 832
Other farms	28 901	64 468	61 088	6 524	13 913	15 884
Average	35 235	67 511	66 966	16 324	30 750	30 575

Source: Statistics Finland



## OTHER ENTREPRENEURSHIP ON AGRICULTURAL AND HORTICULTURAL ENTERPRISES

<b>Number of farms</b>	<b>2000 <sup>1)</sup></b>	<b>2005 <sup>1)</sup></b>	<b>2010</b>	<b>2016</b>
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	<sup>2)</sup>	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	<sup>2)</sup>	573	365	250
fishing industry	<sup>2)</sup>	144	104	110
other primary production	<sup>2)</sup>	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

<sup>1)</sup> Figures for 2000 and 2005 do not include horticultural enterprises engaged exclusively in greenhouse production.

<sup>2)</sup> 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.

## VOLUME OF FRESH WATER SELF-ABSTRACTED FROM THE ENVIRONMENT BY AGRICULTURE AND FOOD INDUSTRY

Toimiala	2010	2015
	1 000 000 m <sup>3</sup> /a	1 000 000 m <sup>3</sup> /a
Growing of crops	9.2	..
Animal husbandry	35.7	35.0
Food industry	22.2	22.2
Beverage industry	6.3	5.6
Food trading	3.1	..
Food service activities	11.2	..
Households	249.2	..
foodchain related usage	99.7	..

Lähde: J. M. Salminen et al. Improving data quality, applicability and transparency of national water accounts – A case study for Finland

## Economy

### USE OF ARABLE LAND

	1995	2005	2017 <sup>1)</sup>	2018 <sup>1)</sup>
	1 000 ha	1 000 ha	1 000 ha	1 000 ha
Grassland	755	620	717	763
Cereals. total	978	1 188	1 071	1 040
wheat	101	215	219	190
rye	21	14	32	17
barley	516	595	437	463
oats	329	346	337	324
mixed grain	11	16	43	42
other cereals	1	1	3,4	3,9
Oil plants	85	77	65	58
Sugar-beets	35	31	12	10
Potatoes	36	29	22	22
Other crops	29	49	101	104
Area in production	1 918	1 993	1 988	1 996
Fallow	223	241	254	246
Cultivated area	2 141	2 235	2 242	2 242

Source: Natural Resources Institute Finland

<sup>1)</sup> Includes only enterprises that exceed the threshold value (SO 2000 EUR).

	1995	2005	2017	2018
	ha	ha	ha	ha
Mean arable land	22	33	47	48

Source: Natural Resources Institute Finland

## ORGANIC PRODUCTION AREA AND NUMBER OF ORGANIC FARMS

Area, ha	1995	2005	2017	2018
Certified organic area, ha	23 139	135 223	216 693	235 065
In-conversion area, ha	21 557	12 364	42 759	61 581
Total organically farmed area, ha	44 696	147 588	259 451	296 645
Percentage of organically farmed area of the total area of production %	..	6.7	11.4	13.1
Organic farm size, ha/farm	20	34	57	59
Organic farms, number	2 793	4 296	4 587	5 039
Percentage of organically farmed area of the total area of production %				
EU 28	..	3.6 <sup>1)</sup>	7	..
Total organically farmed area, EU 28	..	6 475 828 <sup>1)</sup>	12 560 189	..

Source: Finnish Food Authority, Eurostat

<sup>1)</sup> The 2005 figure is for the EU 27.

## Locality

## NUMBER OF ORGANIC PRODUCERS

	2008	2011	2017	2018
Organic primary production <sup>1)</sup>	3 758	3 975	4 509	4 988
from which organic animal farms	511	643	974	1 037
Organic foodstuff producers	401	487	742 <sup>2)</sup>	749 <sup>2)</sup>
Organic feedstuff producers	16	33	45	44
Organic seed packing plants	..	31	25	28
Total	4 175	4 526	5 437	5 934
Organic primary production EU 28	..	..	295 618 <sup>3)</sup>	..

Source: Finnish Food Authority, Eurostat

<sup>1)</sup> Includes, in addition to farms, also greenhouse, mushroom farms and beekeepers.

<sup>2)</sup> This figure includes subcontractors.

<sup>3)</sup> In 2016.

## USE OF ARABLE LAND ON ORGANIC FARMS

<b>Certified organic area, ha</b>	<b>1995 <sup>1)</sup></b>	<b>2005</b>	<b>2017</b>	<b>2018</b>
Grass	11 431	60 195	134 053	149 187
Cereals	8 158	46 362	58 147	61 503
wheat	724	6 629	5 088	6 206
rye	1 616	4 594	3 306	2 968
barley	2 118	6 760	5 110	6 459
oats	2 447	23 134	32 428	32 485
mixed : straw grains	302	2 798	3 148 <sup>2)</sup>	3 296 <sup>2)</sup>
mixed: legumes+straw grains	927	1 842	8 284	9 272 <sup>2)</sup>
Peas	120	1 289	2 298	1 768
Buckwheat	23	185	599 <sup>2)</sup>	584 <sup>1)</sup>
Caraway	9	355	158 <sup>2)</sup>	232 <sup>2)</sup>
Flax	22	277	123 <sup>2)</sup>	47 <sup>2)</sup>
Turnip rape	64	2 419	1 542	1 976
Potatoes	423	440	761	739
Vegetables, open land	197	211	468	527
Greenhouse vegetables	2	9	8	8
Leafherbs	17	16	10 <sup>2)</sup>	8 <sup>2)</sup>
Berries and fruit	256	800	714	771
Other crops	395	3 672	5 214	13 398
Fallow	2 022	19 178	10 650	4 317
<b>Total</b>	<b>23 139</b>	<b>135 223</b>	<b>216 784</b>	<b>235 065</b>

Source: Finnish Food Authority

<sup>1)</sup> Åland's data not included.<sup>2)</sup> No production in Åland.

Figures for the traditional use of arable land are on page 16.

## ORGANIC PRODUCTION

	2007 mil- lion kg	% of total product- ion	2017 million kg	% of total product- ion	2018 million kg	% of total product- ion
Beef	..	..	2.6	3.1	2.6	3
Pork	..	..	0.8	0.5	0.7	0.5
Lamb	..	..	0.3	24.8	0.4	24.8
Poultry	..	..	0.2 <sup>1)</sup>	0.1 <sup>1)</sup>	..	..
Eggs	1.1	2	3.88	5.7	4.7	6.7
Bread grain (wheat and rye)	18.2	2.1	16.9	1.9	14.2	2.6
Potato	0.3	0	9.4	1.5	13.5	2.2
Peas	1.2	18.8	1.9	21.3	3	14.7
Milk, million litres	26.8	1.2	62.6	2.7	69	3

Source: Pro Luomu, Natural Resources Institute Finland

<sup>1)</sup> In 2016.

In 2018, the market share of organic produce (€) in grocery trade was 2.4 %.

Source: Pro Luomu

## CROP

	1995	2005	2017	2018
<b>Wheat</b>				
area (in 1 000 ha)	101	215	194	178
total yield (M kg)	380	801	802	495
yield kg/ha	3 770	3 730	4 130	2 780
<b>Rye</b>				
area (in 1 000 ha)	21	14	29	16
total yield (M kg)	58	32	114	42
yield kg/ha	2 770	2 290	3 920	2 580
<b>Barley</b>				
area (in 1 000 ha)	516	594	358	405
total yield (M kg)	1 764	2 103	1 460	1 336
yield kg/ha	3 420	3 540	4 070	3 300
<b>Oats</b>				
area (in 1 000 ha)	329	345	270	289
total yield (M kg)	1 097	1 073	1 014	818
yield kg/ha	3 330	3 110	3 760	2 830
<b>Sugar-beets</b>				
area (in 1 000 ha)	35	31	12	10
total yield (M kg)	1 110	1 181	430	355
yield kg/ha	31 900	37 870	36 550	36 270
<b>Oil plants</b>				
area (in 1 000 ha)	85	77	55	53
total yield (M kg)	128	106	91	71
yield kg/ha	1 500	1 380	1 650	1 330
<b>Peas</b>				
area (in 1 000 ha)	5	4	4	9
total yield (M kg)	11	8	9	20
yield kg/ha	2 420	93	2 180	2 350
<b>Potatoes</b>				
area (in 1 000 ha)	36	29	21	21
total yield (M kg)	798	743	612	600
yield kg/ha	22 110	25 700	28 860	28 060
<b>Vegetables</b>				
total yield (M kg)	234	248	254	257
tomatoes	31	38	39	39
cucumber (greenhouse)	24	32	43	45
cabbage	24	19	23	19
carrots	61	67	62	68
onions	17	21	26	24
<b>Potted vegetables (M pcs)</b>	30	64	102	116

Source: Natural Resources Institute Finland

## AGRICULTURAL PRODUCTION COSTS

	<b>2002</b>	<b>2005</b>	<b>2016</b>	<b>2017</b>
	<b>MEUR</b>	<b>MEUR</b>	<b>MEUR</b>	<b>MEUR</b>
Material costs	1 572	1 569	2 075	2 010
Fertilizer, lime	194	186	274	224
Other crop production costs	256	309	414	404
Fuel and lubricants	176	209	255	293
Electricity	117	115	206	207
Forage costs	516	438	524	500
Livestock costs	313	322	401	383
Farm operating costs <sup>1)</sup>	368	312	431	401
Machinery cost	844	875	1 058	991
Depreciation of machines	502	543	549	504
Other machinery costs	342	332	509	487
Building costs	316	317	362	356
Depreciation of buildings	256	258	301	294
Other building costs	60	58	61	62
Other cost	693	731	979	938
Insurance cost paid	241	255	327	279
Fixed rents paid	102	101	195	187
Other depreciations	45	46	49	44
Other costs	305	328	408	411
Wages costs	1 835	1 775	1 486	1 359
Wages paid	166	185	303	282
Wages claim	1 669	1 590	1 183	1 078
Interest costs	597	621	589	532
Interest paid	127	112	113	116
Interest claim of equity	470	509	476	416
Total costs	6 226	6 199	6 980	6 587

Source: Luke Economydoctor. Total Calculation of Agriculture.

Data: Luke Profitability bookkeeping results.

All figures have been updated due to a new weighting system.

<sup>1)</sup> Costs of feedstuff and seeds produced and used on the farm.

## AGRICULTURAL GROSS RETURN

<b>Income from</b>	<b>2002 MEUR</b>	<b>2005 MEUR</b>	<b>2016 MEUR</b>	<b>2017 MEUR</b>
Crop revenues total	814	671	1 011	1 019
Rye and wheat	86	72	114	153
Barley	158	158	182	237
Oats and other cereals	147	81	152	162
Oilseeds	20	20	39	39
Grass crops	240	215	297	309
Potato and sugar beet	140	110	186	81
Pulses and other crops	23	15	39	38
Livestock revenues total	1 808	1 652	1 848	1 806
Cattle revenue	1 243	1 097	1 267	1 295
Pig production	348	348	304	263
Poultry revenues	212	175	241	219
Sheep, goat and horse revenues	5	5	36	29
Glasshouse and outdoor horticultural revenues total	464	523	740	758
Financial yields	17	13	9	10
Other income	155	170	211	202
The sum of subsidies	1 846	1 922	1 834	1 829
CAP subsidies	434	499	567	585
LFA- and environmental subsidies	714	738	861	826
National and investment subsidies	697	684	388	405
Gross return total	5 104	4 924	5 653	5 624

Source: Luke Economydoctor. Total Calculation of Agriculture.

Data: Luke Profitability bookkeeping results.

All figures have been updated due to a new weighting system.

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



## BEEKEEPING FIGURES

	2017	2018
The Finnish Beekeepers' Association members	2 590	2 750
Professional beekeepers <sup>1)</sup>	74	79
Organic beekeepers	61	58
Number of productive beehives	67 000	72 300
Number of organic beehives	4 079	4 488
Yield per beehive, kg	38	47
Honey production, tonnes	2 100	2 606
Imported honey, tonnes	1 970	2 003
Honey consumption, tonnes	3 168	4 100
Honey consumption, g/person	576	743
Winter beehive losses <sup>2)</sup> , %	15	19
Gross profit, beekeeping <sup>3)</sup> , €	30 000	31 000
The share of organic production and consumption, %	7	7

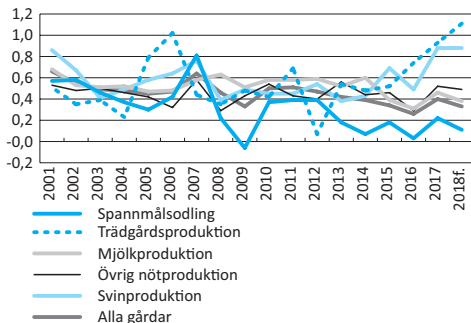
Source: Suomen Mehiläishoitajain Liitto SML ry (The Finnish Beekeepers' Association)

<sup>1)</sup> Beekeepers with more than 100 hives according to hive grant statistics.

<sup>2)</sup> Percentage of bees that died during the winter.

<sup>3)</sup> Estimates from 2017 and 2018.

### PROFITABILITY COEFFICIENT ON THE FINNISH FARMS 2001–2018e



Source: Total Calculation of Luke Economic Research

## ENTREPRENEURIAL INCOME

	2002 MEUR	2005 MEUR	2017 MEUR	2018 p. MEUR
Entrepreneurial income	1 019	827	520	415

Source: Luke Economydoctor. Total Calculation of Agriculture.

Data: Luke Profitability bookkeeping results.

All figures have been updated due to a new weighting system.

## PRODUCER PRICES

Annual average		1995	2005	2017	2018	Change 17/18 %
<b>Milk</b>	c/ltr					
producer price <sup>1)</sup>		31.3	31.5	34.00	33.71	-0.2
surplus payment		1.5	2.2	0.53	0.57	7.6
<b>Meat</b>	€/kg					
beef		2.4	2.1	2.98	3.12	4.6
pork		1.3	1.3	1.48	1.52	3.2
chicken		1.1	1.1	1.29	1.32	1.8
lamb		1.9	2.6	3.71	3.78	2.3
horse		1.3	0.3	..	..	..
<b>Eggs</b>	€/kg	0.5	0.6	0.96	1.03	6.6
<b>Grain and rootcrops</b>						
wheat <sup>2)</sup>	€/tn	147.0	106.2	156.49	193.84	23.9
rye <sup>2)</sup>	€/tn	149.5	118.4	164.02	180.64	10.1
barley <sup>2)</sup>	€/tn	122.3	99.5	130.22	171.94	32.0
oats <sup>2)</sup>	€/tn	118.4	87.1	134.69	177.85	32.0
malt <sup>2)</sup>	€/tn	142.1	115.3	156.63	179.03	14.3
food						
potatoes <sup>3)</sup>	€/100 kg	..	..	17.97	18.59	3.5
oil plants <sup>2)</sup>	€/tn	..	200.1	382.51	355.16	-7.2

Source: Natural Resources Institute Finland

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

<sup>2)</sup> The basic price paid to farmers, including transportation to the first reception point.

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

## LIVESTOCK

In thousands	1995	2005	2017	2018
Horses	50	64	74	74
Cattle	1 148	959	893	882
dairy cows	399	319	275	271
suckler cows	29	35	60	60
Sheep <sup>1)</sup>	159	87	156	155
ewes	69	52	76	76
lambs and rams	90	35	80	80
Pigs <sup>2)</sup>	1 400	1 401	1 136	1 089
sows	161	177	85	83
fattening pigs	451	460	536	508
piglets	476	451	494	477
Poultry <sup>3)</sup>	10 358	10 538	13 136	14 140
hens	4 179	3 128	3 595	3 985
broilers	4 276	5 472	8 047	8 781
turkeys	80	495	292	299
Goats	6	7	5	5
Reindeer <sup>4)</sup>	208	207	193	185

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

<sup>1)</sup> From 2015 onwards, the number of sheep is not directly comparable to the previous years.

<sup>2)</sup> The definitions of pigs changed from 2015. Only class 'Pigs' is comparable with previous year.

<sup>3)</sup> From 2016 onwards, the number of poultry is not directly comparable to the previous years.

<sup>4)</sup> Calculated reindeer that have been left to live + calves.

## AVERAGE NUMBER OF ANIMALS IN FARMS

Animals pcs/farms	2012	2017 <sup>1)</sup>	2018 <sup>1)</sup>
Pigs	1 175	1 871	1 887
Cattle	70	88	91
Poultry	32 412	30 128	32 506

Source: Natural Resources Institute Finland

<sup>1)</sup> 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**

<b>Item</b>	<b>Inspections</b>			<b>Cases of neglect</b>		
	<b>2011</b>	<b>2017</b>	<b>2018</b>	<b>2011</b>	<b>2017</b>	<b>2018</b>
Pigs	52	20	22	13	3	6
Cattle	362	288	209	97	43	22
Poultry	26	3	1	5	0	1
Broiler chickens	..	2	4	..	0	1
Goats	12	0	1	0	0	0
Ducks and geese	8	..	..	0	..	..
Sheep	32	13	21	8	1	0

Source: Finnish Food Authority

**PREVENTION OF CRUELTY TO ANIMALS INSPECTIONS IN COMMERCIAL ANIMAL DELIVERIES**

	<b>2005</b>	<b>2011</b>	<b>2017</b>	<b>2018</b>
Inspections (no.)	451	387	357	382
Cases of neglect (%)	24	16	7	6

Source: Finnish Food Authority

**FARMS RECEIVING ANIMAL WELL-BEING SUBSIDIES <sup>1)</sup>**

<b>Number of farms</b>	<b>2016</b>	<b>% of farms</b>	<b>2017</b>	<b>% of farms</b>	<b>2018</b>	<b>% of farms</b>
Beef farms	4 888	52	4 841	52	4 787	53
Pork farms	698	68	773	72	746	73
Sheep/goat farms	318	53	307	47	311	47
Poultry farms	304	70	357	75	358	75

Source: Finnish Food Authority

<sup>1)</sup> 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 <sup>1)</sup>		At national level <sup>2)</sup>		At basic level <sup>3)</sup>		Passive <sup>4)</sup>		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	7 508 <sup>5)</sup>	7 560 <sup>6)</sup>	67 <sup>5)</sup>	71 <sup>6)</sup>	..	..	..	..	..	..	..	..	9 041 <sup>5)</sup>	10 694 <sup>6)</sup>

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

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

<sup>1)</sup> Meets the voluntary special requirements set by the industry for pig breeding farms [www.sikava.fi](http://www.sikava.fi).

<sup>2)</sup> Meets the voluntary health care requirements set by the industry.

<sup>3)</sup> Some of the voluntary national requirements are not met.

<sup>4)</sup> Empty pens.

<sup>5)</sup> In 2017.

<sup>6)</sup> In 2018.

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

RESPONSIBLE PRODUCTION LIMIT VALUES  
IN PORK PRODUCTION

Period	Farms <sup>1)</sup>		RPI exceeded <sup>1)</sup> , fattening pigs			RPI exceeded <sup>1)</sup> , 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](http://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 %.

<sup>1)</sup> Percentage of farms in proportion to all farms.

USE OF ANTIMICROBIAL AGENTS IN FOOD-PRODUCING  
ANIMALS

	EU/EEA, average			Finland		
	2010 <sup>2)</sup>	2015 <sup>3)</sup>	2016 <sup>3)</sup>	2010	2015	2016
mg/PCU <sup>1)</sup>	131	136	126	25	20	19

Source: The European Medicines Agency EMA, ESVAC

<sup>1)</sup> 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.

<sup>2)</sup> Number of participating countries: 19

<sup>3)</sup> Number of participating countries: 30

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

	2012	2017	2018
Share of flocks, %, with a score of less than 40	94.46	99.2	98.5
Share of flocks, %, with a score of 40–80	4.91	0.75	1.28
Share of flocks, %, with a score of more than 80	0.62	0.05	0.18

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	2017	2018
Enriched cage	89	62	59
Floor	9	32	33
Outdoor <sup>1)</sup>	..	..	2
Organic	2	5	7

Source: Finnish Poultry Association

<sup>1)</sup> Before 2018 outdoor henneries were compiled as part of floor henneries.

## BARN TYPES 2018

	Number of barns	%	Cows	%	Average number of cows/ farm
Tie stall barn	2 870	61	75 776	39	29.1
Free stall barn	1 835	39	120 083	61	73.6
Total	4 705 <sup>1)</sup>	100	195 859	100	46.2

Source: ProAgria

<sup>1)</sup> 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		2018	
	no.	%	no.	%
Graze in the summer, time outdoors in the winter	455	7.9	429	9.0
Graze in the summer, indoors in the winter	3 895	67.8	2 881	63.0
Fenced walking area in the summer, time outdoors in the winter	103	1.8	104	2.0
Fenced walking area in the summer, indoors in the winter	347	6	290	6.0
Indoors in the summer and in the winter	946	16.5	904	20.0
Total	5 746	100	4 608	100

Source: ProAgria

## MILKING MACHINES 2018

Milking machine type	Farms	%
Pipeline milking	2 660	59.8
Milking station	863	19.4
Robotic milking	899	20.2
Bucket milking machine	29	0.7
Total	4 451	100.0

Source: ProAgria

## AVERAGE YIELD PER COW AND MILK CONTENTS 2018

Breed	Cows number	Average output kg/cow	Pro-tein	Milk contents %		
				Fat	ECM <sup>1)</sup>	Cells <sup>2)</sup>
Ayrshire	90 048	9 310	3.58	4.46	9 963	168
Holstein	92 171	10 360	3.47	4.16	10 669	182
Finncattle	1 876	6 347	3.43	4.43	6 763	184
Eastern Finncattle	224	4 318	3.45	4.38	4 569	160
Western Finncattle	1 236	7 021	3.44	4.48	7 526	183
Northern Finncattle	417	5 437	3.40	4.29	5 677	200
Jersey	874	7 912	3.85	5.21	9 370	177
Other	359	9 112	3.45	4.19	9 488	175
All	185 328	9 795	3.52	4.30	10 278	176

Source: ProAgria

<sup>1)</sup> Energy-corrected milk output (milk's butterfat, protein and lactose content is taken into account).

<sup>2)</sup> Somatic cell count, geometric mean 1000 pcs/ml.

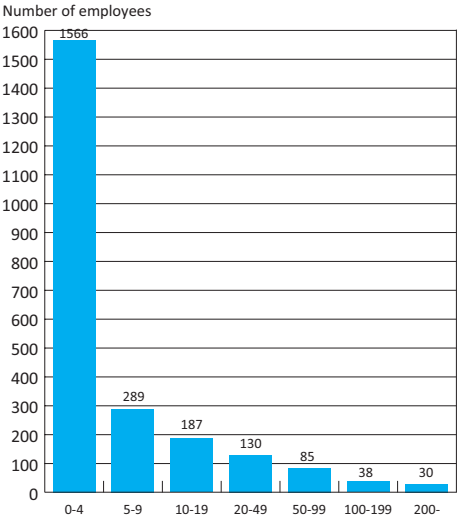


# FOOD MANUFACTURERS BY SECTOR

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
<b>Total</b>	<b>2 605</b>	<b>307</b>	<b>2 680</b>	<b>270</b>	<b>2 606</b>	<b>253</b>

Source: aitojamakuja.fi 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 <sup>1)</sup>		Turnover 1 000 €		Turnover 1 000 € / employee	
	2016	2017	2016	2017	2016	2017	2016	2017
Slaughter and meat processing	254	242	8 022	8 104	2 437 902	2 498 218	304	308
Fish products	146	147	859	861	346 997	363 811	404	423
Fruit and vegetables	155	159	1 936	1 979	567 744	569 958	293	288
Processing and preserving of potatoes	44	41	383	394	112 318	128 306	293	326
Edible oils and fats	20	18	147	143	59 233	61 608	403	432
Dairy products and ice cream	89	84	4 119	4 504	2 044 459	2 044 294	496	454
Milling products and starch	65	65	618	615	354 053	333 999	573	543
Manufacture of bakery and farinaceous products	799	796	7 352	7 093	1 007 091	1 007 425	137	142
Manufacture of other food products	269	283	5 886	5 934	1 814 545	1 885 814	308	318
Sugar	4	4	268	274	197 116	238 364	735	869
Chocolate, cocoa and confect.	48	50	1 567	1 582	378 605	361 637	242	229
Processing of tea and coffee	23	24	464	431	360 006	375 608	776	872
Convenience food	77	80	1 935	1 889	376 207	383 703	194	203
Food preparations and dietetic food	9	10	369	396	143 085	141 083	388	356
Soft drinks	177	190	2 807	2 774	1 214 119	1 253 974	433	452
Alcoholic beverages <sup>2)</sup>	148	161	2 517	2 501	1 096 973	1 143 209	436	457
Food industry, total	1 882	1 879	29 908	30 185	9 200 979	9 542 848	308	316

Source: Statistics Finland, regional and industrial statistics on manufacturing

- <sup>1)</sup> 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.
- <sup>2)</sup> 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.

# IMPORT AND EXPORT OF FOODSTUFFS

Product group	Import MEUR		
	1995	2005	2017 <sup>1)</sup>
<b>INDUSTRIAL PRODUCTS</b>			
Drinks	..	333.3	422.30
Alcoholic beverages <sup>2)</sup>	99.5	267.8	312.13
Beer	7.4	20.6	37.00
Soft drinks and mineral waters	4.0	33.5	59.19
Juices	9.1	13.0	80.34
Fats and oils	31.1	41.2	101.39
Butter	..	1.4	5.45
Canola oil	..	5.0	9.13
Margarin	6.9	23.6	28.56
Fruit preserves	..	42.5	70.36
Other vegetable preserves	..	35.6	75.46
Sugar and honey	1.3	2.2	63.97
Sugarchemical products	3.5	6.4	4.34
Honey	..	2.2	9.63
Coffee (instant and roasted)	11.3	19.7	75.19
Fish products	..	..	147.55
Frozen fish products	..	6.9	30.76
Soups and stocks	8.5	12.8	35.95
Babyfood	2.0	9.3	19.75
Meat	57.3	102.8	330.53
Pork	..	29.4	55.97
Beef and veal	..	37.9	73.23
Poultry	..	18.2	31.58
Dairy products	63.6	178.8	384.47
Milk powder	..	1.9	3.29
Cheese	..	123.1	272.48
Malt	1.7	0.4	2.39
Frozen berries and vegetables	23.6	59.0	98.92
Frozen potatoes	..	16.4	28.79
Flour and milling industry products	1.4	3.0	132.36
Rye flour	..	..	0.20
Feed products	83.7	147.0	326.20
Sweets	90.9	134.7	250.92
Chocolate	..	56.1	119.65
Starch	69.5	82.0	91.86
<b>All industrial products total <sup>3)</sup></b>	<b>860.1</b>	<b>1 781.6</b>	<b>3 276.82</b>
<b>AGRICULTURAL PRODUCTS</b>			
Tea	..	..	13.93
Fruits	146.7	220.3	374.93
Cocoa beans	0.2	0.0	0.26
Raw coffee	124.3	115.7	210.56
Birds' eggs	0.1	1.3	3.45
Fish and shellfish	..	..	350.39
Fresh fish	14.4	65.6	338.40
Berries	2.6	5.7	20.40
Blueberry	..	2.3	1.51
Spices	4.4	6.8	15.42
Nuts	7.4	9.5	35.83
Raw sugar	17.7	26.7	32.90
Vegetables and potato	62.5	113.6	221.41
Grain	37.2	28.5	37.17
Oat	..	0.01	6.28
<b>All agricultural products total <sup>3)</sup></b>	<b>1 335.8</b>	<b>2 448.3</b>	<b>1 382.05</b>

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

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

2018 <sup>1)</sup>	Change	Export MEUR			2018 <sup>1)</sup>	Change
	17/18 %	1995	2005	2017 <sup>1)</sup>		17/18 %
453.30	7.3	..	90.2	182.47	173.43	-5.0
326.23	4.5	40.1	73.4	149.01	145.50	-2.4
36.77	-0.6	19.7	11.3	14.02	12.17	-13.2
77.83	31.5	7.4	4.8	19.45	15.75	-19.0
85.85	6.9	13.0	2.1	5.00	6.39	27.8
105.47	4.0	7.0	26.5	157.16	160.78	2.3
5.37	-1.4	..	85.1	137.01	138.98	1.4
14.45	58.2	..	22.7	4.63	3.40	-26.6
26.77	-6.3	30.7	32.7	6.51	7.72	18.5
65.66	-6.7	..	3.2	2.24	2.29	2.3
79.44	5.3	..	4.7	3.74	4.43	18.5
66.02	3.2	0.0	0.0	104.13	97.78	-6.1
4.92	13.1	13.4	81.5	85.65	86.59	1.1
8.56	-11.1	..	0.003	0.044	0.12	169.5
77.77	3.4	21.9	8.0	37.00	30.29	-18.1
147.14	-0.3	..	..	17.71	16.07	-9.2
32.69	6.3	..	6.1	12.04	10.37	-13.9
36.24	0.8	0.4	0.4	2.22	1.70	-23.5
20.92	5.9	7.4	4.9	6.64	7.57	14.0
345.90	4.6	26.4	91.5	118.27	106.61	-9.9
55.56	-0.7	..	68.6	59.92	43.93	-26.7
83.61	14.2	..	6.4	14.92	17.63	18.1
30.65	-3.0	..	10.2	10.20	12.32	20.7
395.34	2.8	161.9	303.1	257.35	242.88	-5.6
3.62	10.0	..	28.7	88.98	69.28	-22.1
272.50	0.0	..	119.7	47.22	48.06	1.8
1.31	-45.2	15.7	21.9	13.79	14.85	7.7
104.05	5.2	9.0	18.2	25.91	21.96	-15.3
28.99	0.7	..	0.2	0.32	0.09	-70.8
126.26	-4.6	4.3	7.7	45.96	58.58	27.5
0.26	26.5	..	..	0.33	0.17	-48.8
331.81	1.7	15.0	21.7	74.18	67.31	-9.3
223.03	-11.1	94.9	86.3	100.44	92.35	-8.1
110.83	-7.4	..	46.8	60.64	53.21	-12.3
94.28	2.6	8.5	15.7	10.98	11.08	0.9
3 224.02	-1.6	609.0	961.9	1 329.27	1 270.78	-4.4
12.44	-10.7	..	..	0.408	0.32	-20.5
381.62	1.8	13.0	0.8	7.76	7.45	-4.0
0.35	36.8	0.0	0.0	0.0043	0.01	244.2
161.37	-23.4	2.3	0.0	24.13	4.21	-82.5
5.70	65.3	7.1	6.6	11.37	14.34	26.1
362.23	3.4	..	..	122.63	155.28	26.6
349.06	3.1	2.3	0.0	122.49	155.18	26.7
29.27	43.5	0.8	0.2	0.54	0.01	-97.6
4.09	171.7	..	..	0.41	0.0015	-99.6
15.68	1.7	1.5	1.9	10.27	8.53	-16.9
33.31	-7.0	0.1	0.0	0.55	0.58	6.3
6.62	-79.9	0.01	0.8	1.03	1.32	27.4
228.13	3.0	7.2	3.9	6.39	7.46	16.7
50.50	35.9	35.8	42.3	111.26	80.31	-27.8
2.37	-62.3	..	35.9	56.88	58.71	3.2
1 359.84	-1.6	683.1	1 022.8	295.79	281.26	-4.9

<sup>2)</sup> Includes spirits and vinegar and vinegar substitutes made from acetic acid, in addition to weak and strong alcoholic beverages <sup>3)</sup>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	%	2017 <sup>1)</sup>	%	2018 <sup>1)</sup>	%
Russia	29.5	Russia	19.7	Sweden	18.0	Sweden	18.6
Sweden	14.2	Sweden	15.4	Estonia	8.9	Estonia	8.1
Estonia	6.9	Estonia	9.2	Russia	7.3	France	6.7
Germany	5.1	U.S.	5.9	France	6.0	Russia	5.9
Belgium	4.4	Germany	5.3	Germany	4.6	Germany	5.6
Norway	3.7	UK	4.4	Denmark	4.5	Denmark	5.0
U.S.	3.6	Poland	3.2	Poland	3.7	Poland	4.2
UK	3.4	Norway	2.9	The Netherlands	3.4	The Netherlands	3.9
Denmark	3.2	Denmark	2.8	UK	3.2	China	3.1
The Netherlands	2.8	France	2.8	Lithuania	2.7	Lithuania	3.0
Others	23.2	Others	28.4	Others	38.3	Others	35.9
Total	100	Total	100	Total	100		100

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

<sup>1)</sup> Compilation of statistics changed from 2014. The figures are not comparable with the previous figures.

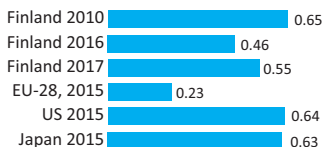
## FOOD EXPORTS BY COUNTRY AND PRODUCT GROUP, EXPORTS 2018

Russia	€ thousand	EU	€ thousand	Other countries	€ thousand
Compound feeding-stuffs	17 681	Fish, fresh	150 915	Milk powder	52 110
Other foodstuffs	9 563	Butter and other fats and oils derived from milk	122 665	Pork	29 642
Alcoholic beverages	9 187	Alcoholic beverages	110 098	Other milk products	26 572
Other bakery products	7 033	Oat	50 816	Alcoholic beverages	26 214
Malts	9 070	Other milk products	41 917	Cheese	19 763
Chocolate	5 482	Chocolate	40 207	Raw materials for feedstuff	18 129
Other cereal products	5 185	Cheese	28 212	Butter and other fats and oils derived from milk	15 418
Coffee, raw	3 850	Coffee, roasted	27 590	Other meat and animal parts	8 971
Other grain mill products	3 753	Other sweets	26 771	Oat	7 898
Beer	3 236	Yoghurt	24 894	Chocolate	7 519
Other	20 703	Other	394 308	Other	65 163
Total	94 743	Total	1 018 393	Total	277 399

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

## THE SHARE OF FOOD INDUSTRY'S R&amp;D COSTS

(% of production)



Source: Statistics Finland, FoodDrinkEurope

## CONSUMPTION EXPENDITURE

Private consumption expenditure at current prices, MEUR	1995	2005	2016	2017
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

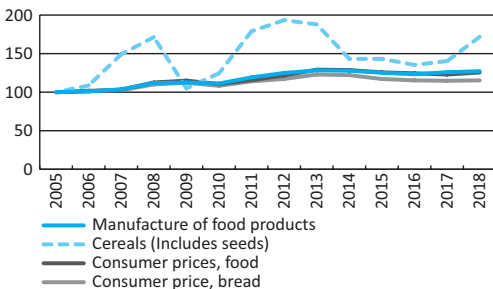
Source: Statistics Finland, National Accounts



## FOOD EXPENDITURE

Food expenditure of households, per capita	1995 €/y	%	2005 €/y	%	2016 €/y	%	2017 €/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 <sup>1)</sup>	150	11	203	12	281	12	264	12
<b>Total</b>	<b>1 365</b>	<b>100</b>	<b>1 674</b>	<b>100</b>	<b>2 303</b>	<b>100</b>	<b>2 273</b>	<b>100</b>

Source: Statistics Finland, National Accounts

<sup>1)</sup> Other drinks are not included.REAL PRICE DEVELOPMENT OF FOOD IN FINLAND  
2005–2018

Source: Statistics Finland

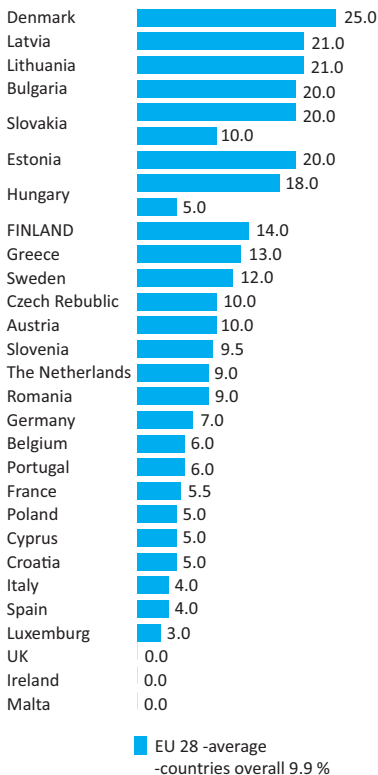
## RETAIL PRICES

Prices, €/kg, €/l	1994	2005	2017	2018
<b>Milk</b>				
low-fat milk	0.66	0.74	0.99	0.99
fat free milk	0.58	0.72	0.89	0.90
sour milk <sup>1)</sup>	0.58	0.89	1.34	1.36
<b>Cheese</b>				
Emmentaler	8.34	10.59	13.75	14.16
Edam	7.03	7.92	8.80	9.08
<b>Fat</b>				
butter	5.28	4.96	5.16	6.06
margarine	..	2.87	3.53	3.52
<b>Meat</b>				
roast of beef <sup>2)</sup>	11.16	9.08	15.99	16.38
minced beef	7.86	7.44	9.95	10.11
pork sirloin <sup>3)</sup>	7.59	9.02	9.48	9.07
broiler fillet <sup>4)</sup>	4.10	2.03	12.84	12.32
salami	15.86	12.19	15.41	15.75
frankfurter (skinless)	5.82	4.68	7.27	7.41
sausage	3.70	3.43	4.26	4.33
<b>Eggs</b>	2.79	2.33	3.27	3.24
<b>Fish</b>				
rainbow trout <sup>5)</sup>	5.84	8.29 <sup>6)</sup>	12.22	11.16
<b>Grain and vegetable products</b>				
wheat flour	0.90	0.59	0.65	0.65
rye bread	..	3.68	3.54	3.56
wheat bread	..	3.57	..	..
wheat coffee bread	5.63	5.79	6.79	6.85
granulated sugar	1.23	1.08	0.88	0.83
food potatoes	1.52	0.65	0.85	0.91
carrots	1.56	1.21	1.49	1.98
tomatoes	2.39	2.98	2.92	3.05
roasted coffee	5.56	5.04	7.98	7.90

Source: Statistics Finland

<sup>1)</sup> Price calculations for 1994 based on fat free sour milk.<sup>2)</sup> The average price for 1994 calculated from topside.<sup>3)</sup> Price calculations for 1994 based on pork chop.<sup>4)</sup> Price calculations for 1994 based on broiler, drumstick-thigh.<sup>5)</sup> Gutted whole fish.<sup>6)</sup> Value for 2006.

## THE MOST COMMON VALUE-ADDED TAX ON FOOD IN THE EU COUNTRIES 2019 (%)



Source: European Commission

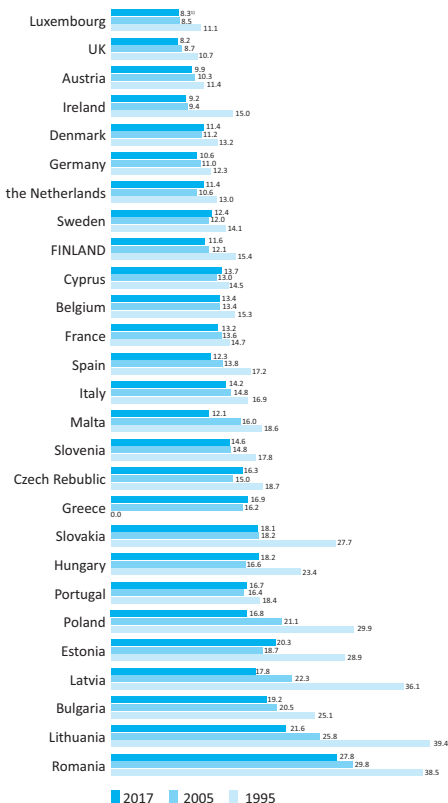
## PRICE INDEXES 2017 (EU15=100)

	Household consump- tion expen- diture	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, vegeta- bles and potatoes	Other Non-al- coholic food- stuffs and bever- ages	
The Netherlands	106.7	95.9	95.4	85.8	111.6	100.0	97.8	91.4	95.8	85.9	99.8
Belgium	104.5	107.2	106.6	106.8	114.3	108.5	107.9	111.5	98.5	100.6	112.4
Spain	87.2	90.6	90.7	102.1	80.7	85.2	94.2	84.7	93.4	98.5	88.9
Ireland	120.1	117.3	115.3	116.0	99.1	110.1	122.2	109.9	120.4	136.4	137.2
UK	109.4	89.1	87.6	81.6	86.3	79.5	90.7	85.7	91.0	93.4	104.0
Italy	94.5	105.2	106.7	110.7	107.8	103.5	113.8	96.9	101.1	108.3	91.1
Austria	104.9	118.3	119.3	126.4	132.2	130.8	104.3	126.4	119.1	107.2	110.6
Greece	77.2	101.4	100.0	108.6	84.1	107.4	131.9	119.8	77.1	133.0	117.6
Luxembourg	130.2	117.8	118.8	119.5	126.6	112.3	128.2	121.0	110.8	112.0	112.3
Portugal	77.7	94.4	92.5	91.5	76.9	94.2	107.7	107.2	86.3	128.1	119.0
France	99.6	108.1	109.0	104.6	118.3	112.9	97.8	108.2	114.5	103.4	99.4
Sweden	125.1	116.8	117.3	122.9	113.8	115.9	116.2	120.3	122.3	116.1	113.6
Germany	96.5	95.5	95.4	94.9	95.3	120.4	90.6	103.2	97.7	92.4	97.4
Finland	114.7	112.6	111.5	120.1	109.5	110.6	112.8	95.4	117.2	107.7	122.9
Denmark	129.3	125.2	124.7	145.3	110.8	129.5	114.7	115.8	111.9	160.2	132.3
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

% from households total consumption



Source: CIAA, Eurostat, Kantar TNS Agri Ltd

<sup>1)</sup> in 2012

## MEAT

Million kg	1995	2005	2017	2018
Pork				
total production	166	204	182	169
consumption	165	176	184	177
exports <sup>1)</sup>	9	40	32	22
imports <sup>1)</sup>	10	15	33	34
Beef and veal				
total production	95	87	86	87
consumption	96	98	107	108
exports <sup>1)</sup>	6	2	4	5
imports <sup>1)</sup>	8	14	26	27
Poultry meat				
production	43	87	130	137
consumption	45	84	137	141
exports <sup>1)</sup>	3	10	17	16
imports <sup>1)</sup>	0.3	7	22	22
Mutton				
production	2.0	0.6	1.3	1.4
consumption	2.0	1.9	3.9	3.8
exports <sup>1)</sup>	0.0	0.0	0.0	0.0
imports <sup>1)</sup>	1.0	1.4	2.6	2.4
Horse meat				
production	0.4	0.1	0.3	0.3
consumption	0.5	1.0	1.8	1.6
Reindeer meat				
Production <sup>2)</sup>	2.8	2.9	1.9	1.8
consumption	2.6	3.1	2.5	2.4
exports	..	0.04	0.2	0.2
imports	..	0.2	0.7	0.8
Meat total				
production	306	378	399	394
consumption	308	361	434	432
exports <sup>1)</sup>	15	52	53	42
imports <sup>1)</sup>	21	39	85	86
Meat products export	3.7	2.1	2.3	1.5

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

<sup>1)</sup> Estimated meat in carcass, incl. bones and spoilage. Amount of meat eaten is approx. half of carcass weight.

<sup>2)</sup> Statistics are compiled for the reindeer husbandry year, from 1st June to 31st May.

## EGGS

Million kilos	1995	2005	2017	2018
Production	74.7	58.2	73.5	74.9
Consumption	61.0	48.8	66.6	64.9
Exports	14.0	11.2	10.7	12.3

Source: Kantar TNS Agri Ltd

## MILK PRODUCTS AND EDIBLE FATS

	1995	2005	2017	2018
<b>Milk (M litres)</b>				
production	2 397	2 362	2 336	2 328
yield litres/cow	5 981	7 505	8 534	8 650
received at dairies	2 296	2 293	2 297	2 285
consumption of liquid milk products	1 012	995	881	855
<b>Butter (M kg)</b>				
production	45	50	53	50
consumption	27	14	19	19
exports	19	37	34	31
<b>Cheese (M kg)</b>				
production	96	97	86	87
consumption	78	98	143	142
exports	29	37	13	15
<b>Milk powder, exports (M kg)</b>	7	15	46	46

Source: Kantar TNS Agri Ltd, Natural Resources Institute Finland

## BREAD GRAIN

<b>Wheat</b>	1995	2005	2017	2018
Total yield (M kg)	379.5	801.3	802.0	494.7
First grade product <sup>1)</sup> %	..	32	14	86
Imports (M kg)	131.6	23.2	20.6	50.9
Exports (M kg)	8.4	25.5	164.4	59.6
Consumption as food, M kg <sup>2)</sup>	229.5	253.7	245.3	245.8
Annual consumption, kg/person	45.0	49.0	44.5	44.6
<b>Rye</b>				
Total yield (M kg)	57.7	32.4	113.5	42.3
First grade product <sup>3)</sup> %	..	28	42	90
Imports (M kg)	61.4	80.4	7.8	14.7
Exports (M kg)	..	2.4	0.3	0.5
Consumption as food, M kg <sup>2)</sup>	79.2	88.2	85.3	84.1
Annual consumption, kg/person	16.0	15.0	15.5	15.3

Source: Natural Resources Institute Finland, National Board of Customs

<sup>1)</sup> Hectolitre weight  $\geq 78,0$  kg, falling number  $\geq 180$ , protein (N\*5,7)  $\geq 12,5$  %.<sup>2)</sup> Consumption of ground grains expressed in flour weight.<sup>3)</sup> Hectolitre weight  $\geq 71,0$  kg, falling number  $\geq 120$ .

## FISH

<b>Fish caught, million kg <sup>1)</sup></b>	<b>1995</b>	<b>2005</b>	<b>2017 <sup>2)</sup></b>	<b>2018 <sup>3)</sup></b>
Baltic herring ( <i>Clupea harengus membras</i> )	96	67	135	127
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	8	9
Pike-perch ( <i>Sander lucioperca</i> )	2	3	5	5
Commercial fishing, total	111	94	164	154
Recreational fishing, total	57	38	30	30
Fish farming	17	14 <sup>4)</sup>	15 <sup>4)</sup>	14 <sup>4)</sup>

Source: Natural Resources Institute Finland

<sup>1)</sup> The species named are the most important for commercial fishing (recreational fishing included).

<sup>2)</sup> Recreational fishing figures are from 2016.

<sup>3)</sup> Recreational fishing figures are from 2016 and commercial inland fishing figures are from 2017.

<sup>4)</sup> Share of rainbow trout more than 90%.

## FISH CONSUMPTION

<b>Domestic fish (kg/person)</b>	<b>2000</b>	<b>2005</b>	<b>2016</b>	<b>2017</b>
Farmed rainbow trout ( <i>Oncorhynchus mykiss</i> )	1.6	1.4	1.2	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	0.4	0.4
European perch ( <i>Perca fluviatilis</i> )	0.7	0.6	0.4	0.4
Vendace ( <i>Coregonus albula</i> )	0.7	0.7	0.5	0.6
Lavaret ( <i>Coregonus lavaretus</i> )	0.4	0.3	0.3	0.3
Pike-perch ( <i>Sander lucioperca</i> )	0.2	0.3	0.4	0.4
Other domestic fish	0.6	0.5	0.5	0.5
<b>Imported fish (kg/person)</b>				
Farmed rainbow trout ( <i>Oncorhynchus mykiss</i> )	0.3	0.6	0.9	0.8
Farmed Atlantic salmon ( <i>Salmo salar</i> )	0.9	1.9	3.5	4
Tuna ( <i>Thunnus thynnus</i> ) (preserved and prepared)	1.2	1.6	1.4	1.5
Saithe ( <i>Pollachius virens</i> ) (frozen fillets)	0.6	0.4	0.4	0.4
Shrimps and prawns	0.4	0.5	0.4	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	1.9	2.2

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

<b>1000 kg</b>	<b>1995</b>	<b>2005</b>	<b>2017 <sup>1)</sup></b>	<b>2018 <sup>1)</sup></b>
Potato				
exports	2 895	4 853	7 814	11 558
imports	3 909	19 304	11 501	4 737
Tomato				
exports	2 368	58	281	340
imports	16 130	19 471	24 836	26 128
Onions				
exports	..	117	26	31
imports	..	8 264	16 636	18 406
Cauliflower				
exports	75	..	0,1	1,1
imports	2 166	2 407	4069	4 262
White and red cabbage				
exports	2 447	3	0,1	0,1
imports	1 660	1 608	2244	1 907
Head lettuce				
exports	104	35	12	15
imports	5 672	11 056	18 012	18 369
Carrots and turnips				
exports	1.5	21	5	9
imports	2 643	4 816	7 999	14 128
Cucumber				
exports	498	66	1	47
imports	11 107	11 256	9 728	7 834
Pepper				
exports	354	5	39	61
imports	5 438	9 538	15 700	16 116
Other fresh vegetables				
exports	..	1 372	236	344
imports	..	12 353	26 996	28 210
Banana				
exports	2 352	..	7 530	7 273
imports	6 619	65 491	113 939	111 647
Citrus fruit <sup>2)</sup>				
exports	3 968	91	504	430
imports	62 100	63 749	71 684	75 841
Apple				
exports	11 480	100	278	217
imports	54 001	49 719	43 784	40 479
Other fresh fruit <sup>3)</sup>				
exports	..	373	885	461
imports	..	58 775	99 570	101 077

Source: National Board of Customs, Statistics Service

<sup>1)</sup> Compilation of statistics changed in 2015.<sup>2)</sup> Fresh and dried.<sup>3)</sup> Incl. berries and dried dates, figs, pineapples, avocados, guavas, mangos and mangosteens.

## BERRIES AND MUSHROOMS

<b>Total crops of garden berries, mill. kg</b>	<b>2005</b>	<b>2010</b>	<b>2017</b>	<b>2018</b>
Strawberry	10.1	10.3	13.8	15.3
of which organic	..	0.2	0.3	0.4
Black- and greencurrant	1.8	1.0	1.4	1
Red- and whitecurrant	0.5	0.4	0.5	0.4
Raspberry	0.6	0.5	1.1	0.9
of which organic	..	0.01	0.02	0.02
Gooseberry	0.03	0.06	0.05	0.03
<b>Total</b>	<b>13.1</b>	<b>12.5</b>	<b>17.1</b>	<b>18</b>
<b>Supply of wild berries, 1 000 kg</b>				
Blueberry	3 111	2 780	3 617	5 855
of which organic	..	1 036	825	3 381
Lingonberry	8 544	6 057	5 243	2 076
of which organic	..	1 232	292	97
Cloudberry	321	152	222	73
of which organic	..	1	130	42
Other berries	51	108	49	28
<b>Total</b>	<b>12 027</b>	<b>9 097</b>	<b>9 131</b>	<b>8 430</b>
<b>Supply of wild mushrooms, 1 000 kg <sup>1)</sup></b>				
Chanterelle	16	5	12	16
Cep	181	747	67	275
Milk caps	152	98	122	88
Other wild mushrooms	77	5	37	17
<b>Total</b>	<b>426</b>	<b>855</b>	<b>238</b>	<b>396</b>

Source: Natural Resources Institute Finland, Finnish Food Authority, Kantar TNS Agri Ltd

<sup>1)</sup> Weighted fresh.

## GAME BAG

Amount and face value of game meat		2006	2010	2017
Number	Hares	268 800	248 200	131 600
	Moose	75 587	68 423	56 581
	Other artiodactyla <sup>1)</sup>	25 777	29 113	50 673
	Wild boar	3	100	571
	Waterfowl	586 000	533 800	364 600
	Grouse	459 200	306 200	76 500
	Other game birds	245 400	278 000	244 700
	Total <sup>2)</sup>	1 664 867	1 470 315	928 666
Quantity 1 000 kg	Hares	525	501	267
	Moose	10 018	9 124	7 712
	Other artiodactyla <sup>1)</sup>	1 086	1 227	2 092
	Wild boar	0	8	45
	Waterfowl	327	305	203
	Grouse	308	204	56
	Other game birds	84	97	83
	Total <sup>2)</sup>	12 400	11 559	10 507
Value EUR 1 000	Hares	2 608	7 446	3 948
	Moose	51 526	54 744	50 128
	Other artiodactyla <sup>1)</sup>	5 681	6 348	11 025
	Wild boar	1	80	500
	Waterfowl	5 157	6 146	4 151
	Grouse	4 515	5 921	1 754
	Other game birds	1 480	1 775	1 492
	Total <sup>2)</sup>	71 175	83 029	73 489

Source: The Natural Resources Institute Finland

<sup>1)</sup> White-tailed deer, Finnish forest reindeer, fallow deer and roe deer.<sup>2)</sup> Totals include bears and beavers.

## LEVEL OF SELF-SUFFICIENCY IN FOOD PRODUCTS

Ratio of production to consumption (%)	1994	2005	2017	2018
Bread grain	75	102	109	65
Dairy products, liquid milk	112	106	99	100
Beef and veal	111	89	81	81
Pork	113	116	99	95
Eggs	130	119	112	115
Sugar	68	83	39	34
Tomato	..	62	61	61
Cucumber	..	74	81	88
Carrot and turnip	..	94	92	..
Yellow onion	..	80 <sup>1)</sup>	69	..
Cauliflower	..	62	38	..
Strawberry	..	67	65	..
Raspberry	..	24	38	..
Apple <sup>2)</sup>	..	21	15	..
Apple (includes private gardening)	..	31	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

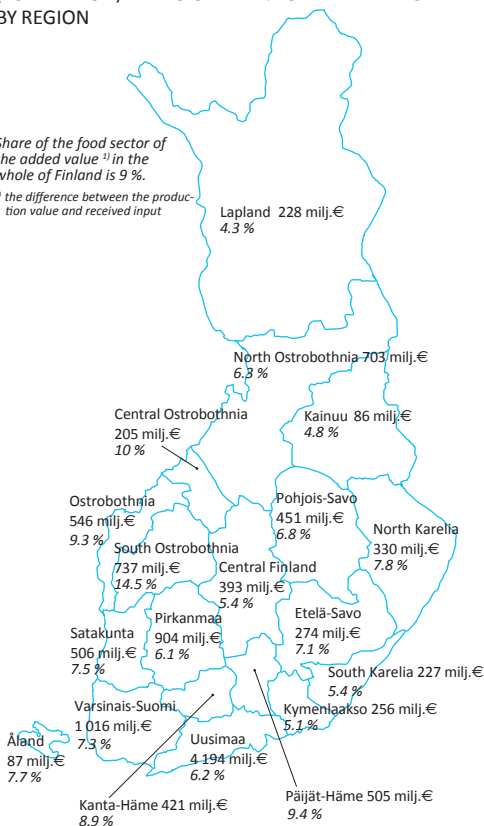
<sup>1)</sup> Onions excluding garlic and leek.

<sup>2)</sup> 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 <sup>1)</sup> in the whole of Finland is 9 %.

<sup>1)</sup> 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 2018

Inspected foods	Inspected batches <sup>1)</sup> , number	Batches issued a notice <sup>2)</sup> , number	Non-compliant batches <sup>2)</sup> , number
Grain and cereal products	110	10	6
Vegetables and vegetable products	486	54	29
Starchy roots and tubers	14	0	0
Leguminous plant seeds and leguminous products	32	7	12
Fruit and fruit products	530	37	11
Fish and fish products	10	1	1
Sweets and chocolate	36	5	9
Fruit, vegetable and plant juices, drinks and spreads etc.	69	8	4
Water, water-based soft drinks etc.	57	11	10
Ingredients for hot drinks and groats	102	12	26
Alcoholic beverages	26	10	2
Foodstuff for adolescents	81	13	0
Foodstuff for people with special diet (incl. dietary supplements)	67	10	19
Compiled dishes	84	15	15
Spicing products and dinner sauces	71	8	10
Purified and isolated ingredients	39	7	6
Cereal dough based products	126	9	9
Nuts and nut products	81	4	4
Oil seeds and fruit	79	1	0
Herbs, spices and similar	156	23	13
Products imitating meat and dairy products	16	0	6
<b>Total</b>	<b>2 272</b>	<b>245</b>	<b>192</b>

Source: Customs Laboratory

<sup>1)</sup> 44 % of the batches were from countries outside the EU.<sup>2)</sup> 8 % were found to be non-compliant with the regulations, and lesser defects (reason for reprimand) were found in 12% of the investigated lots.

## CAUSES OF NON-COMPLIANCE 2018

Cause of non-compliance	Number of batches	%
Labelling	66	35.1
Plant protection products	43	22.9
Warning labels	20	10.6
Additives	16	8.5
Microbiological causes incl. salmonella	11	5.9
Salt content	8	4.3
Allergens	5	2.7
Mold toxins	5	2.7
Others	14	7.4
<b>Total</b>	<b>188</b>	<b>100.0</b>

Source: Customs Laboratory

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

	EU-27 average		Finland		
	2010	2016	2010	2017	2018
Number of targeted samples	418 081	369 262	4 344	4 218	4 265
Non-compliant samples %	0.33	0.31	0.00	0.28	0.33

Source: EFSA and Finnish Food Authority

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 2018

Inspections, number	Primary production <sup>1)</sup>	Manufacture and packaging	Distribution and transport	Retail sales	Service sector	Total
Number of establishments	38 034	3 428	2 197	11 306	33 659	88 624
Number of establishments inspected	778	1 491	391	3 613	14 190	20 463
Number of inspections	852	2 902	518	4 768	17 305	26 345
Number of establishments committing infringements	398	257	37	472	1 645	2 809
<b>Type of infringement</b>						
Hygiene (HACCP, training)	..	120	20	175	707	1 022
General hygiene	..	284	20	427	1 837	2 568
Composition	..	14	8	10	0	32
Quality and contaminants	..	8	0	6	39	53
Labelling and presentation	..	71	20	182	122	395
Other	..	50	3	83	83	219

Source: Finnish Food Authority, Report on the implementation of the Multi-annual National Food Chain Control Audit Plan 2015–2019 in 2018

<sup>1)</sup> Primary production data of foods missing as comprehensive information not available in 2018.



## NUMBER OF RECALLS

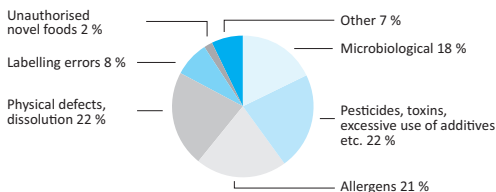
	2005	2010	2017	2018
Recalls <sup>1)</sup> , number	28	84	158	168

Source: Finnish Food Authority

<sup>1)</sup> 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 2018



Source: Finnish Food Authority

## FOOD AND WATER BORNE OUTBREAKS AND NUMBER OF PERSONS AFFECTED 2018

Disease-causing agent	Number of outbreaks	Number of persons affected	
	N=75	N=1 947	%
<b>Food borne</b>			
Bacillus cereus	2	25	2
Campylobacter	3	21	1
Clostridium perfringens	1	36	2
Listeria monocytogenes	1	30	2
Salmonella	5	56	4
Yersinia enterocolitica	2	22	1
Norovirus	25	958	65
Kryptosporidi	1	21	1
Histamine	1	2	0,1
Unknown	32	304	21
<b>Total</b>	<b>73</b>	<b>1475</b>	<b>100</b>
<b>Waterborne</b>			
Norovirus + sapovirus + several other pathogens	1	463	
Norovirus	1	9	
<b>Total</b>	<b>2</b>	<b>472</b>	

Source: Finnish Food Authority

FOOD BORNE OUTBREAKS BY FOOD VEHICLE 2018

Food vehicle	Unknown / several foodstuffs / buffet	Meat and meat products	Vegetables and vegetable products	Fish and fish products, shellfish	Bakery products	Total
<b>Causative agent</b>						
Bacillus cereus	1	1				2
Campylobacter	2	1				3
Clostridium perfringens		1				1
Listeria monocytogenes			1			1
Salmonella	4	1				5
Yersinia enterocolitica	2					2
Norovirus	21			4		25
Kryptosporidi	1					1
Histamine				1		1
Unknown	29	1		1	1	32
Total	60	5	1	6	1	73
%	82	7	1	8	1	100

Source: Finnish Food Authority

# FOOD CONSUMPTION PER CAPITA IN FINLAND AND IN THE EU

Consumption kg/ capita	1995	2005	2011	2017	2018	EU-28 <sup>1)</sup>
Grain	69.8	78.8	78.8	80.3	79.1	127.3
Meat, total	60.3	73.0	77.6	81.0	81.3	85 <sup>2)</sup>
beef and veal	18.8	18.6	18.6	19.4	19.3	15.4 <sup>2)</sup>
pork	32.0	33.5	36.4	33.4	32.5	38.4 <sup>2)</sup>
poultry meat	9.0	16.1	18.2	24.9	25.6	24.1 <sup>3)</sup>
other meat	0.6	4.8	4.4	..	..	2.8
Liquid milk products, total (litres)	203.0	187.8	181.8	159.9	150.7	236.4
milk	145.6	134.6	127.6	115.6	110.1	..
sour milk products	37.1	36.8	40.7	31.9	31.6	..
cream (incl. sour cream products)	6.8	6.6	8.8	9.3	9.0	3.9
Butter	5.5	2.6	4.0	3.5	3.5	4.2 <sup>3)</sup>
Vegetable oils	4.3	5.3	5.5	..	..	19.6
Cheese <sup>4)</sup>	14.8	17.2	21.0	25.8	25.7	19.3 <sup>3)</sup>
Eggs	11.8	9.3	10.0	11.9	11.8	12.5 <sup>3)</sup>
Sugar	35.4	32.0	30.1	30.6	29.2	31.7
Fruit <sup>5)</sup>	43.6	54.5	58.8	65.4	65.4	103.7
Vegetables <sup>6)</sup>	61.7	68.3	62.6	63.8	63.5	109.4
Fish (fillet/product weight)	14.0	14.1	14.9	..	..	..
Coffee (roasted)	8.3	9.8	9.7	9.6	9.9	4.8
Soft drinks (litres)	45.8	52.0	56.0	52.8 <sup>7)</sup>	53.0	..
Beer (litres) <sup>8)</sup>	82.5	84.0	85.4	75.0	73.3	67.1
Wine (litres) <sup>8)</sup>	8.2	10.8	12.6	11.6	11.4	22.8
Spirits (litres) <sup>8)</sup>	4.9	6.6	5.4	4.4	4.2	..

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

<sup>1)</sup> In 2013. Food product group specifications do not concern EU figures.

<sup>2)</sup> In 2018

<sup>3)</sup> In 2017.

<sup>4)</sup> Includes non-flavoured curd and cottage cheese.

<sup>5)</sup> Excluding fruit juices and berries.

<sup>6)</sup> From 2011 onwards, no frozen or preserved vegetables.

<sup>7)</sup> The number is an estimate from the previous year.

<sup>8)</sup> The numbers don't include private imports.

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

	2012		2017		Recommendation
	Men	Women	Men	Women	
<b>Protein, g</b>					
Intake per day	95.0	72.0	98.0	73.0	
E % <sup>1)</sup>	17.3	17.2	18.0	17.5	10–20 E %
<b>Fat, <sup>2)</sup> g</b>					
Intake per day	93.0	71.0	97.0	75.0	
E % <sup>1)</sup>	37.0	35.9	38.7	37.7	25–40 E %
<b>Saturated fat <sup>3)</sup>, g</b>					
Intake per day	39.0	30.0	38.0	28.0	
E % <sup>1)</sup>	15.5	15.1	15.1	14.4	< 10 E %
<b>Monounsaturated fat <sup>3)</sup>, g</b>					
Intake per day	36.0	27.0	37.0	28.0	
E % <sup>1)</sup>	14.5	13.8	14.6	14.3	10–20 E %
<b>Polyunsaturated fat <sup>3)</sup>, g</b>					
Intake per day	17.2	13.4	17.0	14.0	
E % <sup>1)</sup>	6.9	6.9	6.8	6.9	5–10 E %
<b>Carbohydrates, g</b>					
Intake per day	230.0	186.0	219.0	177.0	
E % <sup>1)</sup>	42.2	43.9	41.3	42.5	45–60 E %
<b>Sucrose, g</b>					
Intake per day	51.0	43.0	43.0	39.0	
E % <sup>1)</sup>	9.2	10.0	7.8	8.9	≤ 10 E %
<b>Fibre, g/vrk</b>					
Intake per day	22.0	21.0	20.0	22.0	25–35 g
<b>Energy, MJ (kcal)</b>	9.4	7.3	9.5	7.4	
<b>intake per day</b>	(2 243)	(1 733)	(2 260)	(1 756)	

Source: The National FinDiet 2012 Survey, The National FinDiet 2017 Survey

25–64 years old

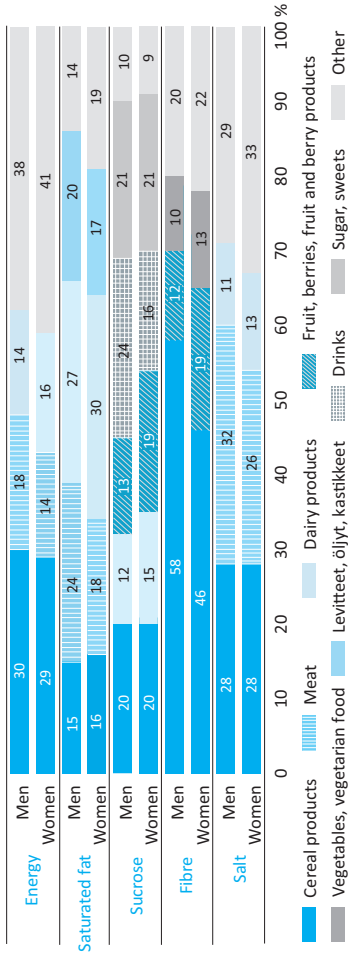
Energy includes fibre and alcohol.

<sup>1)</sup> Percentage of nutrient intake out of the total energy intake.

<sup>2)</sup> Crude fat.

<sup>3)</sup> As triglycerides.

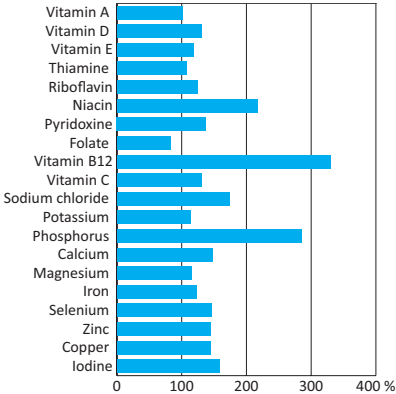
## MOST IMPORTANT SOURCES OF ENERGY AND NUTRIENTS



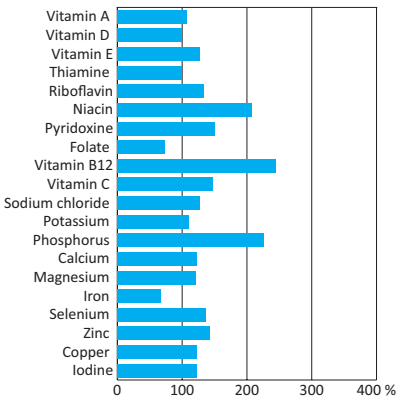
Source: The National FinDiet 2017 Survey  
25–64 years old

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

Men



Women



Source: The National FinDiet 2017 Survey  
25–64 years old

## FINNS' DAILY MEALS (percentage)

	Children/teenagers <sup>4)</sup>				Working-age population		Elderly	
	Primary school <sup>5)</sup>		Secondary school <sup>6)</sup>		Upper secondary school/vocational school <sup>7)</sup>			
	Boys	Girls	Boys	Girls	Boys	Girls	Men	Women
Breakfast	90	91	63 <sup>8)</sup>	67 <sup>8)</sup>	60	63	98	95
Lunch	96	94	85 <sup>8)</sup>	73 <sup>8)</sup>			92	93
Dinner	86	91	77 <sup>8)</sup>	67 <sup>8)</sup>			90	91
Snack <sup>1)</sup>	70	68	29 <sup>8)</sup>	35 <sup>8)</sup>			90	95
Evening snack	92	87	69 <sup>8)</sup>	64 <sup>8)</sup>			95	93
Drink as a meal <sup>2)</sup>			70	70	75	76	96	94
School meal								
Meal with family <sup>3)</sup>			65	60	55	49		

Source: Late-study 2010, Kouluterveystutkimus 2017, The National FinDiet 2017 Survey

<sup>1)</sup> For children, snack in the afternoon.

<sup>2)</sup> Meal that only consists of a drink.

<sup>3)</sup> Evening meal, where the entire family eats together, at least 3 weekdays a week.

<sup>4)</sup> For children and teenagers, the meals eaten on weekdays.

<sup>5)</sup> Primary school classes 1 and 5.

<sup>6)</sup> Secondary school classes 8 and 9.

<sup>7)</sup> 1st and 2nd year students at upper secondary and vocational schools.

<sup>8)</sup> Secondary school class 8.

## HEALTH BEHAVIOUR 2018 (%)

	All	aged 20–54	aged 55–74	75+
Use vegetables and fruits as recommended	31	29	35	30
Eat few fresh vegetables <sup>1)</sup>	55	52	55	64
Eat few fruits or berries	56	63	48	48
Butter or butter/vegetable oil spread every day <sup>1)</sup>	56	53	59	65
Drink too much alcohol	30	29	36	16
Smoke every day	12	14	13	3
Obese BMI ≥ 30	21	19	24	19
Do not exercise	21	22	16	35
Sleep <sup>2)</sup>				
Up to 6 hours	15			
Average duration of sleep (hours) <sup>3)</sup>	7.3			

Source: The National FinSote 2018 survey, The National FinTerveys 2017 survey <sup>2)</sup>

<sup>1)</sup> Answer choices differed from the 2017 ATH study.

<sup>3)</sup> Over 30 year olds.



## NUMBER OF SHOPS BY SHOP TYPE

Shop type	Total 1.1.2019
Hypermarkets	152
Department stores	86
Supermarkets, large	689
Supermarkets, small	456
Self-service shops, large	864
Self-service shops, small	299
Small shops	258
Speciality shops	749
Market halls	32
Discount stores, part of the convenience goods offering <sup>1)</sup>	352
Service station stores, part of the convenience goods offering <sup>1)</sup>	613
<b>Total 1.1.2018</b>	<b>4 550</b>
Mobile shops	11
Closed down	227

Source: A.C. Nielsen Finland Oy

<sup>1)</sup> Selling a limited range of convenience goods.

## SALES OF DAILY CONSUMER GOODS BY SHOP TYPE

MEUR	2018
Hypermarkets <sup>1)</sup>	5 112
Department stores	330
Supermarkets, large	7 002
Supermarkets, small	2 074
Self-service shops, large	2 172
Self-service shops, small	360
Small shops	185
Speciality shops	225
Market halls	33
Discount stores, part of the convenience goods offering	397
Service station stores, part of the convenience goods offering	190
<b>Total</b>	<b>18 078</b>
Mobile shops	4
Closed down	111
<b>Total</b>	<b>18 193</b>

Source: A.C. Nielsen Finland Oy

<sup>1)</sup> Includes chains K-citymarket, Prisma and Minimani.

## NUMBER OF KITCHENS AND UNITS SERVED BY INDUSTRY, 2017

	Number, pieces <sup>1)</sup>	Servings, million
Licenced restaurants <sup>2)</sup>	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	..
<b>Total</b>	<b>12 542</b>	<b>702</b>

Source: Taloustutkimus Oy, Horeca register

<sup>1)</sup> Does not include cafeterias.

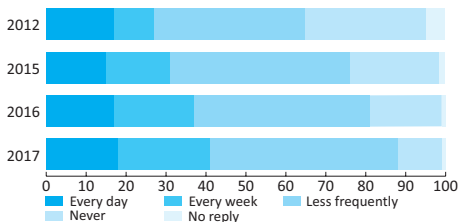
<sup>2)</sup> All licensed cafés and restaurants.

In 2019, the share of organic products in public catering services was approx. 12 % (in kg).

Source: The Joint Authority of Education in Savo, Pro luomu.

## Environment

### FREQUENCY OF CONSUMPTION OF ORGANIC PRODUCE BY CATERING PROVIDERS, %



Source: Taloustutkimus Oy/Food Service Feedback 2017

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