

Food Statistics Pocketbook 2014



Department
for Environment
Food & Rural Affairs



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**Food
Statistics
Pocketbook
2014**

Department for Environment, Food and Rural Affairs

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Foreword

This publication provides a concise round-up of statistics on food covering the economic, social and environmental aspects of the food we eat (excluding agriculture). It contains statistics for different time periods, but always using latest available data at the time of release.

Data comes from surveys run by Defra and the Office for National Statistics and from a wide range of other sources including government departments, agencies and commercial organisations. Links to data sources are included on every page.

An associated dataset containing all charts and key data sources from this year's publication is also available.

Data are a mixture of National Statistics, Official Statistics and unofficial statistics. Unofficial statistics are used where there are gaps in the evidence base. National Statistics (Official Statistics that comply with the national statistics code of practice) are indicated using the logo pictured here.

Further information on National Statistics can be found on the UK Statistics Authority website.



Related Defra publications:

- Family Food
- Total Factor Productivity of the United Kingdom Food Chain
- Agriculture in the United Kingdom

Foreword

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Summary

Economy

- The agri-food sector contributed £96.9 billion or 7.1% to national Gross Value Added in 2012, and 3.6 million or 13% of national employment in Q3 2013.
- Total Factor Productivity in the food sector (excluding agriculture) stabilised in 2012 having risen gradually since 2002.
- Beverages is the largest manufacturing group with a GVA of £5.3 billion in 2012; Alcoholic beverages contributed £4.1 billion (77%) of the total beverages GVA in 2012.

Food Supply & Prices

- Food prices have risen 18% in real terms since 2007 taking us back to the late nineties in terms of cost of food relative to other goods.
- Median income after housing costs fell 13% between 2002-03 and 2012-13 for low income decile households. In 2011-12, all other incomes groups saw decreases in median income of between 0.8% and 3.3%.
- Based on price level indices , in 2013 food and non-alcoholic drinks were 7% more expensive in France and Germany, and 14% more in Ireland, than the UK.
- In 2012, 24 countries together accounted for 90% of UK food supply. Just over half of this (53%) was supplied domestically from within the UK.
- The total value of food and drink exports rose slightly in 2013 to £18.9 billion, £6.0 billion more than in 2005 measured in 2013 prices.

Summary

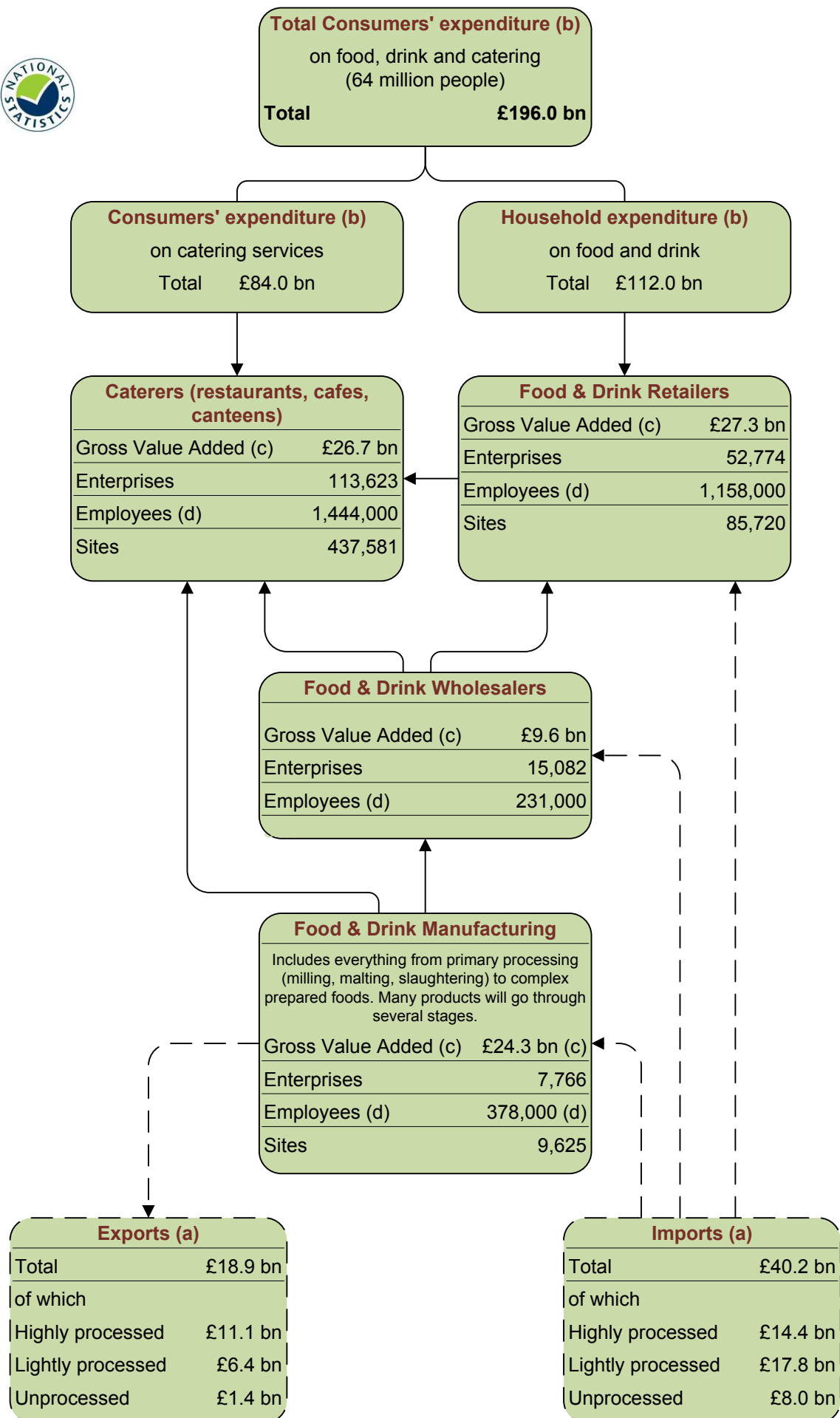
Environment and Waste

- In 2012, total domestic CO₂ emissions from food and drink manufacturing fell 2.2% on 2011.
- Estimated total UK food and drink waste is around 15 million tonnes per year, with households generating 7mt/year of which 4.2 is avoidable (i.e. fit to eat).
- The average UK household spend on food that could have been eaten but is thrown away is £470 a year.
- In 2012 local authorities were collecting over 5 times as much food waste for recycling as they were in 2007.

Health & Food Safety

- Fruit and vegetable consumption is falling. The lowest 10% of households by income purchase the least fruit and vegetables at an average of 2.9 portions per person per day in 2012, 11% less than in 2007.
- In England in 2012 the obesity rate across all adults was 25%, with a further 37% overweight.
- High level incidents dealt with by the FSA in 2013 included an investigation into horse and pig DNA in beef products; two E.coli O157 outbreaks linked to watercress and Caribbean soft fruit drink contaminated with cocaine, which caused one fatality.
- In May 2014 the main food issue of concern to respondents was food prices at 51%, a decrease from 59% in May 2013

Chapter 1: Food Chain



Food Chain

1.1: Economic summary of the UK food chain beyond agriculture¹

(a) Overseas trade data is provisional for full year 2013 from HM Revenue and Customs. (Data may not equal total due to rounding). Dashed lines indicate main trade flows.

(b) Consumers' expenditure, properly known as household final consumption expenditure, is provisional from the Office for National Statistics for full year 2013 and is calculated at current prices. (Data may not equal total due to rounding).

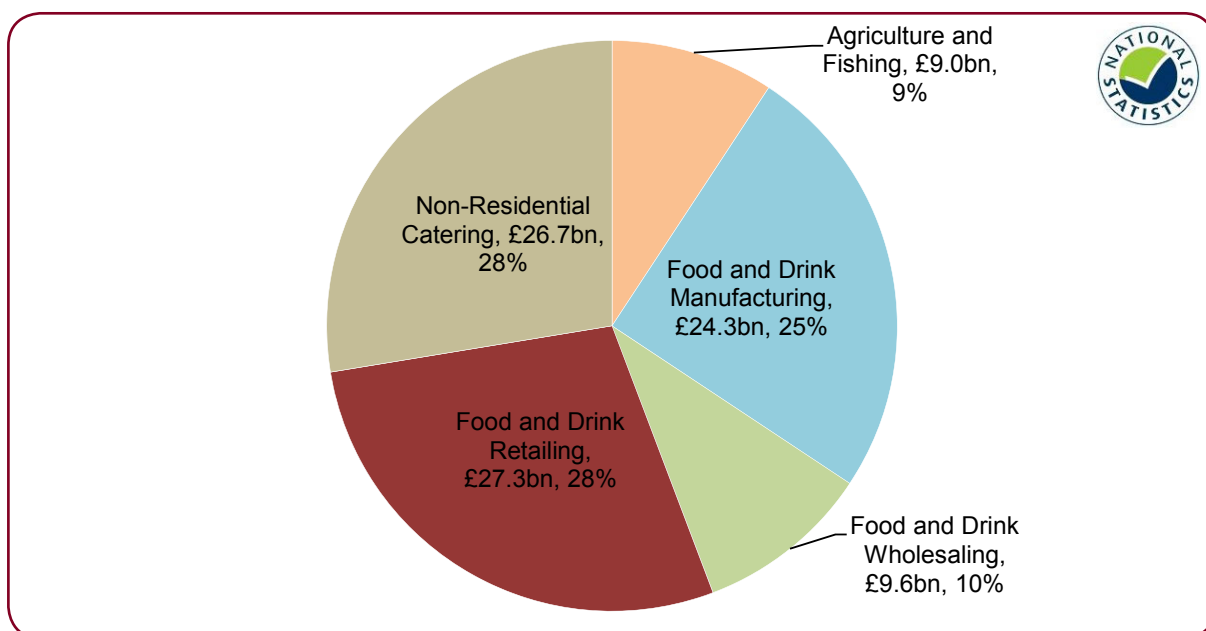
(c) Gross Value Added (GVA) is the difference between the value of goods and services produced and the cost of raw materials and other inputs used up in production. GVA figures are from the Annual Business Survey and is provisional data for full year 2012, calculated at basic prices (market prices less taxes plus subsidies).

(d) Employee data for grocery retailers is for Great Britain only and is for Q3 2013 from the Office for National Statistics Labour Force Survey. Food and drink wholesaling, and agricultural wholesaling includes an estimate of employment by food and drink wholesaling agents, and wholesalers of agricultural machinery from the Annual Business Survey. (Employee data is rounded).

¹ Excludes sectors downstream from food and drink manufacturing such as the food and drink supply industry (food processing machinery).

Food Chain

1.2: Gross Value Added of the UK agri-food sector, 2012



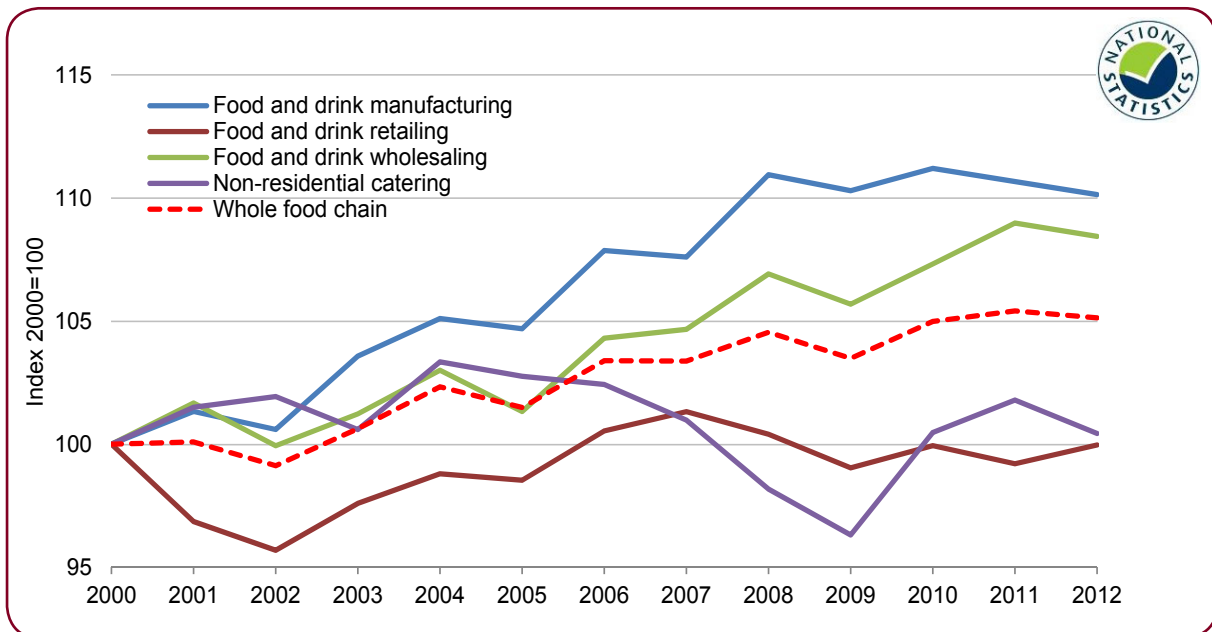
Source: Annual Business Survey (ONS) & Agriculture in the United Kingdom (Defra).

- The agri-food sector contributed £96.9 billion or 7.1% to national Gross Value Added in 2012, a decrease of 0.7% on 2011.
- The GVA of the food sector (excluding agriculture) increased 1.2% in 2012, following a 5.7% increase in 2011. Non-residential catering showed the greatest increase in 2012 at 7.0%. Retailing and wholesaling changed little, whilst the manufacturing sector GVA decreased 3.1% to its lowest level since 2008.
- Longer term, the food sector (excluding agriculture) increased by 50% between 2000 and 2012 while the whole economy increased by 55%. The food sector has less scope for growth as there is a limit to consumer intake capacity and therefore it relies largely on quality improvements.
- There was a net decrease in registered enterprises in the food sector of 970 in 2012 following a net increase of over 2500 in 2011, with most changes in non-residential catering². There was a net increase of around 300 enterprises in the food manufacturing sector.

² Business Demography, Enterprise Births, Deaths and Survivals, ONS 2013.

Food Chain

1.3: Trends in the total factor productivity³ of the UK food sector⁴



Source: Total Factor Productivity of the United Kingdom Food Chain 2000-2012, Defra, January 2014.

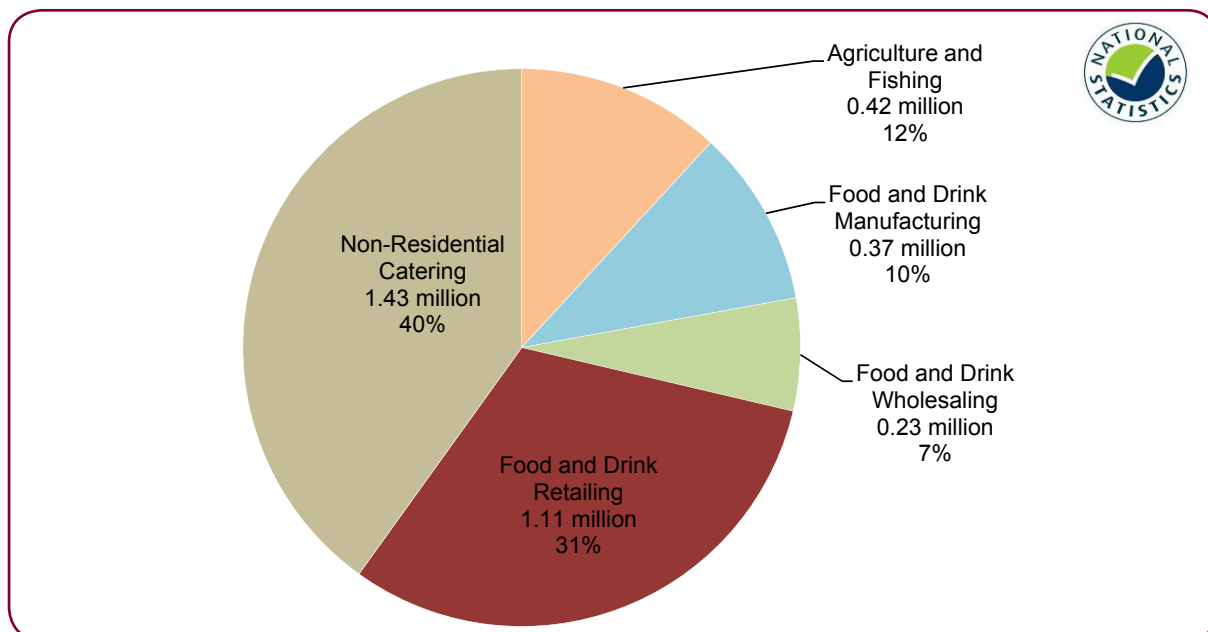
- Total factor productivity (TFP) of the food sector excluding agriculture stabilised in 2012, having risen gradually since 2002.
- The (TFP) of the UK food sector is an indicator of the efficiency and competitiveness of the food industry within the UK. An increase in TFP indicates the industry is improving its competitiveness.
- Since 2000, productivity of food manufacturing and food wholesale have risen overall; food retailing and non-residential catering have fluctuated but in 2012 have returned to around base levels.
- Benchmarking against a wider economy measure shows the average annual growth in the food sector between 2002 and 2012 was 0.6% compared to 0.2% in the wider economy.
- The calculation is based on reliable data on business sales and costs, employment by industry and on price indices all collected by the Office for National Statistics.

³ See Glossary for definition of Total Factor Productivity.

⁴ 'Food' includes non-alcoholic drinks. 'Drink' is alcoholic drinks.

Food Chain

1.4: Agri-food sector employees (GB)⁵, Q1 2014



Source: Labour Market Statistics (ONS)⁶ and June Survey (Defra).

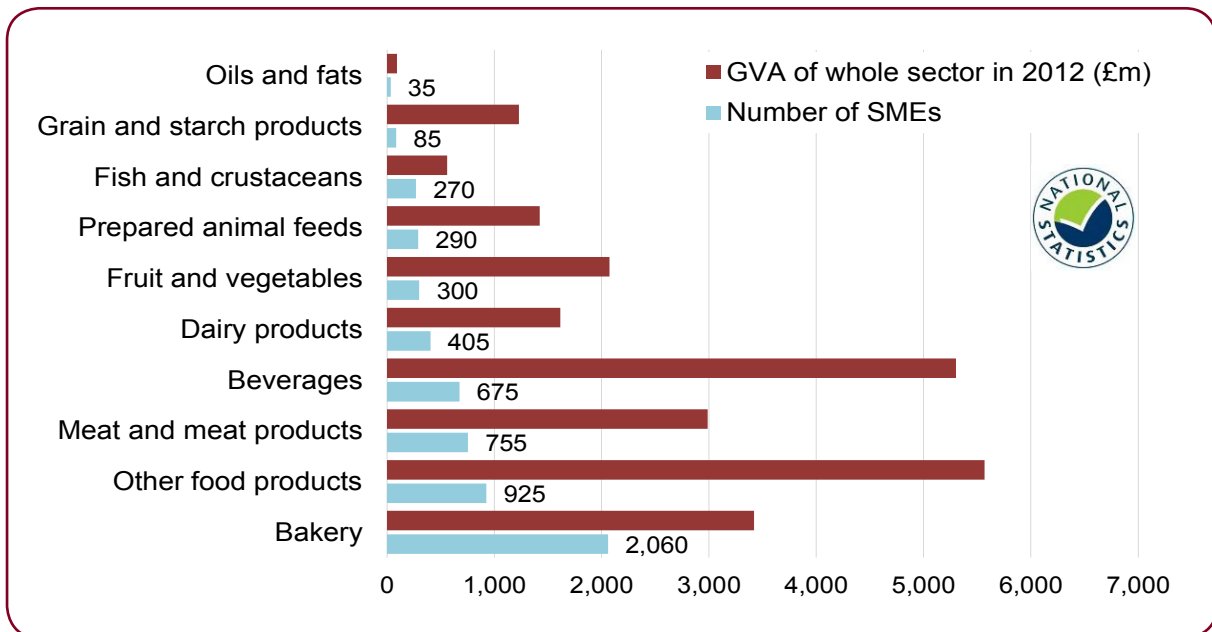
- The food sector in GB employed 3.1 million people in Q1 2014 (3.6 million if agriculture and fishing are included along with self-employed farmers), a 2.3% increase on Q1 2013. It covered 11% of GB employment in Q1 2014 (13% if agriculture and fishing are included along with self-employed farmers).
- Non-residential catering is the largest food sector accounting for 45% of the total (excluding agriculture). Employment in this sector increased 6.1% on Q1 2013, equating to 82,000 employees. Wholesaling, the smallest sector increased 0.9% between Q1 2013 and Q1 2014, equating to 2000 employees.
- The retailing sector saw a 1.2% decrease between Q1 2013 and Q1 2014 while the manufacturing sector was unchanged.
- Women accounted for 57% of employees in food retailing and 52% in non-residential catering in March 2014. Men accounted for 66% of employees and 70% of hours worked in food manufacturing. In Q1 2014, 50% of food sector jobs were part time.

⁵ Data for the food sector is not available for Northern Ireland, but numbers are likely to be small.

⁶ Wholesaling, manufacturing and retailing include tobacco.

Food Chain

1.5: UK food and drink manufacturing by product type⁷



Source: Annual Business Survey (ONS), Business Population Estimates (BIS).

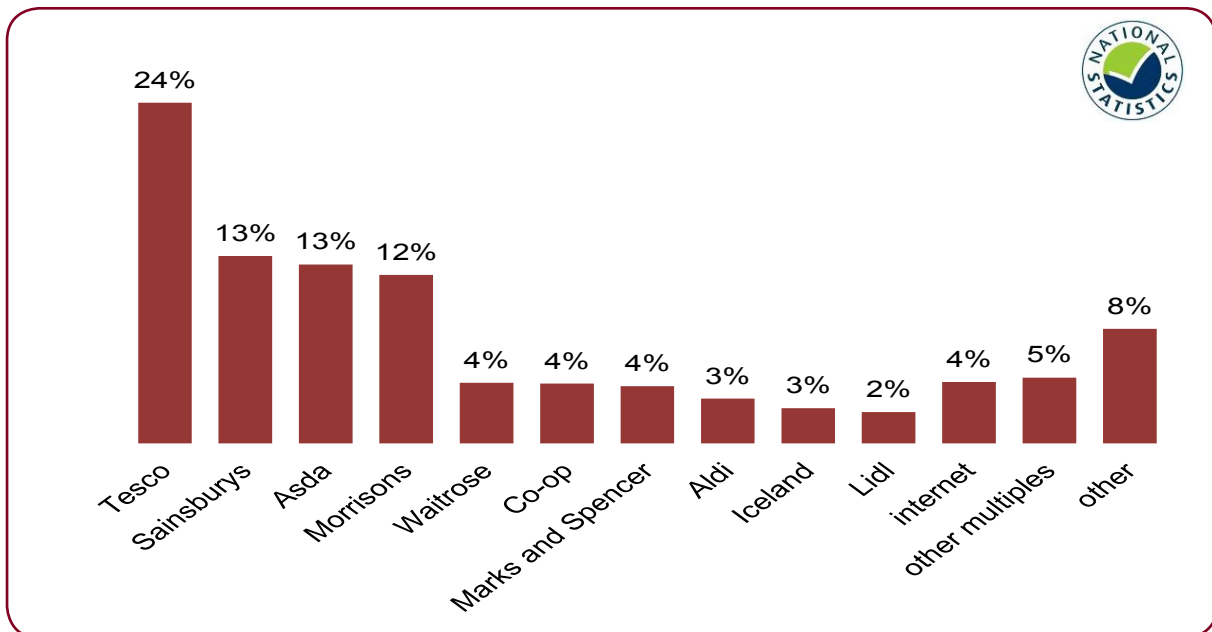
- There were approximately 5800 small and medium sized enterprises⁸ (SMEs) in the food and drink sector with turnover of nearly £22 billion and 123,000 employees at the start of 2013.
- In the food sector (excluding beverages) SMEs accounted for 30% of employment and 26% of turnover.
- Of the 5800 SMEs, more than a third (36%) are manufacturers of bakery and farinaceous products.
- Beverages (including soft drinks and mineral water), is the largest manufacturing group with a Gross Value Added (GVA) of £5.3 billion in 2012; contributing 22% to the total food and drink manufacturing GVA.
- Alcoholic beverages contributed £4.1 billion (77%) of the total beverages GVA in 2012, a fall of 21% on 2011.

⁷ For disclosure reasons some small contributions (less than 4% overall) to food and drink manufacturing GVA have been treated as zeros.

⁸ Includes businesses classed as 'micro'. See Glossary for a more detailed definition.

Food Chain

1.6: UK grocery market shares 2012



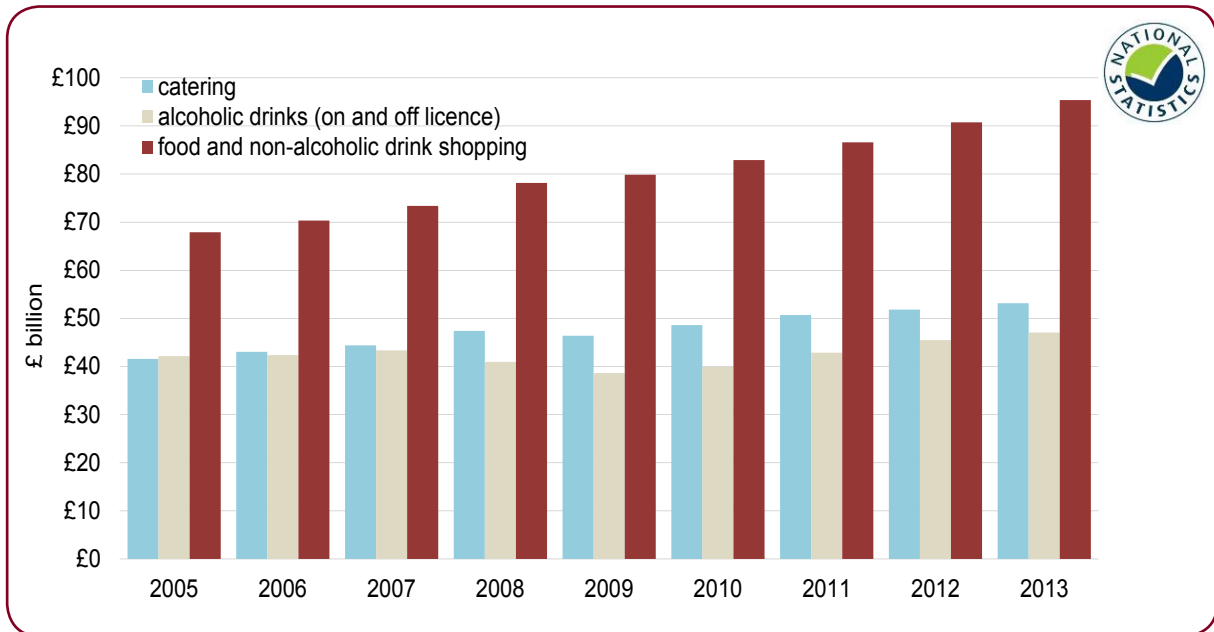
Source: Living Costs and Food Survey (LCFS) 2012, (Defra/ONS).

- The combined market share of food and non-alcoholic drinks of the largest four food and drink retailers decreased 0.7% to 62% in 2012. Tesco commanded the largest market share at 24%, a decrease of 1 percentage point on 2011. The three largest discounters (Aldi, Iceland and Lidl) had a combined market share of 7.9%, an increase of 0.5% on 2011.
- Internet food shopping, which includes the largest supermarkets, remained unchanged on 2011 at 4.4% of sales of food and non-alcoholic drinks.
- Data comes from the Living Costs and Food Survey which is fully representative of UK household food shopping.
- Alternative market share estimates for 2014 from the Kantar Worldpanel⁹ are more up to date although not restricted to foods and not as representative. In 2014 compared to 2013 (based on 12 weeks ending 22 June) Kantar Worldpanel indicates some polarisation of the market with Aldi and Lidl gaining 1.1% and 0.5% respectively, whilst Tesco fell 1.4% and Morrisons 0.8%. Asda was the only large supermarket to show an increase in market share (0.2%)

⁹ Kantar Worldpanel is a market research company, providing up to date statistics on sales by the grocery sector. Market shares also include sales of non-food.

Food Chain

1.7: UK Consumer expenditure on food¹⁰, drink and catering



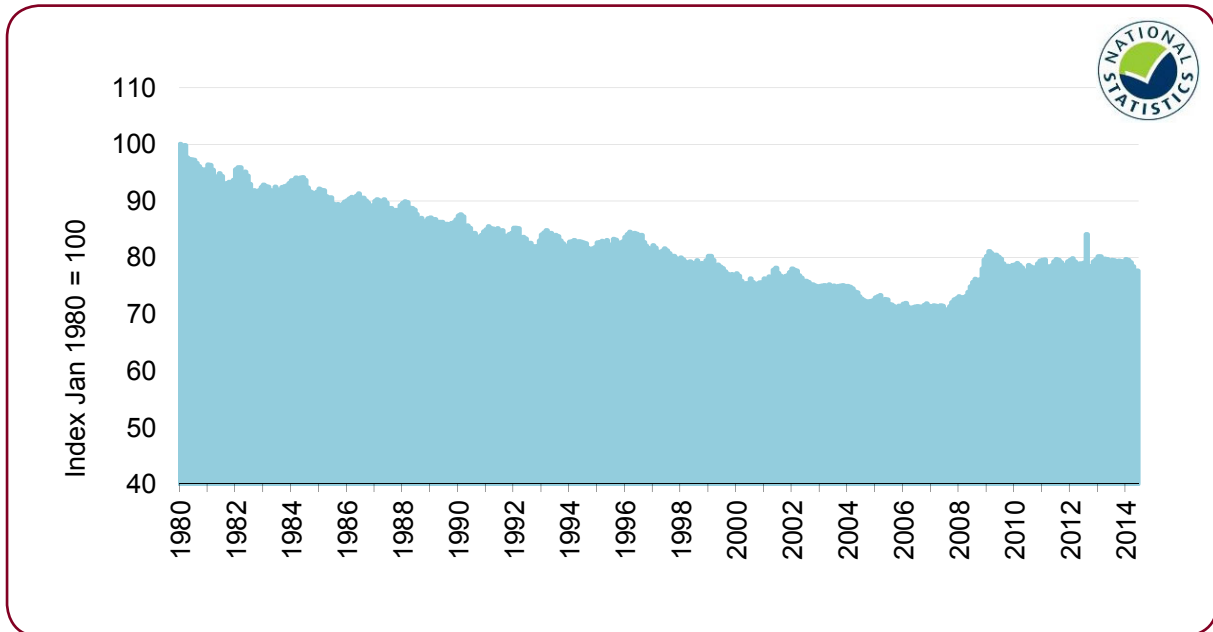
Source: *Consumer Trends*, (ONS).

- Consumer expenditure on food, drink and catering has continued to rise despite the economic downturn. There was a rise of 4.0% in 2013 to £196 billion.
- In 2013 expenditure on food (including non-alcoholic drinks) showed the largest increase, up 5.1%, while spend on alcoholic drinks increased 3.5% and catering increased 2.6%.
- Spend on food shopping has increased 30% since 2007 and accounted for almost half of spend (49%) in the sector in 2013. Spend on catering accounted for 27% of sector spend in 2013 and has increased by 20% since 2007.
- Spend on all alcoholic drinks accounted for 24% of sector spend in 2013 and had the lowest overall increase since 2007 at 8.6%. Spend reduced between 2007 and 2009, but increased yearly thereafter.

¹⁰ Food' includes non-alcoholic drinks. 'Drink' is alcoholic drinks

Chapter 2: Prices & Expenditure

2.1: UK trend in food prices in real terms, January 1980 to July 2014¹



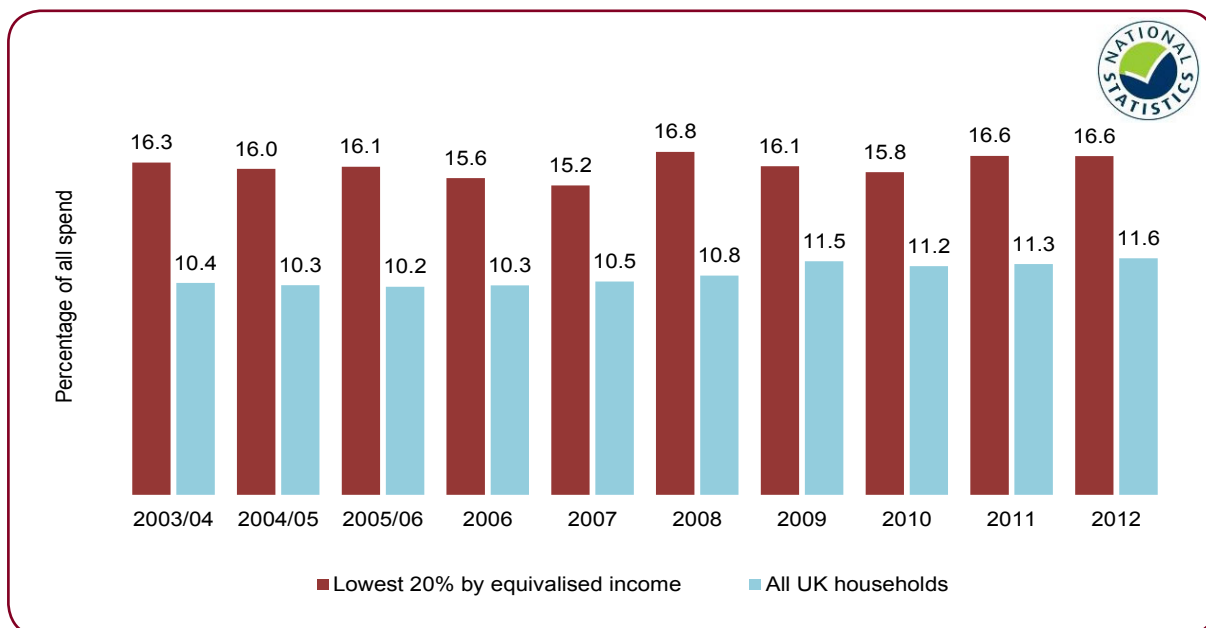
Source: Consumer Price Indices (ONS).

- Food prices rose 18% in real terms between 2007 and their peak in August 2012, following a long period in which they had fallen. Gradual price reductions since early 2013 to June 2014 have reduced that real terms increase to 8.6% compared to 2007.
- Successive spikes in the price of agricultural commodities since 2007 have led to higher retail food prices. They have not returned to low price levels of pre-2007.
- Oil prices also rose over this period, and inflation was higher than historically, but food prices have risen above inflation.
- Those on lower incomes tend to buy different food items to those on average or high incomes but food prices for these different shopping baskets have risen at about the same rate.
- A rise in food prices is more difficult for low income households to cope with because those on low incomes spend a greater proportion of their income on food - a rise in food prices has a disproportionately large impact on money available to spend elsewhere.

¹ Excludes alcoholic drinks and catering.

Prices & Expenditure

2.2: Trend in share of spend going on food and drink² in low income and all UK households, 2003-04 to 2012



Source: *Living Costs and Food Survey (Defra/ONS). Family Spending table 3.2e (ONS).*

- The relative affordability of food can be measured by the share of the household budget that goes on food. Low income households are of particular concern as they tend to have a greater percentage of spend going on food.
- Food is exerting greater pressure on household budgets since 2007 when food prices started to rise in real terms.
- Averaged over all households 11.6% of spend went on food in 2012, 1.1 percentage points above the 2007 level.
- For households in the lowest 20% by equivalised income 16.6% of spend went on household food, 1.4 percentage points above 2007 but unchanged on 2011.
- In 2012, the energy content of household food purchases in income decile 2 was 9.0% lower than in 2007 at 2024 Kcals/person/day; in decile 1 the energy content was 3.0% lower than in 2007 at 1862 Kcals/person/day.

² Excludes alcoholic drinks.

³ See Glossary for definition of equivalised income.

Prices & Expenditure

2.3: Income decline after housing costs, low income⁴ decile (UK)



Source: *Living Standards, Poverty and Inequality in the UK, 2014*; Institute for Fiscal Studies.

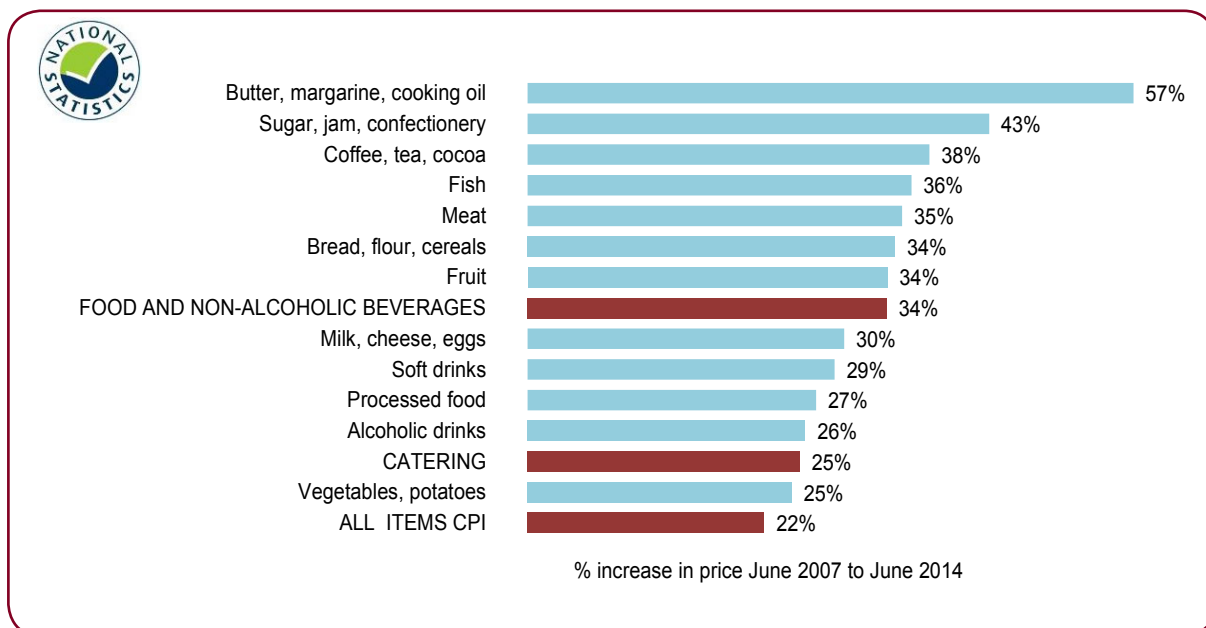
- Median income after housing costs fell 13% between 2002-03 and 2012-13 for low income decile households. Over the same time period, food prices (in real terms) increased 11%. In 2008-09 the median income for low income decile households reached its lowest level, 17% below that of 2002-03. Small increases between 2009 and 2012 were partially reversed in 2012-2013.
- In 2012-13, all income groups saw decreases in median income of between 0.8% (deciles 3 and 8) and 3.3% (lowest income decile). All income groups are below the 2002-03 level.
- Falling income (after housing costs) and rising food prices produced a double effect, reducing food affordability for lowest income decile households.
- The most commonly used threshold of low income in the UK is having an income which is less than 60% of the median. In 2012-13 the percentage of individuals in relative low income (before housing costs) was 15%⁵, equating to around 9.7 million individuals.

⁴ See Glossary for definition of Low income.

⁵ Households Below Average Income, ONS July 2014.

Prices & Expenditure

2.4: UK retail price changes by food group, 2007 to 2014



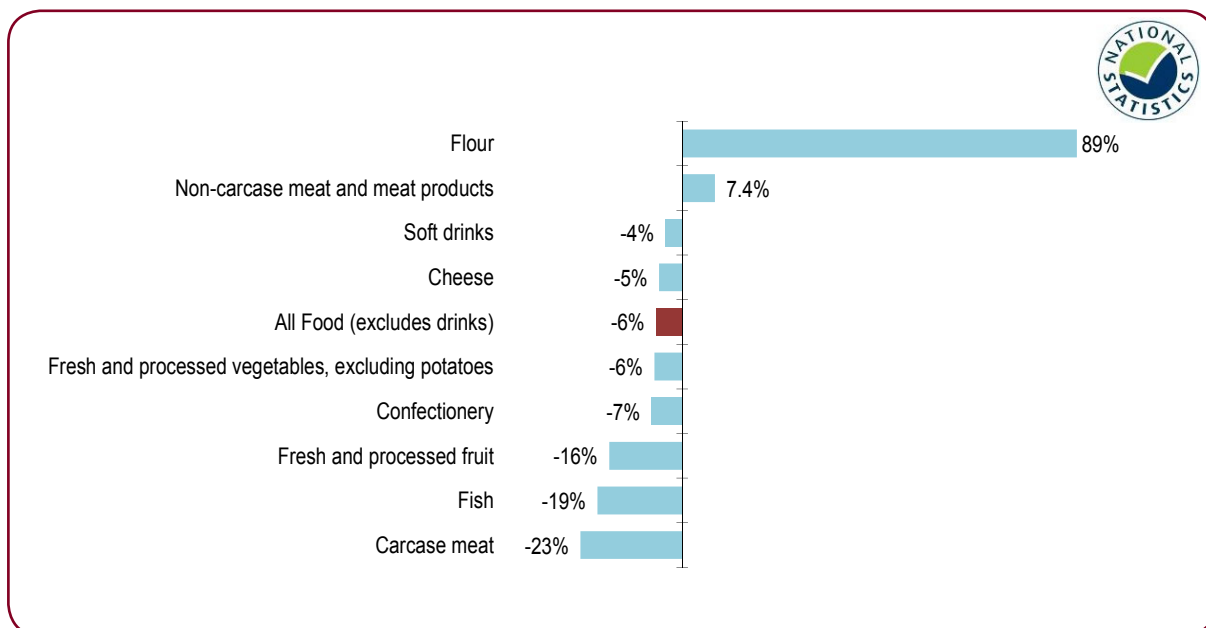
Source: Consumer Price Indices (ONS).

- All food groups have risen in price since 2007 (the start of the recession), with rises ranging from 22% to 57%. Food prices overall (including non-alcoholic drinks) rose 8.6% in real terms between 2007 and 2014.
- The rate of increase has reduced across food groups in the year to June 2014, with some food prices having fallen. Butter, margarine and cooking oils increased 55% between 2007 and 2013, while in the year to June 2014 the additional increase was just 1.2%.
- The largest increases in the year to June 2014 are sugar/jam/confectionery (2.9%), fish (2.0%) and alcoholic drinks (1.4%).
- Prices have fallen for vegetables/potatoes (-4.8%), coffee/tea/cocoa (-0.9%) and fruit (-0.3%) in the year to June 2014.
- Food price rises have a strong effect on food shopping for low income households. Since 2007, households in income decile 1 (lowest income group) bought less beef, bacon, butter, fish, fruit, tea and biscuits/cakes, but bought more pork, poultry and eggs⁶.

⁶ Family Food 2011, Defra, December 2012.

Prices & Expenditure

2.5: Percentage change in food purchases 2007-2012, in low income households (UK)



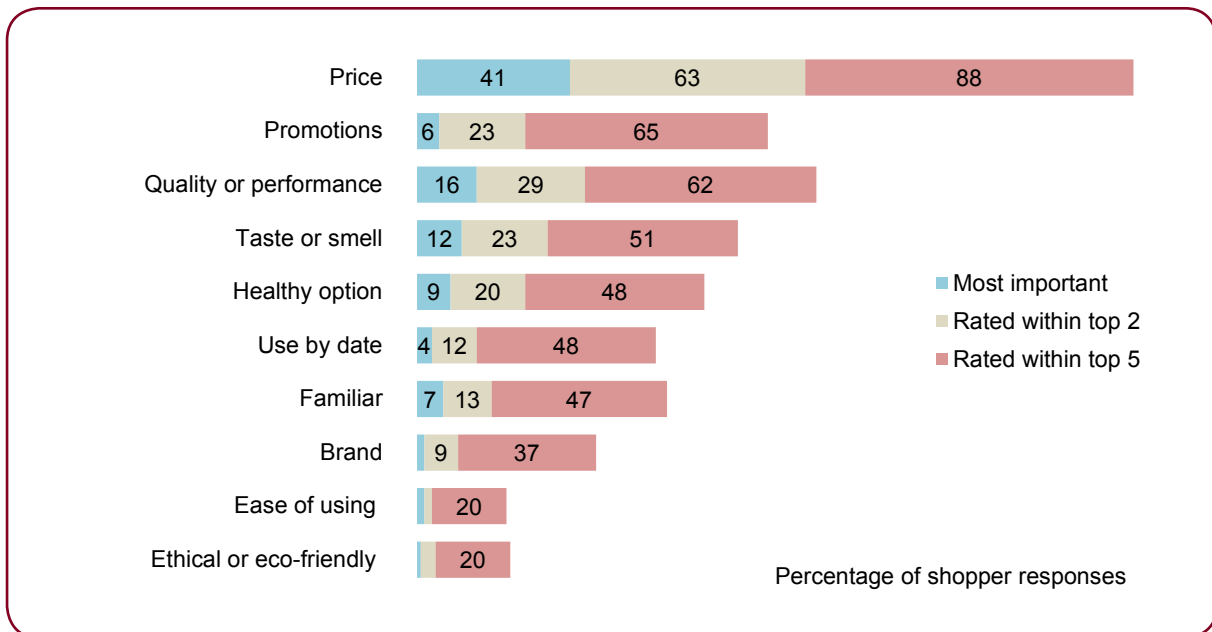
Source: *Family Food 2012*, Defra.

- In 2012 compared to 2007, the lowest income households (equivalised income⁷ decile 1) purchased 23% less carcase meat, 19% less fish and 16% less fruit. They also bought less confectionery (-7%), vegetables (-6%), cheese (-5%) and soft drinks (-4%).
- Purchases of flour increased significantly (89%) between 2007 and 2012 and purchases of non-carcase meat and meat products increased 7.4%.
- Between 2007 and 2012, average households traded down to cheaper products to save nearly 6% while the lowest income households traded down to a much lesser extent, possibly as they were already buying cheaper products.
- Food is the largest item of household expenditure for low income households after housing, fuel and power costs.

⁷ See Glossary for definition of equivalised income.

Prices & Expenditure

2.6: Factors influencing consumer product choice⁸



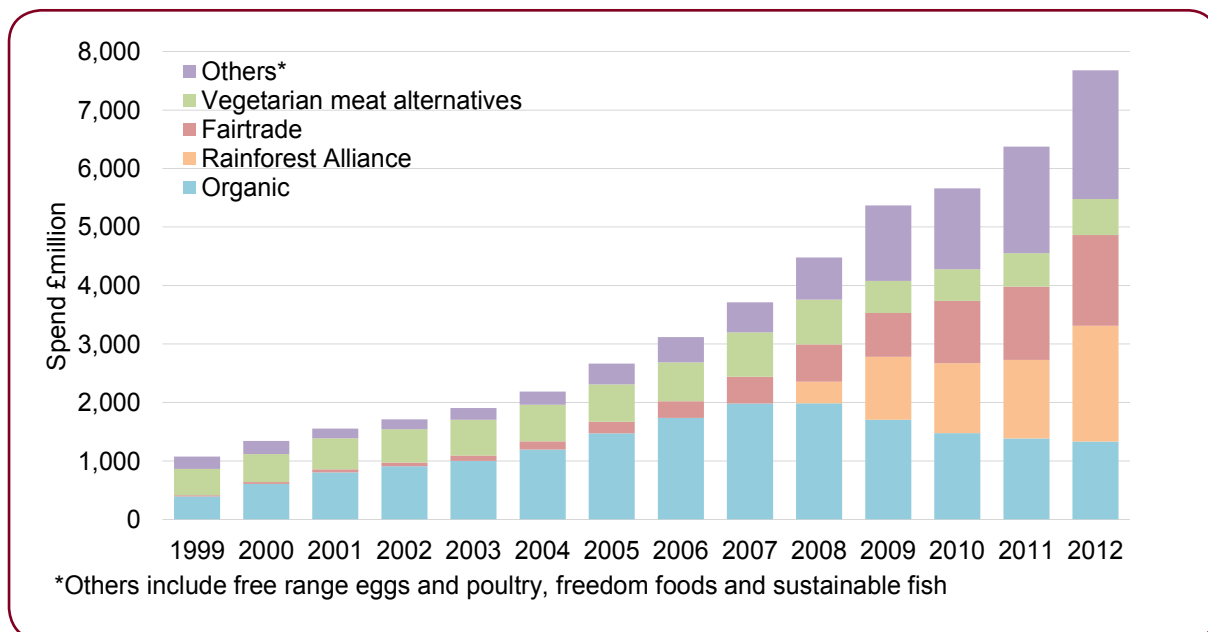
Source: IGD ShopperVista 2014.

- Price is increasingly important in driving product choice, with 41% of shoppers naming it as the most important factor and 88% listing it within their top five influences.
- Quality was rated as the highest influence by 16% of respondents, followed by taste or smell (12%) and healthy (9%).
- Promotions are highly influential with 65% listing it in the top 5 factors, although only 6% considered it most important. Only price featured more highly as a top 5 influence.
- Use by dates were considered most important by only 4% of shoppers and less than half (48%) of shoppers included it in their top 5 influences.
- Familiarity and brand names still have a sway in many purchase decisions, with 47% and 37% of shoppers naming them in their top 5 influences.
- Ethically produced products and whether a product was easy to use were considered least important factors with 20% of shoppers listing them in their top 5 influences.

⁸ IGD ShopperVista 2014, base: all main shoppers, fieldwork June 2014. Sample is managed to be representative of main grocery shoppers but may contain unquantifiable biases.

Prices & Expenditure

2.7: UK trend in sales of ethical produce



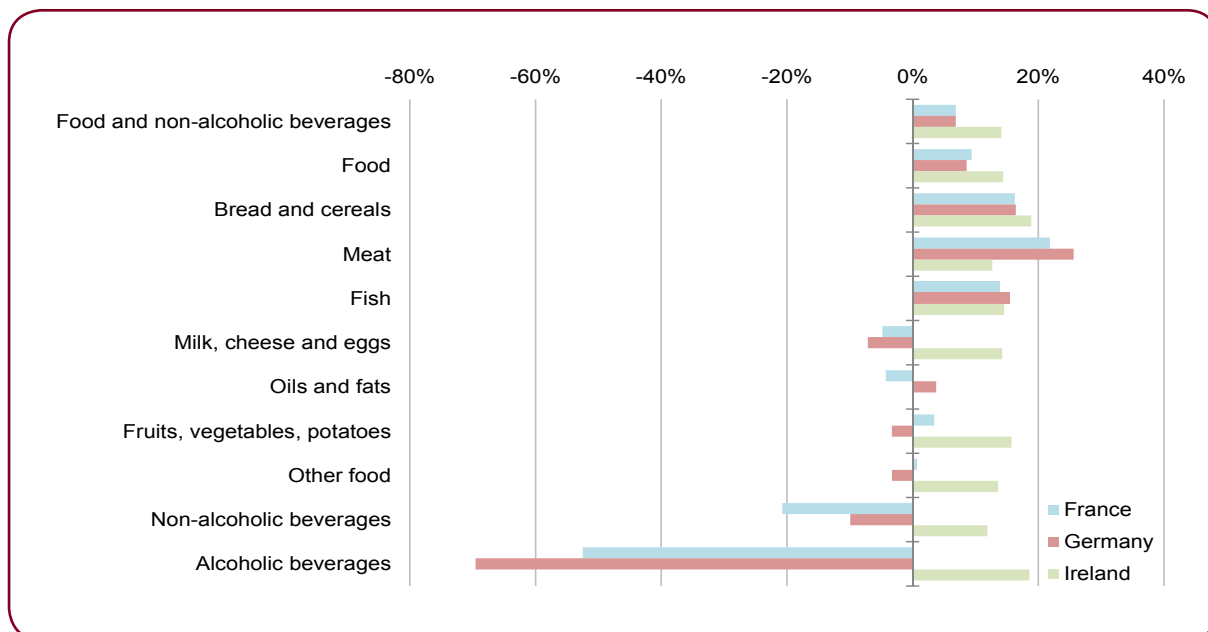
Source: Ethical Consumer Market Report 2013. Ethical Consumer Research Association.

- Sales in “ethical” food and drink, including organic, fair-trade, free range and freedom foods rose to £7.7 billion in 2012⁹, 8.5% of all household food sales.
- Sales of ethical produce have increased year on year since 2007, despite the economic downturn.
- Rainforest Alliance made up the largest share in 2012, accounting for 19% of the total ethical food sector at £2.0 billion; an increase of 47% on 2011. Fairtrade and organic products are the next largest contributors at 15% (£1.6 bn) and 13% (£1.3 bn).
- Yearly decreases in sales of organic food and drink have led to an overall decrease of 33% since their peak in 2008.
- Sales of sustainable fish rose by 20% in 2012 to £0.4 billion.
- Figures are determined by the Ethical Consumer Market Report by The Ethical Consumer Research Association based on administrative data held by ethical labelling organisations, trade associations and market research data.

⁹ Excludes food and drink boycotts.

Prices & Expenditure

2.8: Food prices in selected countries compared to the UK, 2013



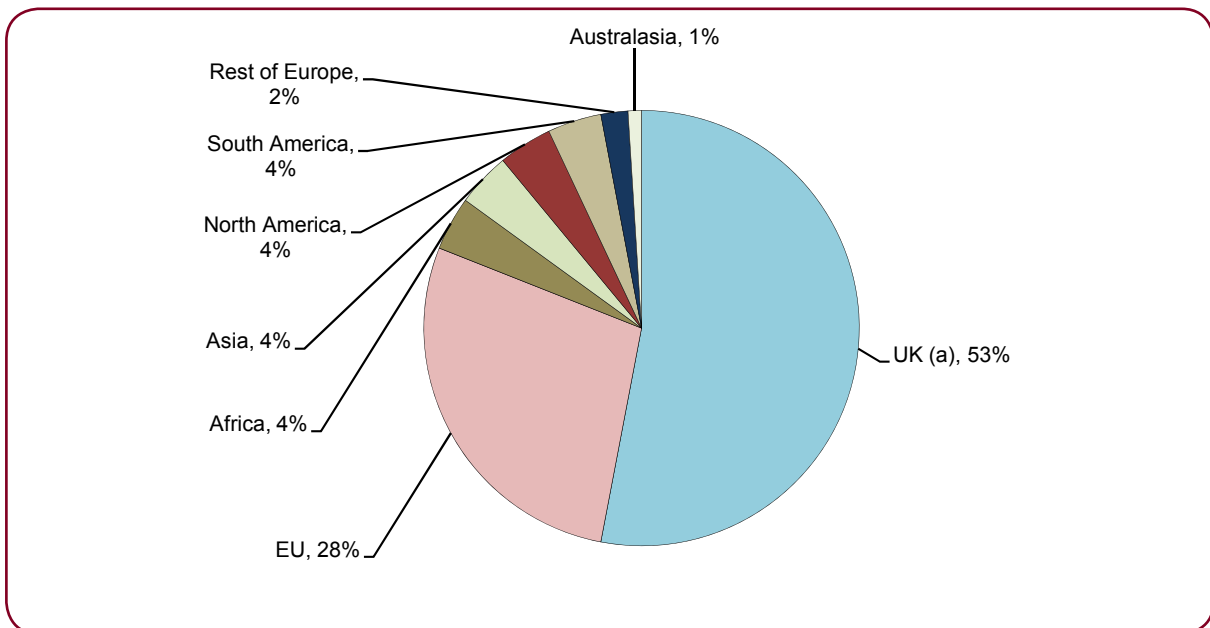
Source: Eurostat.

- Based on price level indices¹⁰, in 2013 food and non-alcoholic drinks were 7% more expensive in France and Germany, and 14% more in Ireland, than the UK.
- Overall UK prices were almost the same as the EU average, just 0.5% higher.
- Alcoholic beverages were at least twice as expensive in the UK than in France and Germany. In Ireland prices were 19% higher than in the UK. Only the Scandinavian countries in the EU were higher than the UK.
- Bread and cereals were the cheapest comparison overall, with prices around 16% higher in France and Germany than the UK. Meat was over 20% higher, although only 13% in Ireland.
- Food prices rose 37% in the UK between January 2007 and July 2014 while rising 19% in Germany and 13% in France. Averaged across the EU, food prices rose 21% over the same time period.

¹⁰ Price level indices are based on Purchasing Power Parities, which compare prices in different countries, after removing the effects of exchange rate differences.

Chapter 3: Global & UK Supply

3.1: Origins of food consumed in the UK, 2013¹



Source: Defra.

(a) Consumption of UK origin consists of UK domestic production minus UK exports

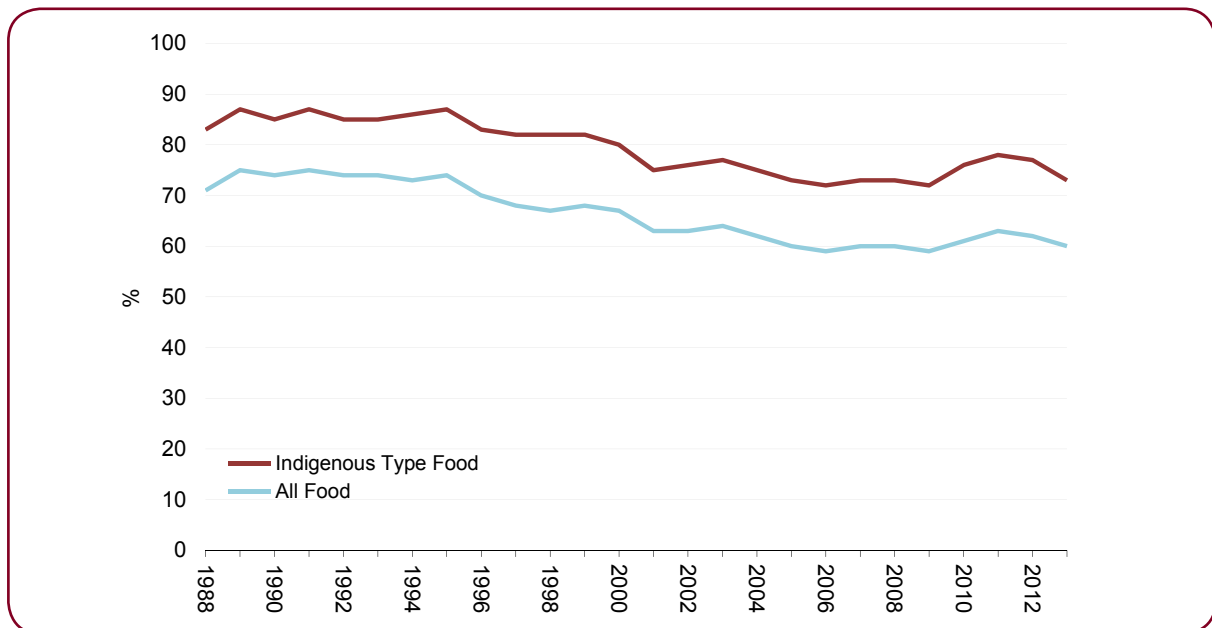
- Sourcing food from a diverse range of stable countries, in addition to domestically, enhances food security².
- Based on the farm-gate value of unprocessed food;
 - Twenty three countries accounted for 90% of UK food supply in 2013. The UK supplied over half (53%). The leading foreign suppliers were the Netherlands (5.8%), Spain (5.3%), France (3.5%), Germany (3.3%) and Irish Republic (3.0%).
 - Three countries accounted for 90% of dairy product and egg supply (UK supplied 85%). Three countries accounted for 90% of meat and meat preparation supply (UK supplied 84%). Twelve countries accounted for 90% of supply of cereals and cereal preparations (including rice). The UK supplied 49%.
 - Twenty four countries accounted for 90% of fruit and vegetable supply (UK supplied 22%).

¹ 2012 figures are final.

² UK Food Security Assessment, January 2010 (Defra).

Global & UK Supply

3.2: UK Food production to supply ratio, 1988-2013

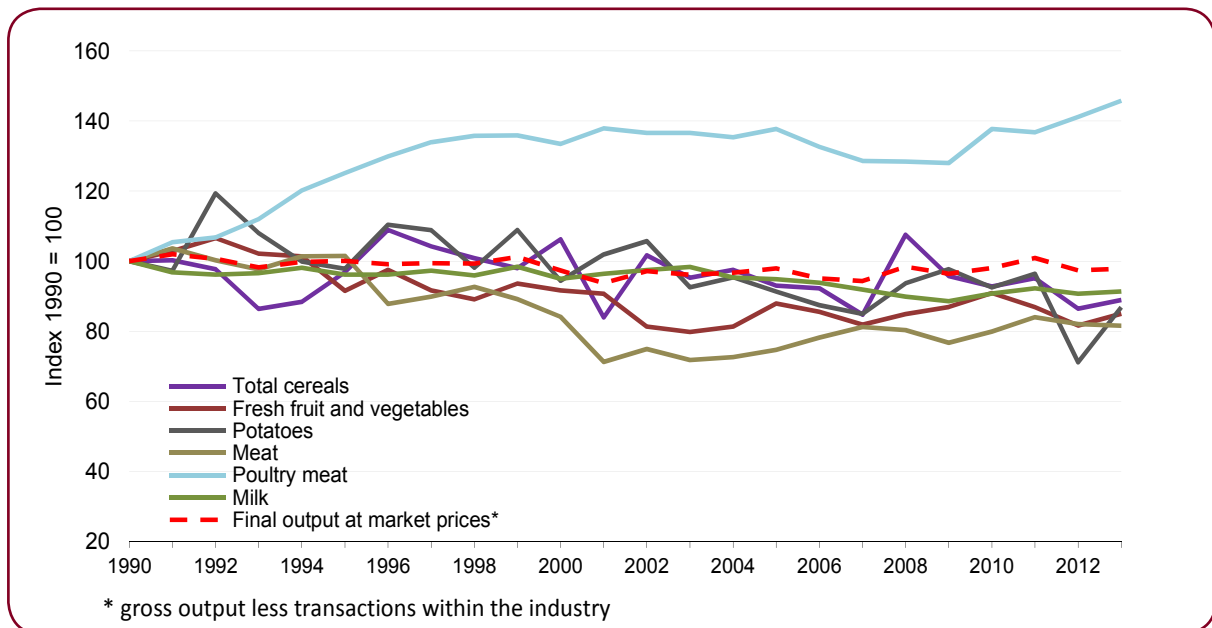


Source: *Agriculture in the United Kingdom*, Defra.

- Food Production to Supply Ratio is calculated as the farm-gate value of raw food production (including for export) divided by the value of raw food for human consumption. It provides a broad indicator of the ability of UK agriculture to meet consumer demand.
- A high production to supply ratio fails to insulate a country against many possible disruptions to its supply chain.
- The ratio in 2013 was 60% for all food and 73% for indigenous type food. This compares with 62% and 77% respectively in 2012.
- In 2013, the overall value of UK food production increased by 8.0%. Significant increases in imports of feed and seed and reduction in exports of these inputs led to the adjusted home production value being much greater in 2013. This was the main factor behind the slight decrease in the ratio over 2012.
- Production potential is more relevant at EU level than United Kingdom level, and the EU as a whole has a food production to supply ratio of around 90%.

Global & UK Supply

3.3: Trends in UK food production³



Source: *Agriculture in the United Kingdom*, Defra.

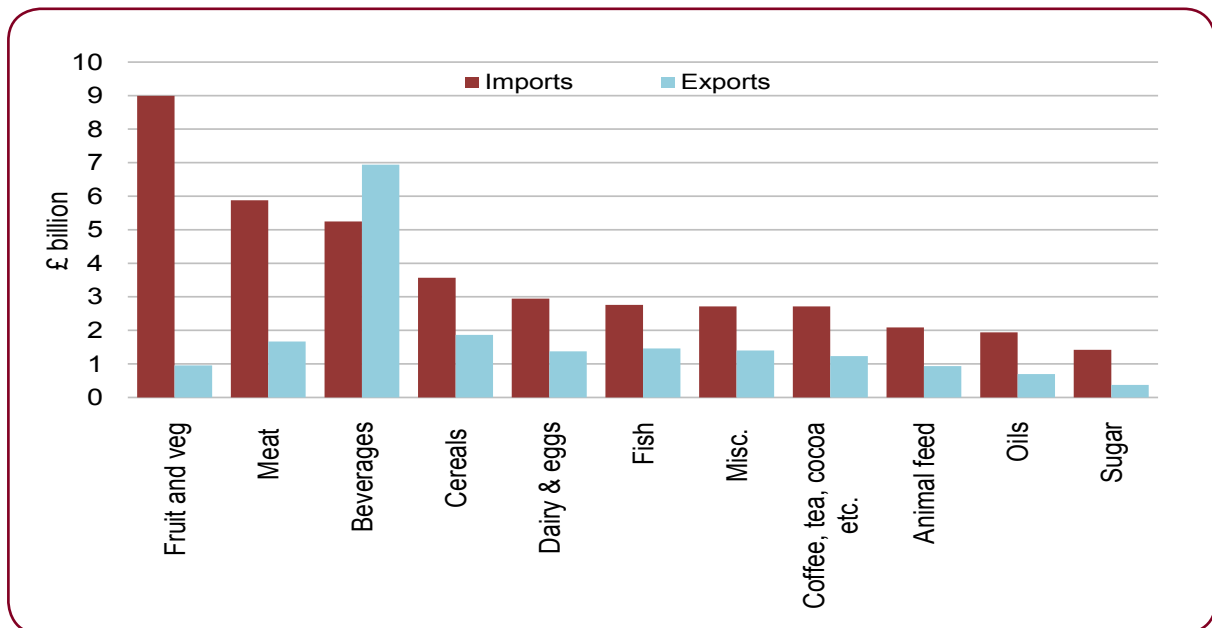
- Final output⁴ of UK agriculture is a proxy for UK food production. The volume of final output remained largely unchanged between 2012 and 2013, increasing just 0.5%. Longer term trends have also shown little variation.
- Total UK cereal production has fluctuated, with significant dips in 2001, 2007 and 2012 and 2013 linked to adverse weather conditions in those years.
- Since 1990 there have been large increases in production levels of poultry meat, part of a longer term upward trend since the late 1970's. Although production dipped during the 2000's, it reached a record level in 2013 with the broiler sector seeing further increases in production.
- Red meat production showed a downward trend through much of the 1990's, driven by a combination of factors including the beef export ban. Since 2002 there has been a slight upward movement but levels still remain lower than those in the early 1990's

³ 2013 figures are provisional.

⁴ Gross output less transactions within the industry.

Global & UK Supply

3.4: UK trade in different food groups, 2013⁵



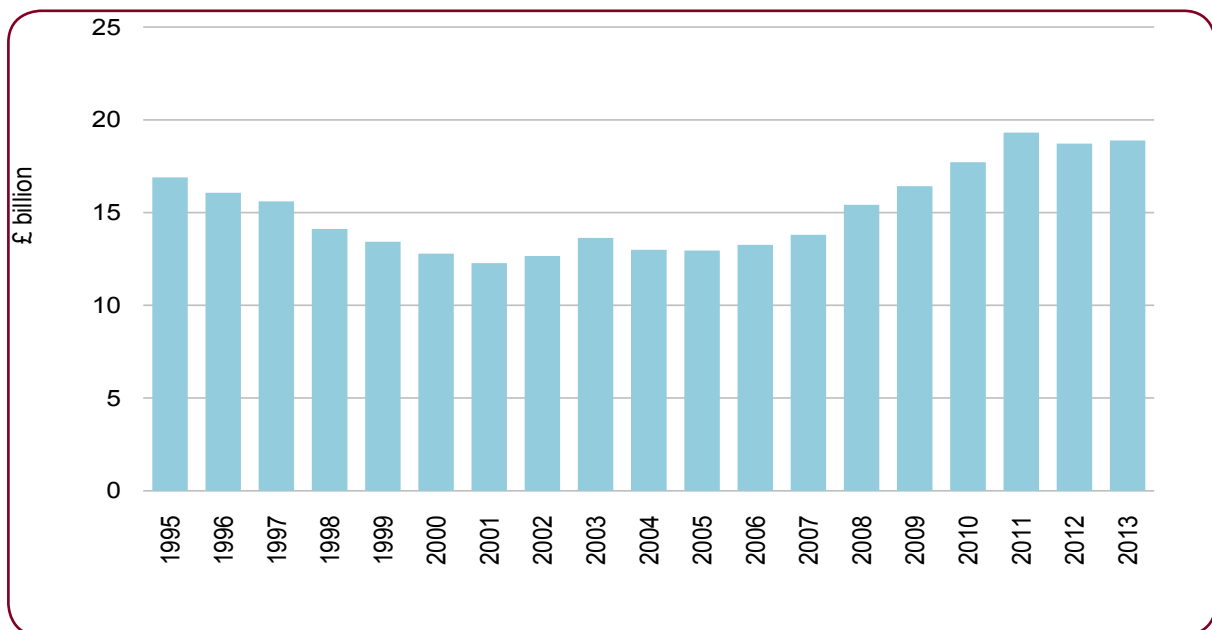
Source: HM Revenue and Customs.

- The value of imports is greater than the value of exports in each of the broad categories of food, feed and drink except 'Beverages' which had a trade surplus of £1.71 bn in 2013, largely due to exports of Scotch Whisky.
- Beverages are the largest export category by far with an export value of £6.9 bn in 2013. Exports (at 2013 prices) rose 25% between 2009 and 2011, due largely to increases in the existing markets. Decreases between 2011 and 2013 have reduced the export value by 3.8% (£277 million).
- Cereals is the second largest export group with a value of £1.9 bn, followed by the meat and fish categories at £1.7 and £1.5 bn respectively.
- 'Fruit and vegetables' has the largest trade deficit. In 2013 imports cost £9.0 bn while exports were worth £1.0 bn, giving a trade gap of £8.0 bn.
- The second largest groups in terms of imports in 2013 were meat and beverages with imports of £5.9 and £5.2 bn respectively.

⁵ 2013 figures are provisional.

Global & UK Supply

3.5: Trend in exports of food, feed and drink⁶



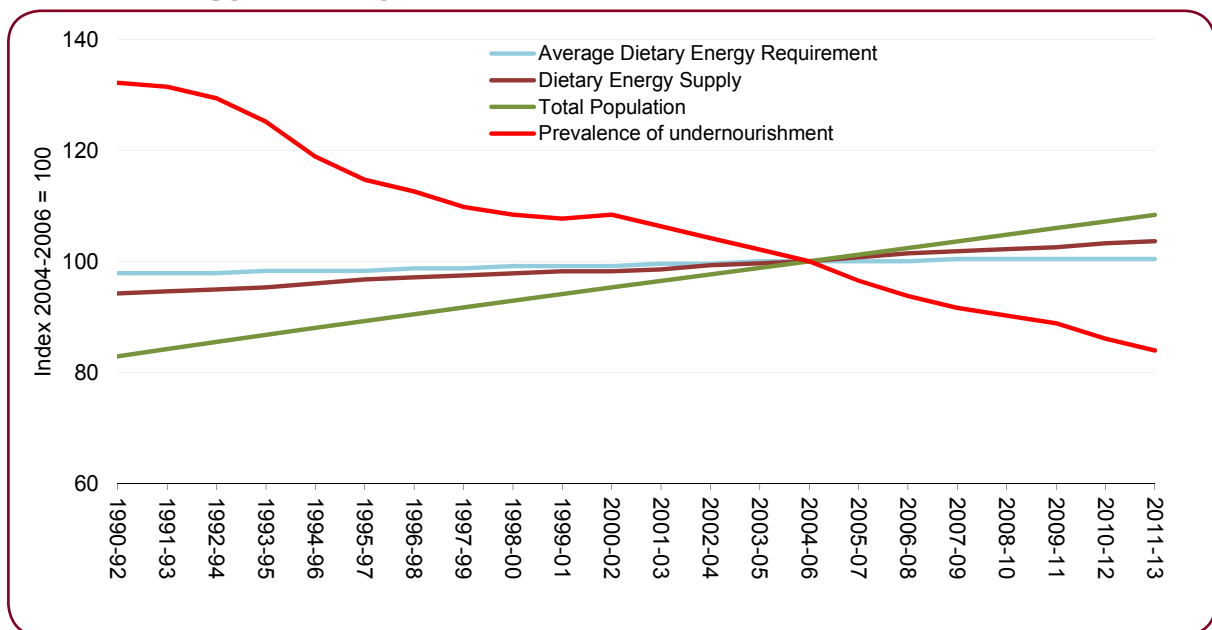
Source: HM Revenue and Customs

- The total value of food and drink exports rose slightly in 2013 to £18.9 billion, £6.0 billion more than in 2005 measured in 2013 prices although still lower than in 2011.
- Exports of most types of food and drink increased in 2013. Dairy products and eggs had the greatest value increase at £0.17 billion (14%). Exports of feedingstuff for animals increased £0.09 billion (11%) and exports of vegetables and fruit by £0.08 billion (9.3%).
- Oils had the greatest value reduction at £0.25 billion (27%), largely removing the increases seen in 2011 and 2012. Exports of cereals and of sugar/sugar preparations/honey also fell in 2013 by 6.8% and 4.5% respectively.
- The trade deficit in food, feed and drink widened slightly in 2013 to £21.3 billion. It is £3.7 billion higher than in 2005 measured in 2013 prices.

⁶ 2013 figures are provisional.

Global & UK Supply

3.6: World trends in population, energy requirement, energy supply and prevalence of under-nourishment⁷



Source: Food Security Indicators, (FAO).

- The average of individual dietary energy requirement (ADER), calculated as Kcal/capita/day, is a reference for adequate nutrition in the population. Its value can be used to calculate the depth of the food deficit (FD)⁸.
- The dietary energy supply, calculated as Kcal/capita/day, has increased 10% since 1990-92.
- World population is currently growing 1.2% per year and increased 31% between 1990-92 and 2010-12.
- Undernourishment reflects a shortage of food energy to sustain normal daily activities, affected by the amount of food available and by its distribution.
- The prevalence of under-nourishment in the world has fallen 37% since 1990-92. The rate of decrease has slowed since 2005, leaving 12% of the world's population (almost 900 million people) without adequate daily food intake⁹.

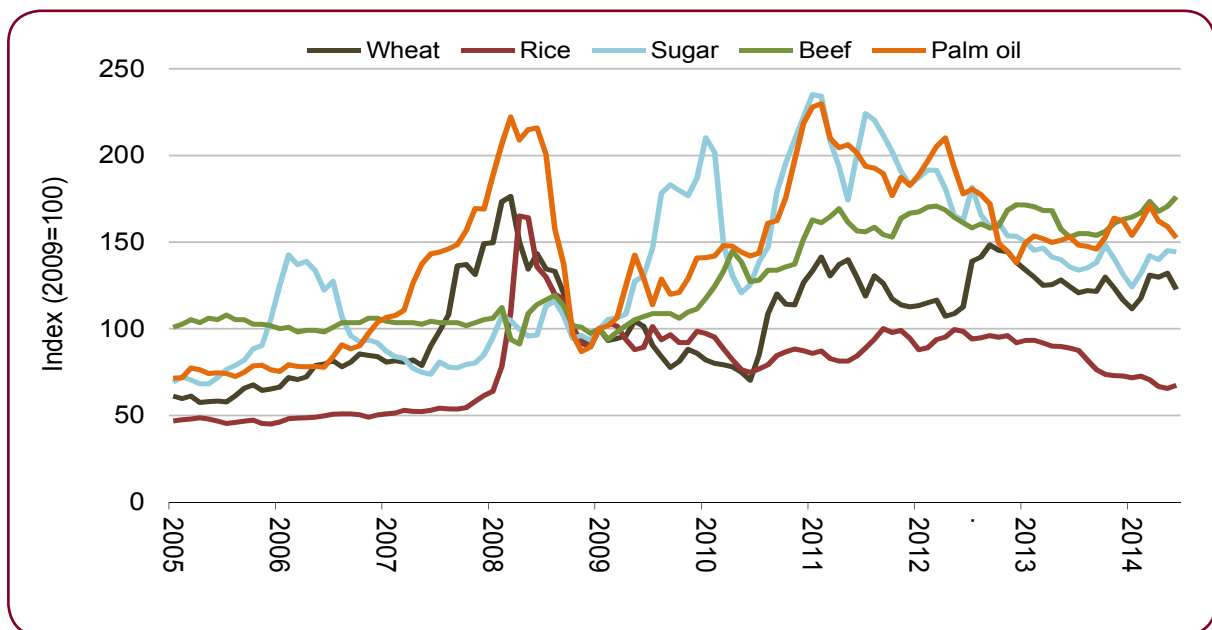
⁷Calculated on three-year averages to reduce the impact of errors in recording annual stock variations.

⁸The amount of dietary energy that would be needed to ensure that, if properly distributed, hunger would be eliminated.

⁹Global monitoring report 2013, World Bank.

Global & UK Supply

3.7: World agricultural commodity prices to June 2014

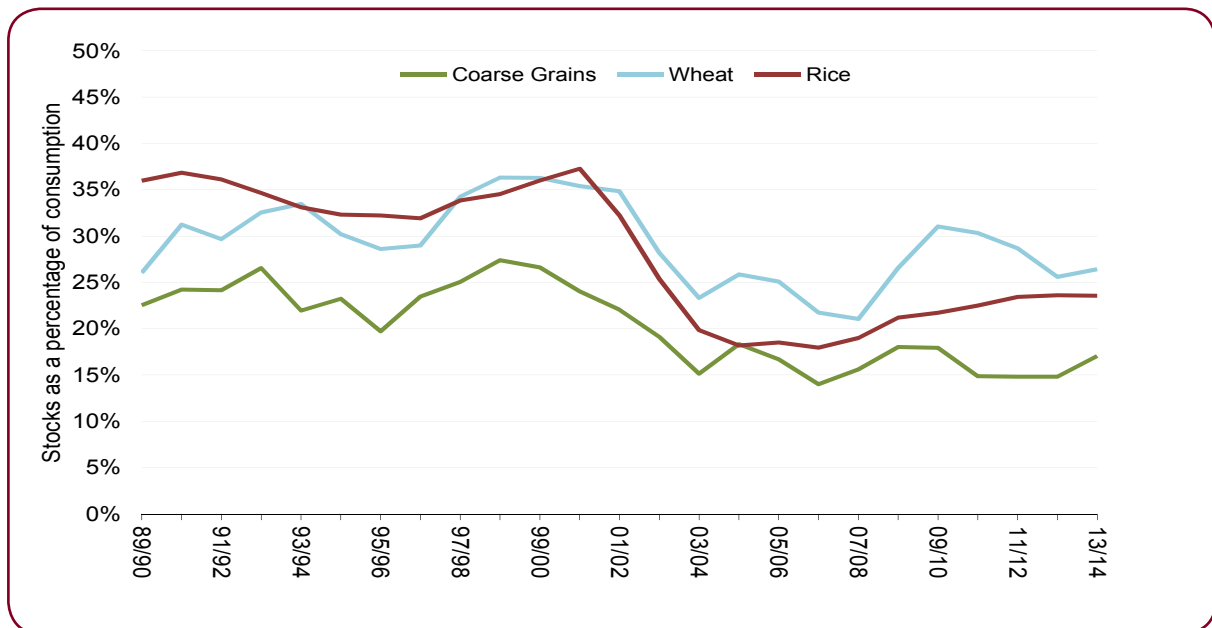


Source: United Nations Conference on Trade & Development (UNCTAD).

- Wheat prices rose 38% between April and September 2012, caused by a major drought in the US “corn belt” and poor wheat harvests elsewhere.
- Wheat prices peaked in March 2008, May 2011 and again in September 2012. The second and third spikes were not as high and reductions between September 2012 and June 2013 have brought prices down to 30% lower than in 2008.
- Sugar prices peaked in January 2011, 170% higher than in January 2007. A steady decline since then resulted in prices in June 2014 being 39% lower than the 2011 peak.
- Rice prices peaked in April 2008 having risen threefold over 8 months. A downward trend followed until June 2010 with prices falling 55%. Prices rose steadily between June 2010 and the first half of 2011 but have fallen back in the year to June 2014.
- Palm oil prices peaked in early 2011, 3.4% higher than the previous peak in early 2008. Since then, prices have been on a downward trend despite some fluctuations in early 2012. Prices in June 2014 are 34% lower than in early 2011.

Global & UK Supply

3.8: World grains stocks to consumption ratio to 2013-14



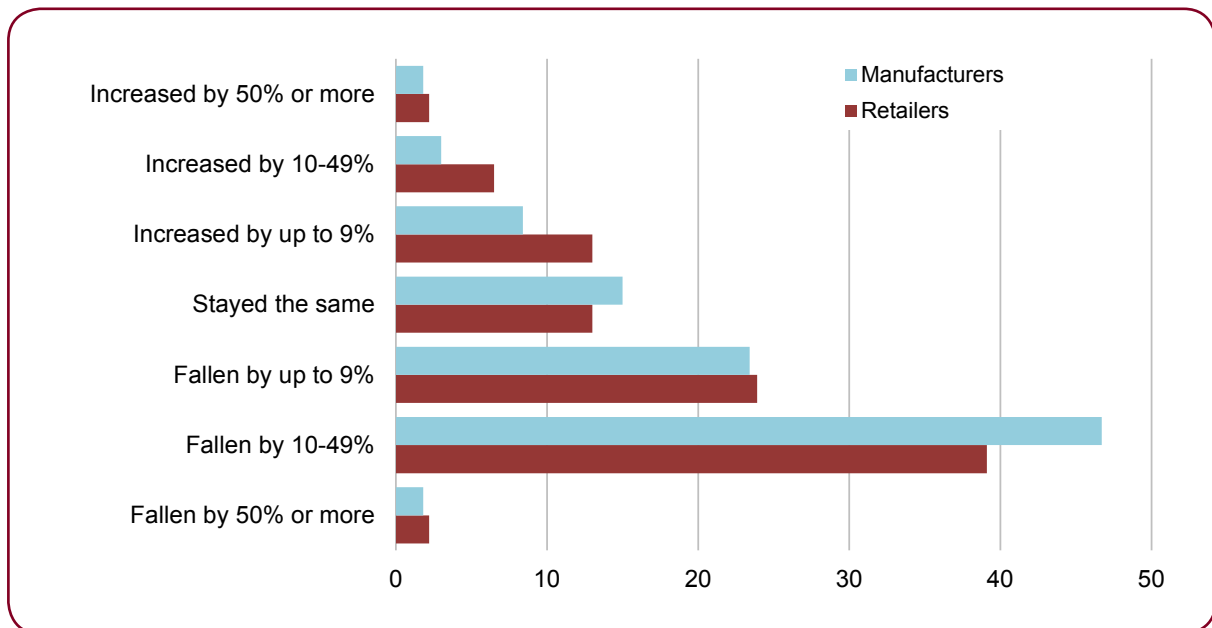
Source: International Grains Council (IGC), United States Department of Agriculture (USDA).

- Stocks to consumption ratios are an indicator of global resilience to food shortages and price stability. With low stocks, markets become sensitive to further supply shortfalls, which magnifies the price response.
- Wheat and rice stocks remain relatively high at the end of the 2012-13 crop year, although wheat stocks began to rise in 2013-14¹⁰. Rice stocks have been on an upward trend since 2004-05.
- Record cereal production levels projected for 2014/15 up 5M tonnes from the 2013/14 record and well above projected consumption allowing stocks to be built. Stock-to-use ratios have been increasing since 2012 particularly for maize (19%) to levels not seen in the last decade.
- Consumption (the denominator) is on a gradually rising trend, pushing the indicator onto a downward trend.

¹⁰ USDA projections.

Global & UK Supply

3.9: Retailer warehouse stock levels 5-year change



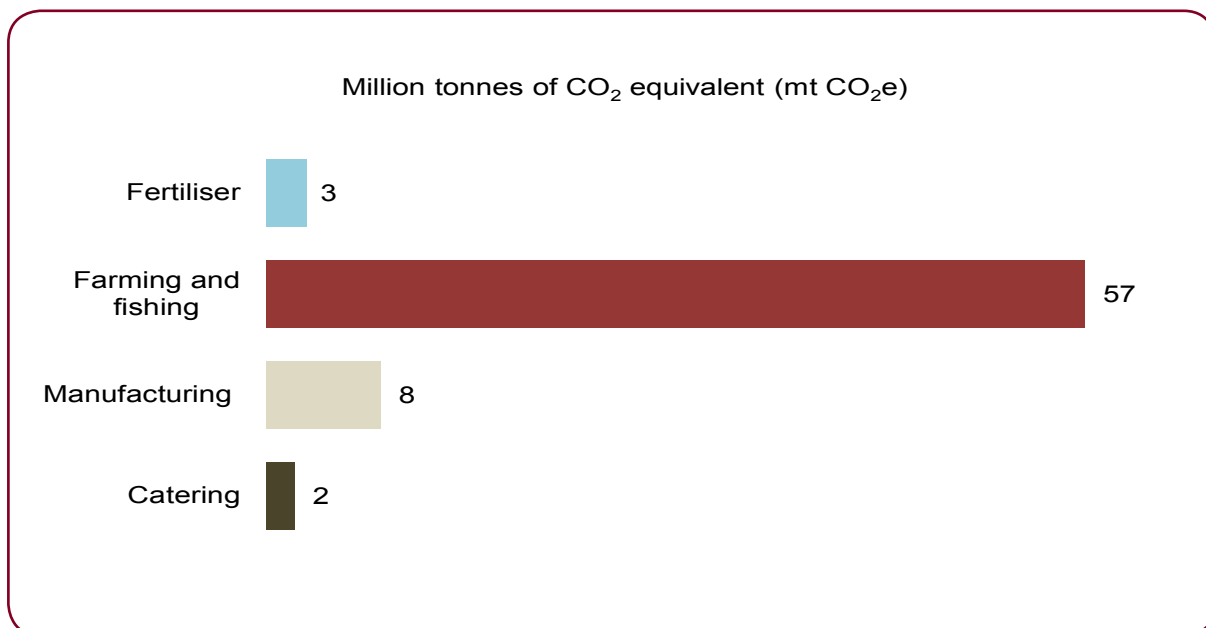
Source: IGD Research, 2012.

- In the last five years, the industry has largely reduced warehouse stock levels. 72% of manufacturers and 65% of retailers have made at least some reduction over this period.
- The majority of retail supply chains have between one and four weeks of stock, with suppliers tending to hold higher levels of stock than retailers. For fresh produce, stock levels can sometimes be only 24 hours or less.
- As retail supply chains become more responsive, lead times¹¹ are reducing and order frequencies are increasing.
- Retailers are increasingly moving products into their stockless networks, managing products from across their ranges in the same way as the fresh and produce categories.
- The impact of the current economic climate on consumer spending has helped drive this change as retailers look at ways of funding price cuts; supply chain operating costs and working capital tied up in inventory has provided such an opportunity.

¹¹ The time between an order being placed and delivery.

Chapter 4: Environment

4.1: Greenhouse gas (GHG) emissions from the UK agri-food sector, 2012¹



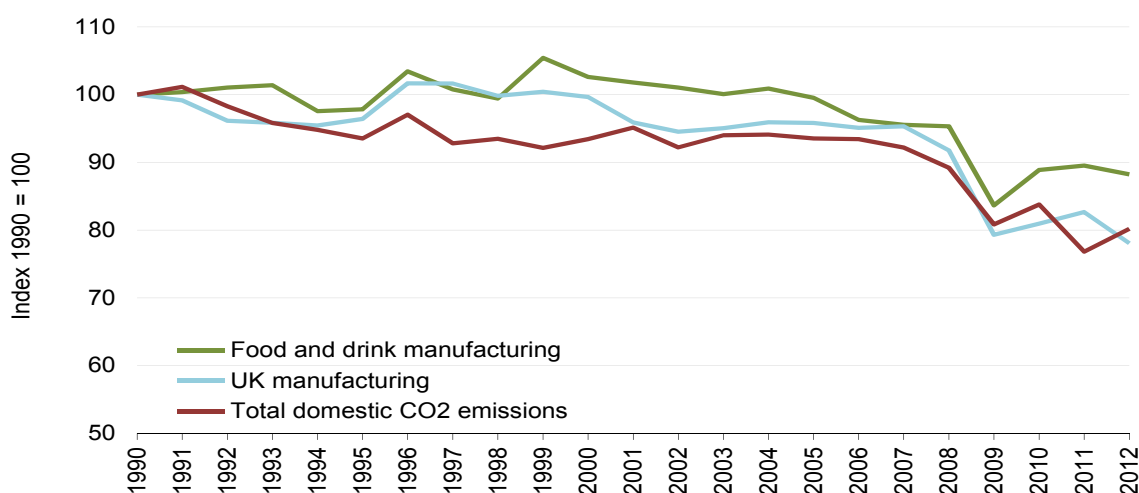
Source: Environmental accounts (ONS), UK Greenhouse Gas Statistics (DECC), British Survey of Fertiliser Practice (Defra), Consumption Emissions (Defra)

- Four sectors were responsible for emitting around 70 million tonnes of CO₂ equivalent GHGs (mt CO₂e) from UK domestic food sector activity in 2012 (excluding emissions from non-fertiliser pre-farm production, land use change, food packaging, retailing, households, food waste and net trade). The largest contributor of the four sectors was farming and fishing, estimated at 57 mt CO₂e.
- Emissions from farming and fishing remained relatively stable between 2011 and 2012. Excluding fishing, emissions from farming, which were estimated at around 56.6 mt CO₂e in 2012, have maintained a steady long-term decline. Enteric fermentation in ruminating animals and oxidisation of nitrogen in fertilisers is the source of most of the farming emissions.
- In the other sectors, food and drink manufacturing emissions declined by 3% in 2012, while catering emissions rose by 2%.

¹ GHG emissions from food packaging, food waste and land use change are not included. Manufacturing includes emissions from electricity use and excludes emissions from road freight transport. Household does not include emissions from heating water for washing up or dishwashers.

Environment

4.2: Trend in CO₂ emissions from UK food and drink manufacturing, 1990-2012²

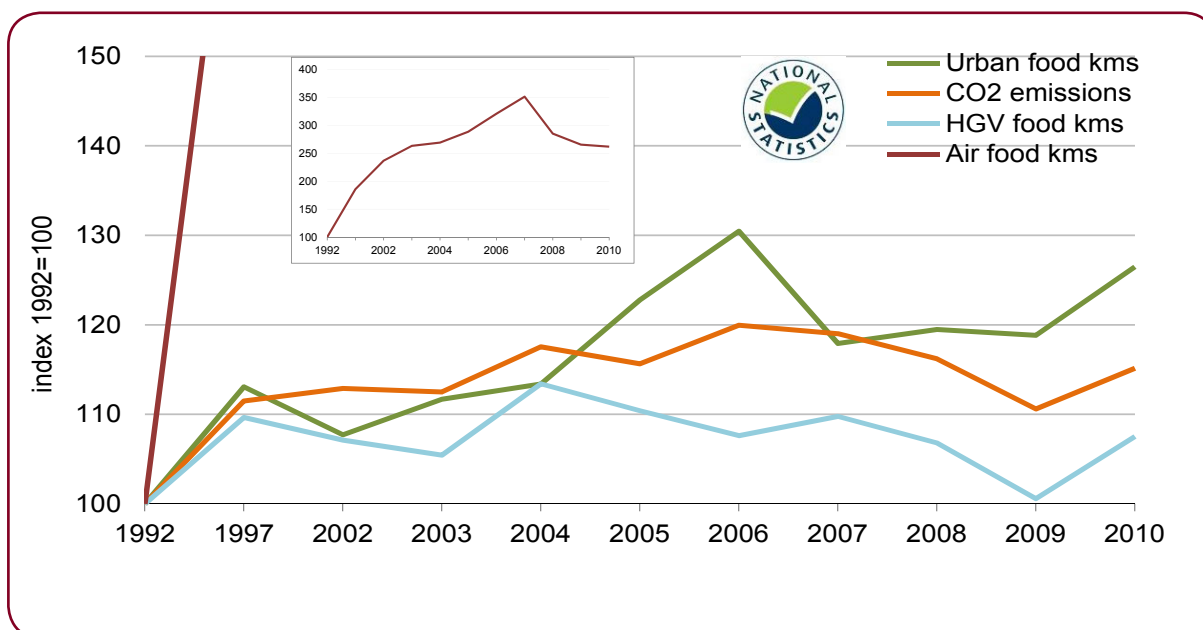


Source: *Environmental Accounts (ONS), Energy Consumption in the UK (DECC.)*

- CO₂ emissions from UK manufacturing, including food and drink manufacturing have been on a downward trend since 1999, despite increases in 2010 and 2011.
- Since 1990, the downward trend in CO₂ emissions from UK manufacturing sectors follows a similar pattern to the downward trend in total domestic emissions. In 2012, total domestic CO₂ emissions from food and drink manufacturing fell 2.2% on 2011.
- The volume of output from food and drink manufacturing fell between 2007 and 2009 during the economic downturn, leading to a reduction in the level of CO₂ emissions. An increase in the volume of outputs along with a prolonged period of exceptionally cold weather produced an increase in emissions during 2010 and into 2011. However, 2011 also saw a reduction in GHG emissions from combustion; in particular, from natural gas combustion.

² Manufacturing figures include the share of CO₂ emissions relating to electricity production using a constant emission factor. Total domestic CO₂ emissions include net emissions/removals from land use and land use change but with no allowance for EU Emission Trading Scheme purchases.

4.3: Indicators of the external impact of food transport³



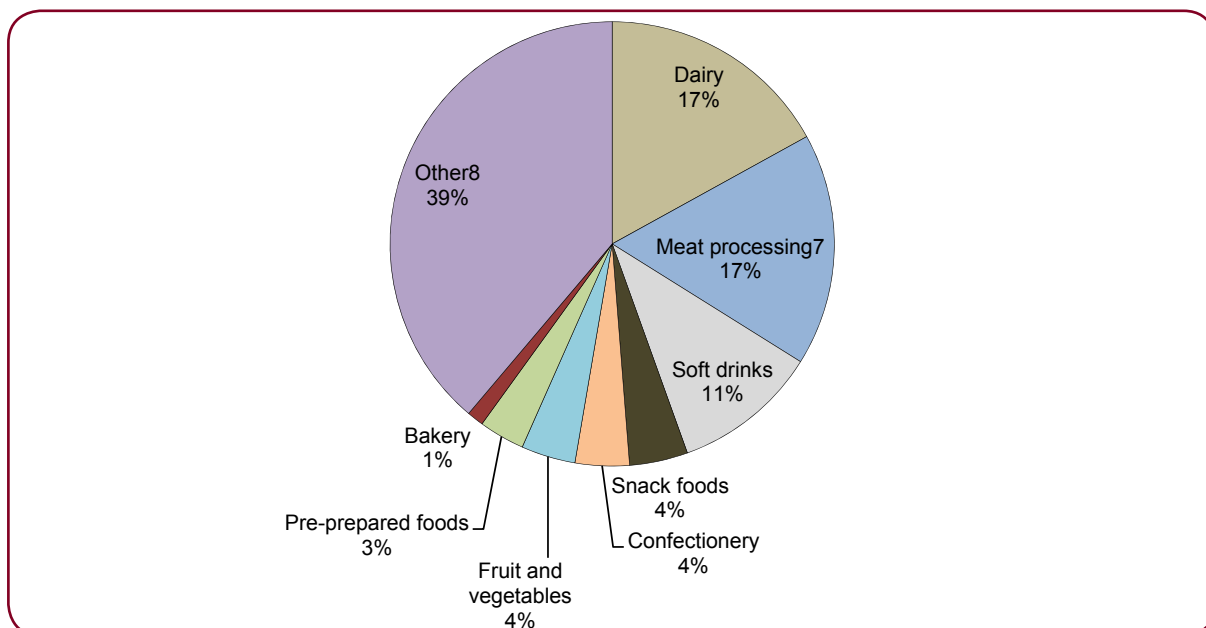
Source: Food Transport Indicators (Defra).

- UK urban food kilometres increased by 6.4% from 2009 to 2010 but there is little evidence of a clear trend in the data.
- CO₂ emissions from food transport increased 4.1% in 2010 but remain 4.0% lower than in 2006, suggesting an underlying downward trend remains.
- HGV food kilometres increased by 6.9% in 2010, broadly in line with other national economic outputs measures. A downward trend in HGV food kilometres since 2004 is apparent despite the increase in 2010.
- Urban food kilometres is a proxy for urban road congestion; HGV food kilometres is a proxy for infrastructure costs.
- Air food kilometres have fallen after a period of rapid growth up to 2007, with some evidence that this is stabilising at around 2003 levels. Although air freight of food accounts for only 1% of food tonne kilometres, it produces 12% of the food transport CO₂ emissions.

³ Air, urban and HGV are measured in vehicle kilometres, carbon dioxide emissions are measured in tonnes.

Environment

4.4: Food and drink sub-sectors represented within the Federation House Commitment (FHC)⁴



Source : Federation House Commitment (FHC)⁵, Progress report 2014 (WRAP).

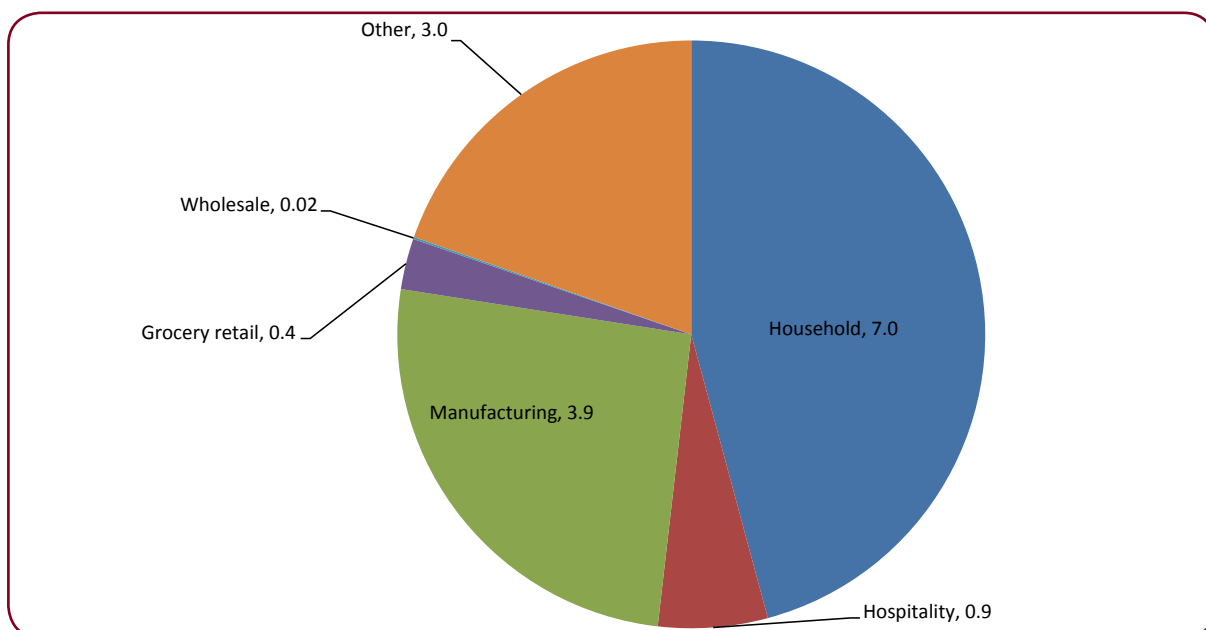
- Federation House Commitment is a voluntary agreement for the food and drink manufacturing sector. Its aim is to help reduce the stress on the nation's water supplies and contribute to an industry-wide target to reduce water use by 20% by 2020 against a 2007 baseline.
- As of June 2014, the FHC has 70 signatories across 284 sites. Together, these signatories represent an estimated 23-25% of UK food and drink manufacturing.
- Between 2007 and 2013 signatories collectively made a 16% reduction in their water use (excluding that in the product). This reduction is equivalent to 6.1 million m³ or 2,430 Olympic-size swimming pools, and is three-quarters of the way towards meeting the 20% reduction target by 2020.
- Between 2012 and 2013 signatories reported a 1.35 million m³ reduction in annual water use. This represents a saving of around £2 million in the purchase of water alone.

⁴ Meat processing includes red meat and poultry. 'Other' includes fish processing, alcoholic beverages, pet food and animal feed, milling, desserts, sauces and condiments

⁵The FHC is managed by WRAP in partnership with the Food and Drink Federation and Dairy UK and supported by the Environment Agency: More information at www.fhc2020.co.uk

Chapter 5: Waste

5.1: UK food and drink waste through the food chain (million tonnes) 2011-12



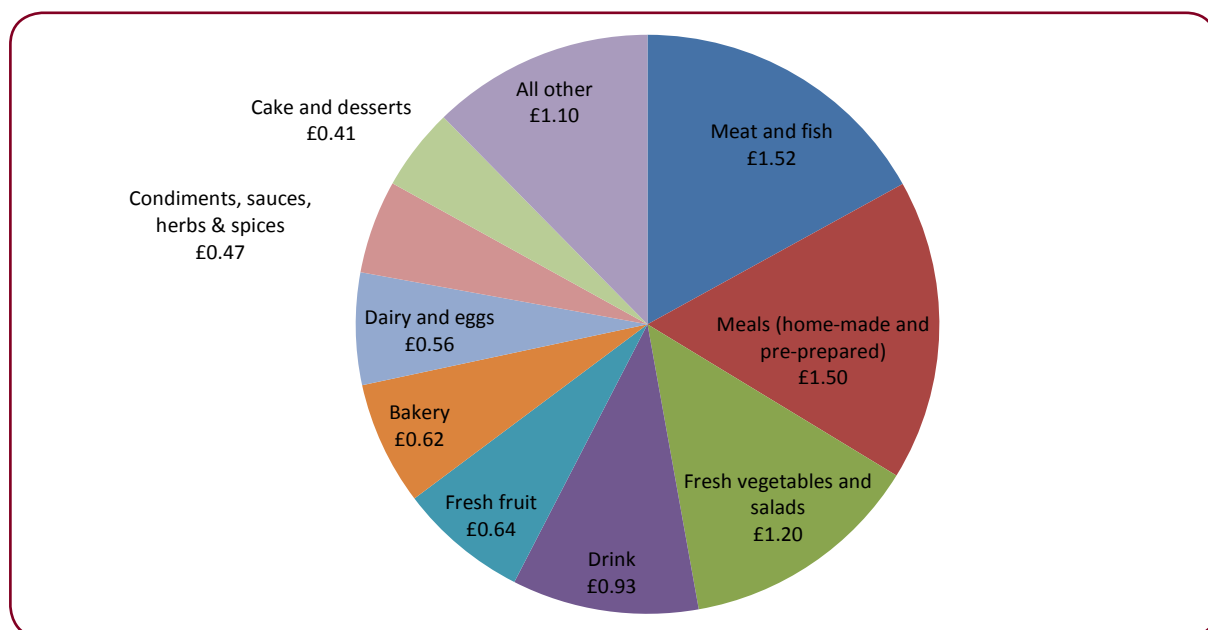
Source: Handy Facts and Figures on Waste in the UK, WRAP 2013 and Household Food and Drink Waste in the UK, WRAP 2012

- 15¹ million tonnes of food and drink was wasted in the food chain in 2011-12 in the UK. Around 41 mt of food are purchased in the UK annually (mainly for use in the home), meaning that the quantity wasted in the supply chain is equivalent to about one third of the food purchased.
- The highest proportion of food and drink waste in the food chain was wasted in households, with 7 million tonnes being thrown away in the UK in 2012, or just under half of the 15 mt.
- Of the 7 mt of household food and drink waste, 4.2 mt was avoidable, 1.2 mt was possibly avoidable and 1.6 mt was unavoidable.
- Manufacturing contributed the second largest proportion of waste, at 26% (3.9 mt), followed by hospitality with 6% (0.92 mt). Grocery retail and wholesale together only wasted 2.9% (0.4 mt).

¹ This includes estimates for other food thrown away by consumers out of the home and the pre-factory gate stages of the food supply chain. Existing estimates of agricultural food waste are indicative, and based on a 2004 Environment Agency synthesis of evidence available at that time <http://cdn.environment-agency.gov.uk/geho1204bikm-e-e.pdf>.

Waste

5.2: UK cost of avoidable food and drink waste per household per week, by food group, 2012



Source: WRAP Household Food and Drink Waste in the United Kingdom 2012

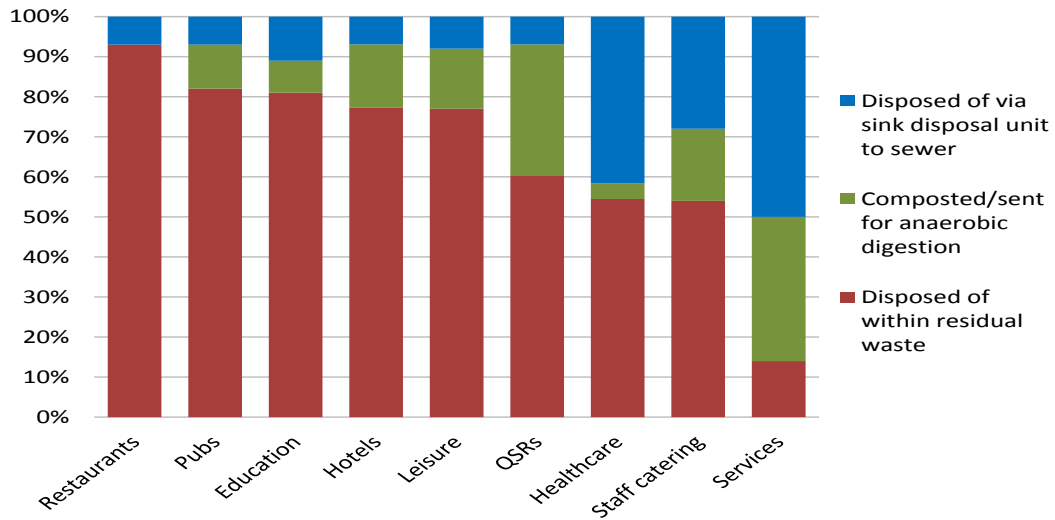
- The retail price of avoidable food and drink² waste from UK homes was around £9 per household per week in 2012, or 14% of the £66 spent on average each week on household food³. The cost to the UK of avoidable food and drink waste in 2012 was £12.5 billion.
- Meat and fish contributed the highest cost to avoidable food and drink waste at £1.52 (16.9%) per week, followed by homemade and pre-prepared meals at £1.50 (16.8%). Cakes and desserts contributed the least (not including other) at £0.41(4.6%), followed by condiments at £0.47 (5.2%).
- Due to their high cost per kilogramme, meat and fish only contributed 7% in weight to the total avoidable food waste (17% in cost) whilst fresh vegetables and salad make up 19% in weight (13% in cost).

² Food and drink only includes those products brought back to the house, not food eaten out.

³ Household food expenditure was sourced from Defra's Family Food 2011.

Waste

5.3: Management of Food Waste by Subsector for the UK Hospitality and Food Sector (HaFS) 2013⁴



Source: Overview of Waste in the UK Hospitality and Food Service Sector 2013

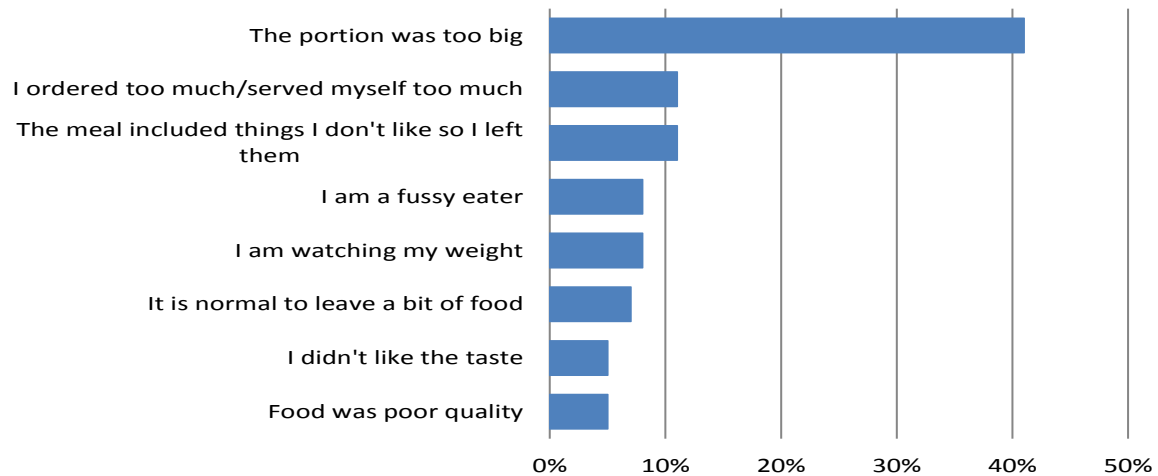
- Services and quick service restaurants (QSRs) composted the most food waste at 36% and 33% respectively, while restaurants didn't compost any. Education and healthcare composted the next least at 8% and 4% respectively.
- Restaurants disposed of the largest proportion of food waste (93%) into the residual waste stream while services disposed of by far the least at 14%.
- Services disposed of the majority of food waste via SDU (50%) followed by healthcare (42%).
- In 2013, 28% of food (by weight) purchased in services was wasted while only 3% was wasted from staff catering.
- The cost in 2011 of food wasted in the HaFS was over £2.5 billion.

⁴ HaFS waste estimates have been compiled from waste reviews and surveys carried out in 2011 and 2013, and datasets collected between 2009 and 2012. Outlets from all HaFS subsectors were represented in the dataset, which included samples from 480 premises across England, Scotland and Wales.

All estimates presented in this summary report are subject to uncertainties. These relate to sampling error (i.e. the problem of trying to represent a large and varied sector based on a limited number of samples), uncertainties in extrapolating annual waste arisings from outlets based on 'snapshot' samples (typically a week's worth of waste), the extent to which samples successfully captured all HaFS waste arisings, and variation in methodology between different studies.

Waste

5.4: Understanding out of home consumer food waste (reasons why food was left)

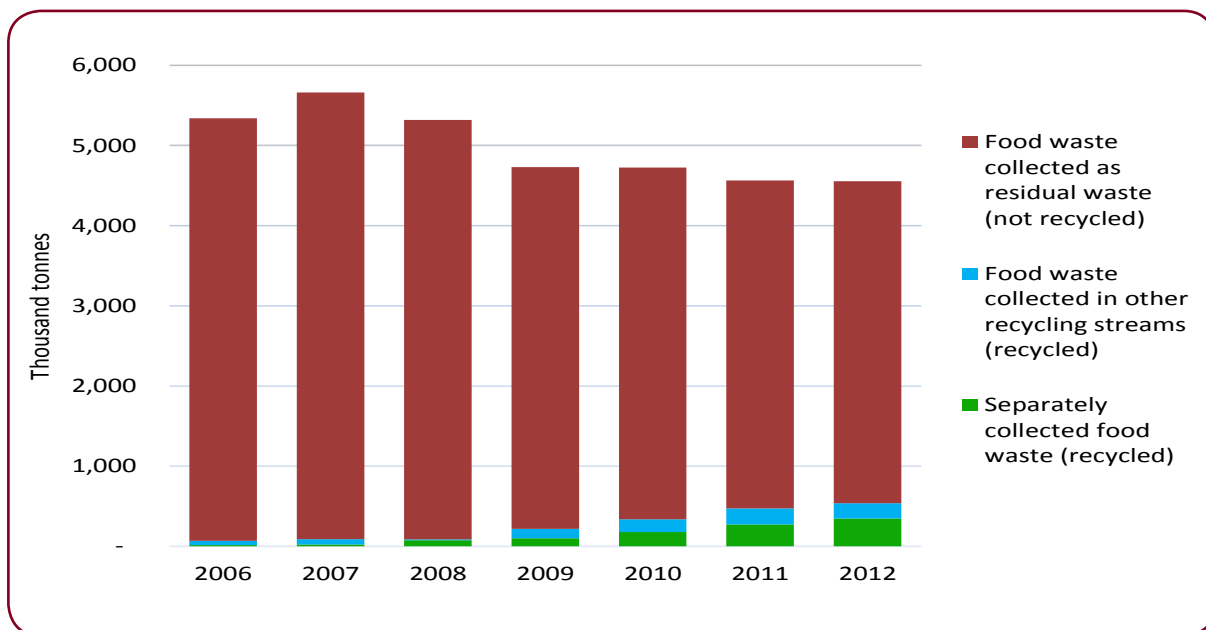


Source: *Understanding out of home consumer food waste*, WRAP 2013.

- Over half of meal leavers eating out linked leaving food to various aspects of portion sizes. Two fifths (41%) of meal leavers stated that one of the reasons why they had left food was because the portion size was too big and 11% stated that they ordered/served themselves too much.
- Those that left food at the end of their meal mainly stated leaving chips (32%) and vegetables (18%). This is true across all types of venue though chips are even more likely to be left in quick service restaurants (45%) and pubs (38%).
- A bigger proportion of meal leavers tend to leave food when eating out in either pubs, hotels or restaurants than other venues. The tendency to leave food at these venues could be that these diners attach more value to enjoying a meal out in a social setting than diners who are simply out to 're-fuel'.
- The research showed that customers take into account the cost and value of what they have actually ordered to decide whether to leave food and what part of the meal to leave. Parts of the meal which tend to be left are the main dish and the accompanying sides; while appetisers, starters and desserts were less likely to be left.

Waste

5.5: Collection of food waste by local authorities in the UK 2006-2012⁵



Source: *Synthesis of Food Waste Compositional Data, WRAP 2012*

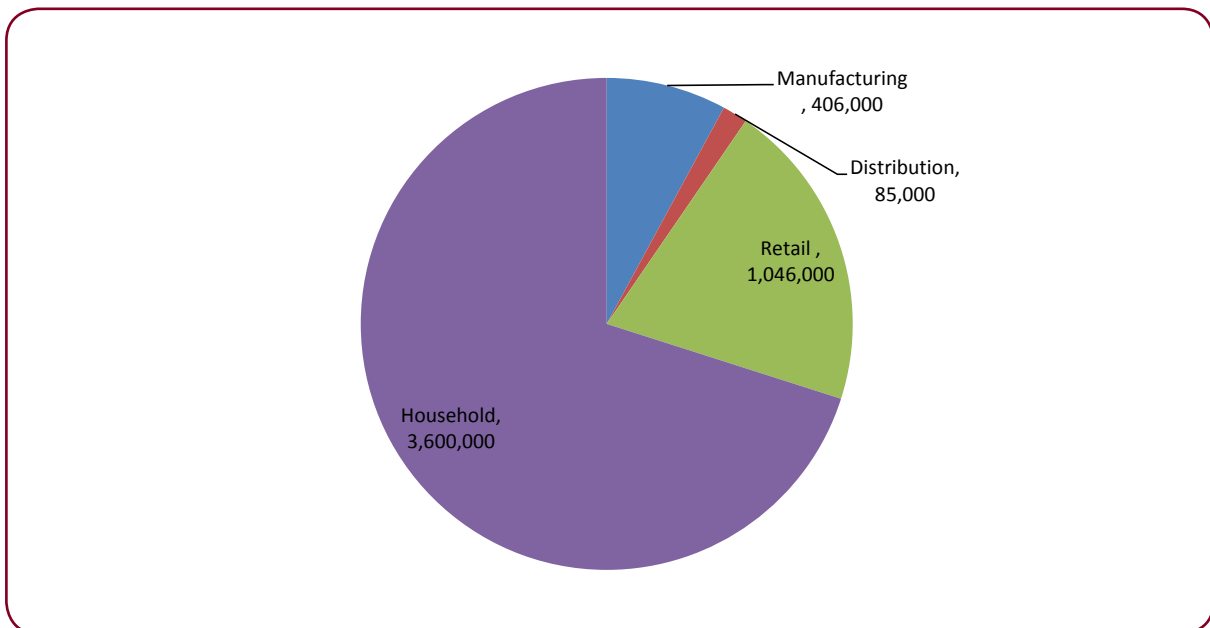
- In 2012 12% (537,000 tonnes) of food waste⁶ collected by local authorities was recycled, compared with 1% (68,000 tonnes) in 2006. In 2012, 8% was collected separately while 4% was mixed with green garden waste.
- Since 2007 there has been a steady decrease in the total amount of food waste generated, and since 2008, an increase in the amount of food waste collected for recycling.
- In 2012 local authorities were collecting over 5 times as much food waste for recycling as they were in 2007, an increase from 88,000 to 537,000 tonnes.
- Separately collected food waste has increased from under 15,000 tonnes in 2006 to nearly 350,000 tonnes in 2012, over 20 times the tonnage in 2006.

⁵ This data is estimated by WRAP. National data on separately collected food waste was only collected from 2010. Before then estimates are used for separately collected. For more details see [Synthesis of Food Waste Compositional Data, WRAP 2012](#).

⁶ This data refers only to food waste collected by local authorities, which includes food waste from households.

Waste

5.6: UK food and drink packaging waste in the supply to households



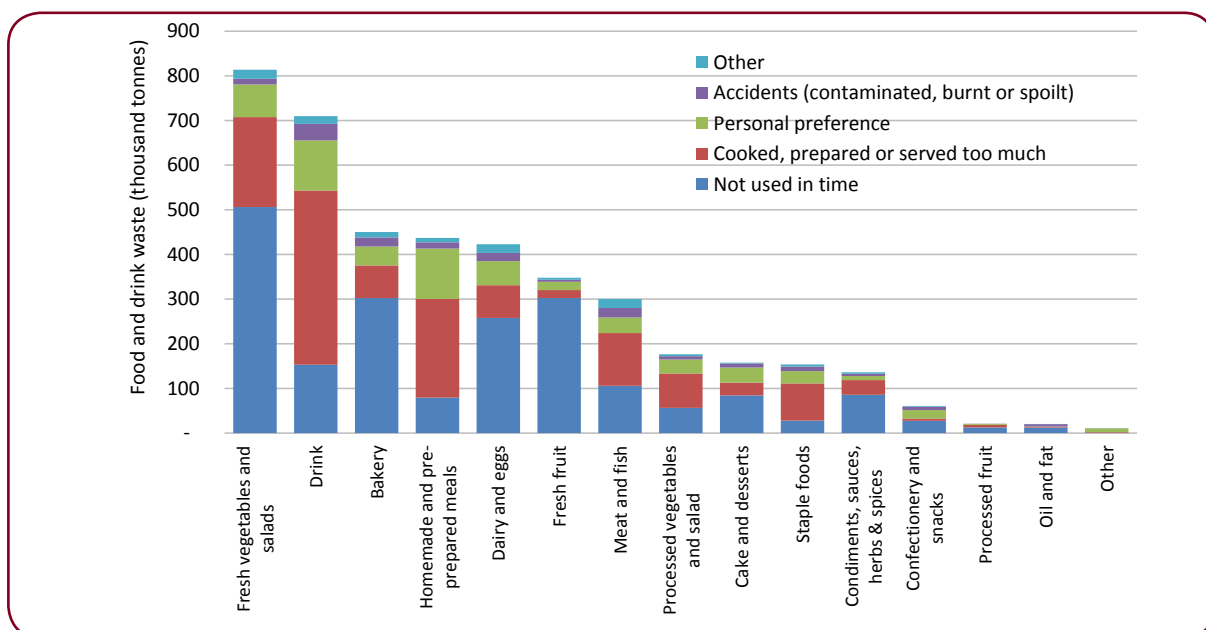
Source: Waste arisings in the supply of food and drink to households in the UK, WRAP 2010.

- Packaging protects products in transit and helps maintain shelf life for perishable foods.
- An estimated 3.6 million tonnes of grocery⁷ packaging enters households which is over two thirds of the total grocery packaging waste.
- Food and drink packaging emissions amount to 8.7 million tonnes of CO₂ equivalent (mtCO₂e), 6.1 mtCO₂e for household purchases.
- The Courtauld Commitment is a responsibility deal between the UK grocery sector and WRAP, delivered in partnership with local authorities. Between 2010 and 2012 Phase 2 led to 1.7 million tonnes of food, drink and packaging waste being prevented, saving £3.1 billion. This represents a reduction of 4.8 million tonnes of CO₂e. Phase 3, to run from 2013 and 2015, aims to lead to a reduction of 1.1 million tonnes of waste, a saving of £1.6 billion and a CO₂(e) reduction of 2.9 million tonnes.

⁷ Including packaging from non-food and drink products sold in grocery shops.

Waste

5.7: UK avoidable household food and drink waste by food group and reason for disposal 2012



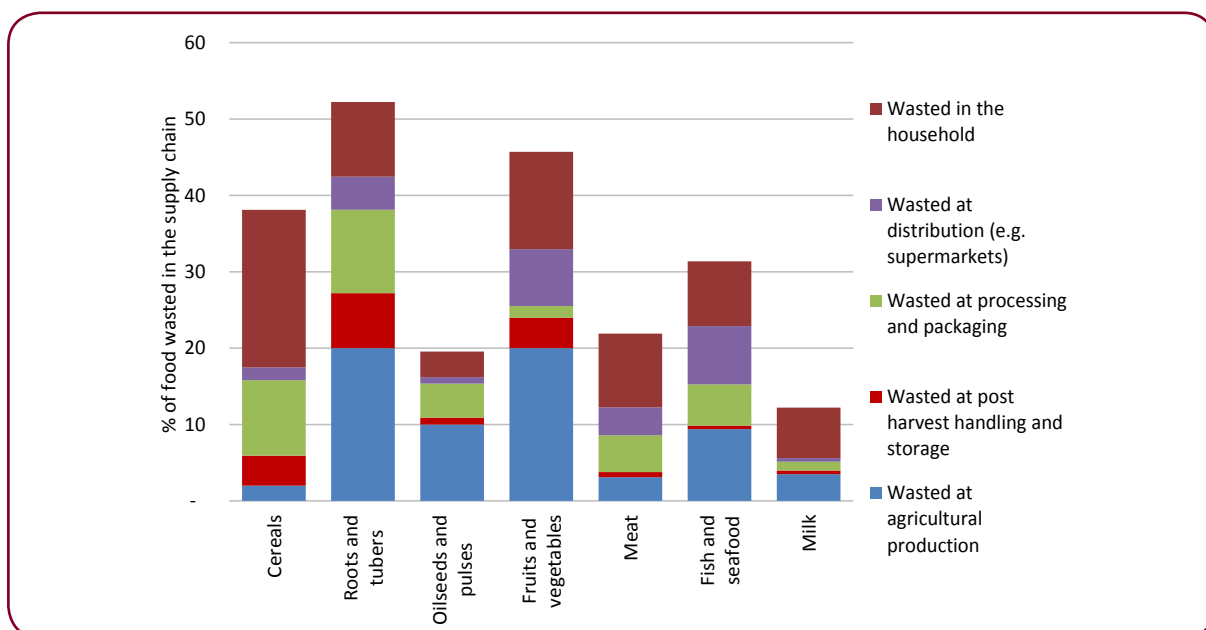
Source: Household Food and Drink Waste in the United Kingdom 2012

- 4.2 million tonnes of avoidable food waste⁸ was disposed of in 2012 by UK households, equivalent to 12% by weight of that brought into the home. 48% was not used in time, 32% was due to too much being cooked or served and 14% down to personal preference.
- Of the 4.2 mt of avoidable food waste, 19% was fresh vegetables and salad, followed by drink making up 17%.
- 2 mt of food wasn't used in time, 25% of which was fresh vegetables and salad, and fresh fruit and bakery each made up 15%.
- 1.3 mt of food was wasted because too much food was cooked or served. Nearly a third of that was drink, followed by homemade and pre-prepared meals (17%) and fresh vegetables and salad (15%).
- Over 0.3 mt of fresh fruit was wasted, 87% of which was not used in time. Over half of drinks, homemade and pre-prepared meals and staple food was wasted due to too much being cooked or served.

⁸ Food waste refers to food and drink waste brought into the home, not eaten out.

Waste

5.8: Food wasted at each stage of the supply chain⁹ in Europe and Russia, 2010



Source: *Global Food Losses and Food Waste, 2011*

- Roots and tubers and fruit and vegetables had the most wasted throughout the supply chain with 52% and 46% respectively. Both also had by far the highest waste at agricultural production at 20%. Only 12% of milk products was wasted in total.
- Cereals contributed the most to food wasted in the household, with 21% not being consumed, while fruit and vegetables contributed 13%. Oilseeds and pulses only contributed 3%.
- The three stages between agricultural production and the household were generally the least wasteful stages, with no food group wasting more than 11% at each stage

⁹ It is assumed that product that hasn't been wasted has been consumed.

Chapter 6: Dietary Health

6.1: The eatwell plate

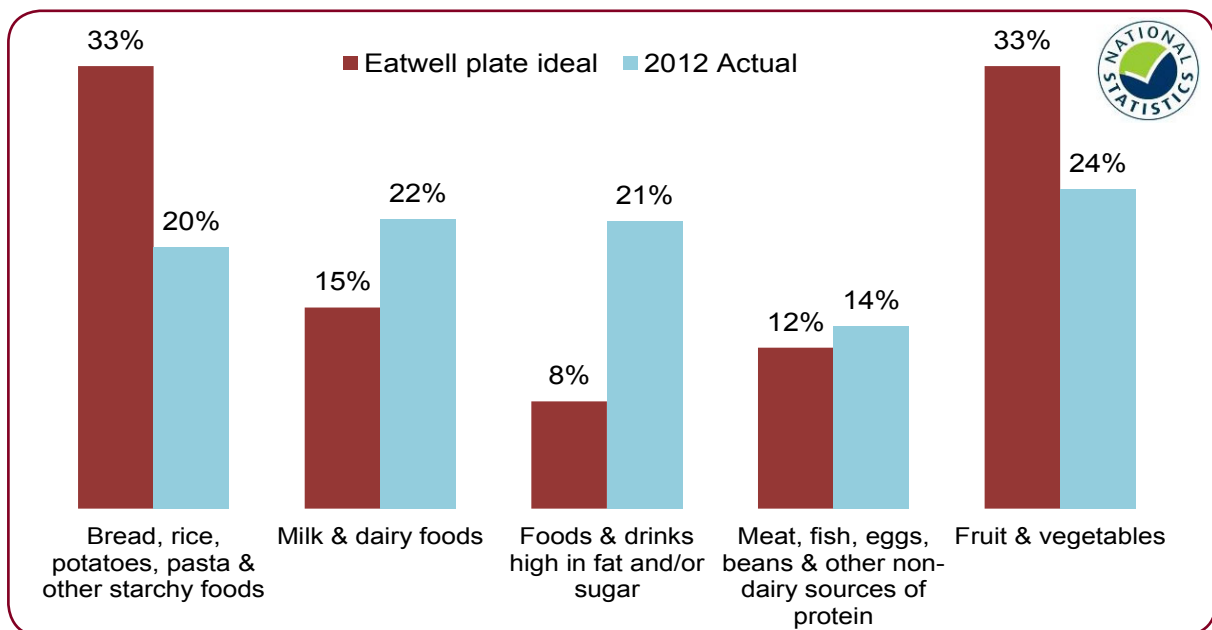


Source: Department of Health.

- The eatwell plate shows the types and proportions of foods that should be eaten to make a well-balanced, healthy diet. The eatwell plate balance does not need to be achieved at every meal; it is a guide to getting the balance right over time such as each day, or over the course of a week. The eatwell plate includes snacks as well as meals.
- We should try to eat:
 - Plenty of 'bread, rice, potatoes, pasta and other starchy foods' (33%). Choose wholegrain varieties when you can.
 - Some 'milk and dairy foods' (15%).
 - Just a small amount of 'foods and drinks high in fat and/or sugar' (8%).
 - Some 'meat, fish, eggs, beans and other non-dairy sources of protein' (12%).
 - Plenty of 'fruit and vegetables' (33%).

Dietary Health

6.2: Household purchases compared to the eatwell ideal



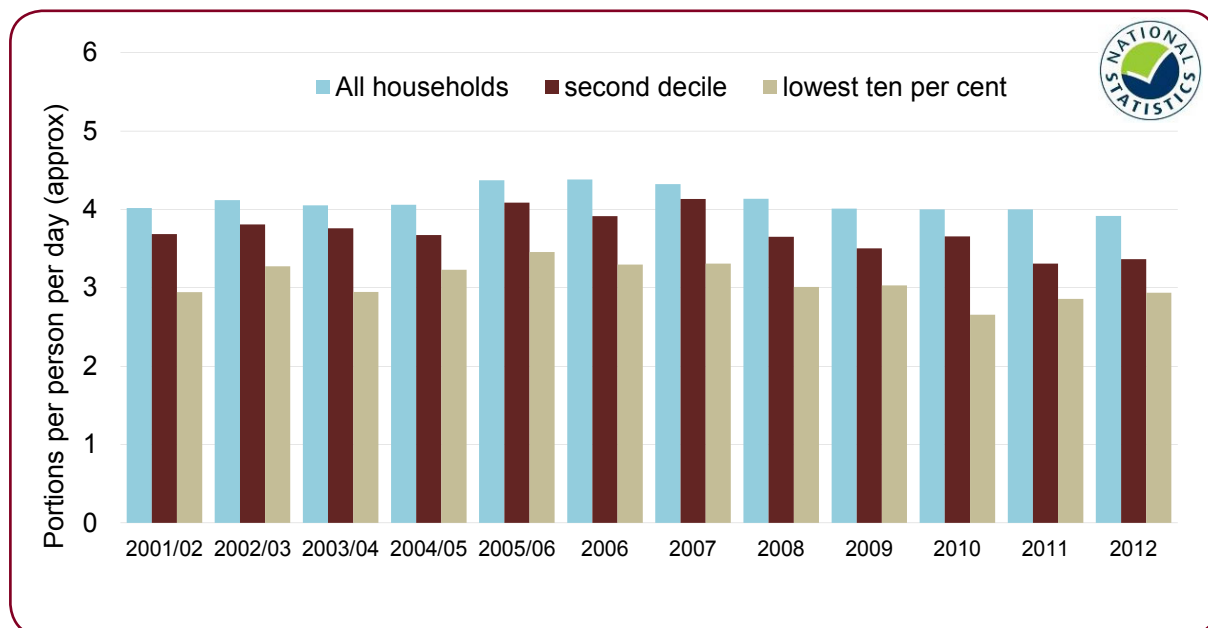
Source: Family Food 2012, Defra, December 2013.

- Food and drink purchases for household supplies were allocated into the five eatwell plate groups¹. This shows that in 2012 household purchases included:
 - too much ‘food and drink high in fat and/or sugar’; nearly three times the eatwell percentage,
 - more than the suggested proportion of ‘milk and dairy foods’; 7 percentage points higher than the eatwell percentage,
 - a little too much ‘meat, fish, eggs, beans and other non-dairy sources of protein’,
 - too little ‘bread, rice, potatoes, pasta and other starchy foods’; less than 60% of the eatwell percentage,
 - too little ‘fruit and vegetables’; around 28% less than the eatwell percentage.

¹ Alcohol, low calorie drinks, tea, coffee and mineral water were excluded from ‘beverages’ and ‘soft drinks’. Slimming & sports foods & infant cereal foods were excluded from ‘other cereals and other cereals products’. Only jelly, ice cream and soya foods were included from ‘other food and drink’.

Dietary Health

6.3: UK trend in purchases of fruit and vegetables (excluding potatoes) to 2012



Source: Family Food 2012, Defra, December 2013.

- UK household purchases of fruit and vegetables were 2.1% lower in 2012 than in 2011, a reduction of 11% since their peak in 2006.
- Purchases of 5 A DAY² across all households remained unchanged between 2009 and 2011 at 4.0 portions; the reduction in 2012 to an average of 3.9 portions takes the level back to that of the early 1990s.
- The lowest income households³ purchase the least fruit and vegetables at an average of 2.9 portions per person of 5 A DAY in 2012, unchanged on 2011.
- Households in the second decile have seen the greatest reduction in purchases of fruit and vegetables since 2007 at 19%, but showed a small increase (1.7%) in 2012.
- Defra estimates that 22% of edible fruit and vegetables are wasted⁴.

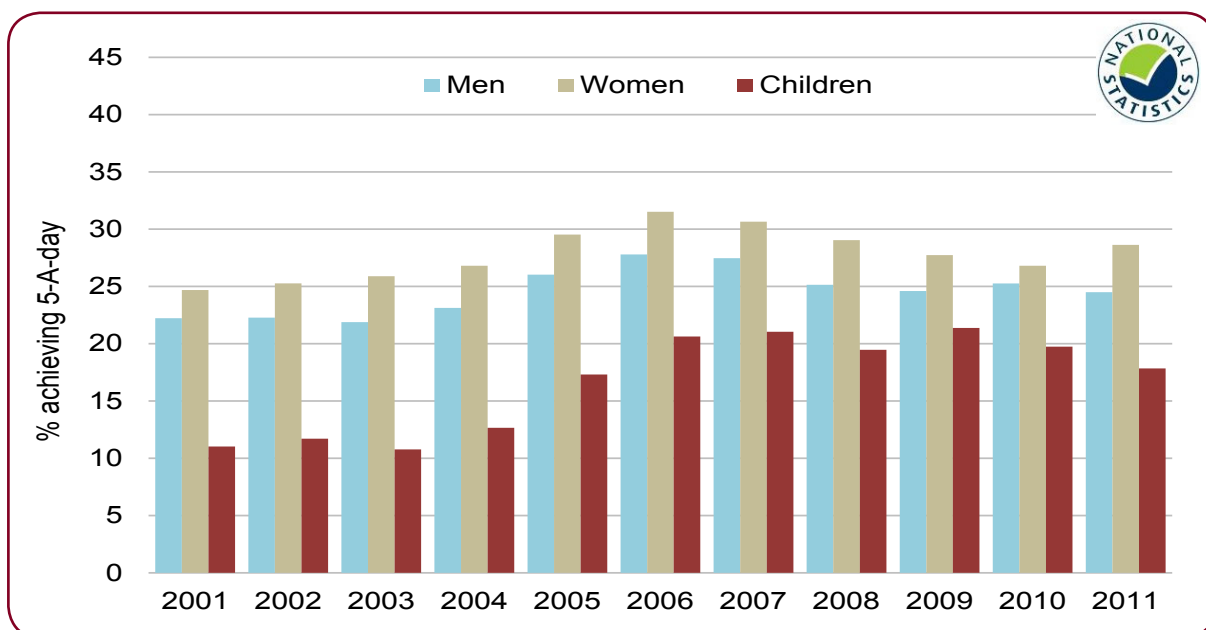
² 5 A DAY calculated as all purchases of fresh and processed fruit and vegetables including fruit juice divided by the adult portion size of 80 grams.

³ Lowest income households are those with incomes in the lowest ten percent of all households. Data on low income households is available from 2001.

⁴ Household Food and Drink Waste linked to Food and Drink Purchases, Defra July 2010.

Dietary Health

6.4: Trend in the consumption of fruit and vegetables in men, women and children in England to 2011



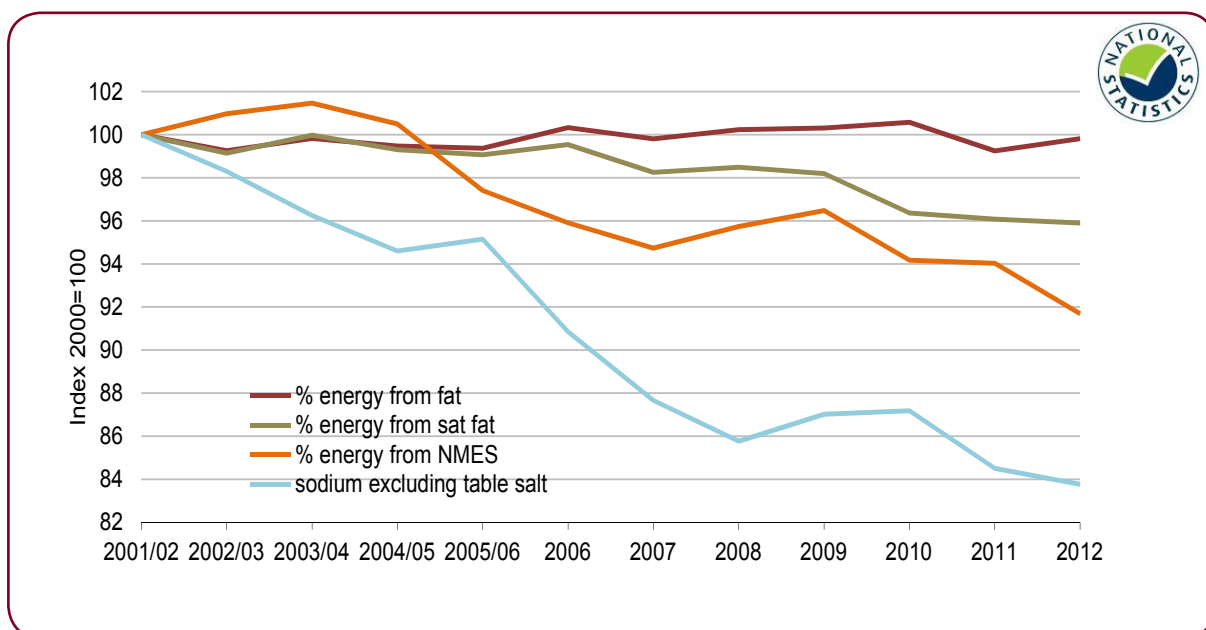
Source: Health Survey for England 2011, December 2012 (NHS Information Centre)⁵.

- In 2011 24% of men, 29% of women and 18% of children (aged 5 to 15 years) consumed the recommended 5 A DAY.
- In 2011 18% of children achieved 5 A DAY, having been over 20% in 2007 and only 11% in 2003.
- Achieving 5 A DAY peaked in 2006 with 32% of women and 28% of men achieving 5 A DAY.
- In 2011 6.6% of adults and 4.7% of children included no fruit or vegetables in their diet.
- Those aged 55 to 75 eat the most fruit and vegetables.
- In 2011 fruit and vegetable consumption by those aged 55 to 65 increased to an average of 3.9 portions per day for men and 4.3 portions per day for women.

⁵ Data from the Health Survey for England is weighted for non-response from 2003 onwards. Consumption is based on a 24 hour period.

Dietary Health

6.5: UK trends in intakes of fat, saturated fatty acids, non-milk extrinsic sugars⁶ and sodium to 2012



Source: Family Food 2012, Defra, December 2013.

- Sodium intake continued on a downward trend to 2.72 g/ person/day in 2012. This is 16% lower than in 2001-02, but above the SACN⁷ recommendation of 2.40g of sodium including table salt.
- The percentage of food energy from NMES at 13.5% and from saturated fatty acids at 14.2% are both on a downwards trend since 2009, although the reductions are small. Neither should exceed 11% of total energy intake.
- Total fat should contribute no more than 35%⁸ of food energy intake (excluding alcohol). Estimates based on food purchases in 2012 from the Family Food survey exceed this at 38.3%, virtually unchanged since 2001-02.

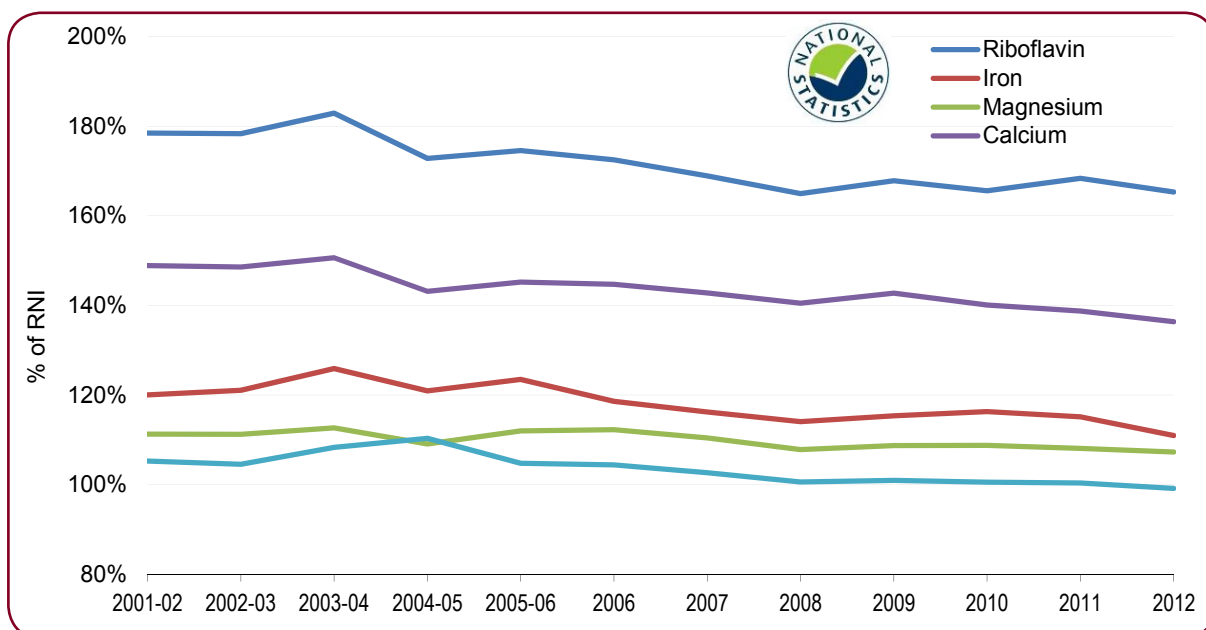
⁶ NMES – free sugar not bound in foods e.g. table sugar, honey and sugars in fruit juices, but excluding milk sugar.

⁷ For recommended intakes see Dietary Reference Values for Food Energy and Nutrients in the United Kingdom, 1991 (Department of Health).

⁸ Scientific Advisory Committee for Nutrition.

Dietary Health

6.6: UK average micronutrient intakes, 2001-02 to 2012⁹



Source: Family Food 2012, Defra, December 2012.

- Based on food and drink purchases average micronutrient intakes except sodium¹⁰ and potassium reached at least 100% of their reference nutrient intake value, where one is set, in 2012.
- Intake of vitamin B₁₂ has been consistently high since 2001-02 and remains at around four times the recommended level.
- Over the four years 2009 to 2012, intakes of most vitamins and minerals showed downward trends, notably Vitamin B₆ and folate, with decreases of 13% and 5.7% respectively. Over the same period, thiamin and vitamin C showed upward trends¹¹.

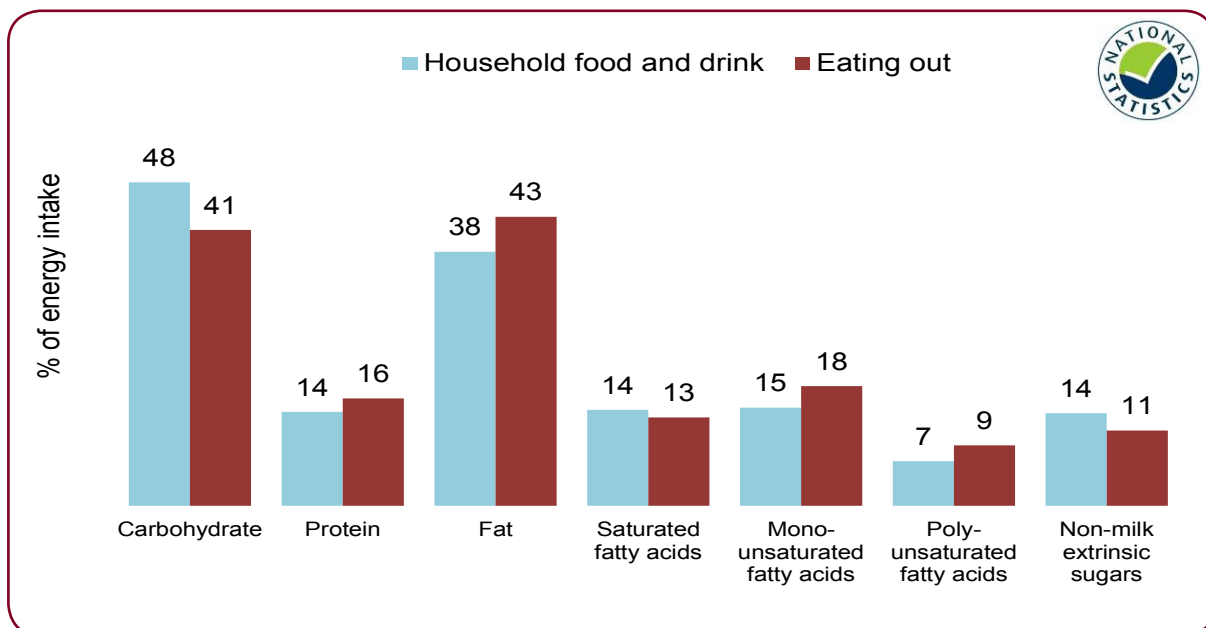
⁹ Reference Nutrient Intake: the intake which is considered sufficient to meet the requirements of 97.5% of the population.

¹⁰ Guidance levels for sodium are a maximum daily amount. See Chart 6.5 for the trend in intakes of Sodium.

¹¹ These trends are partly explained by changes in food composition data over time, due to new analytical data becoming available or changes in the formulation of food products.

Dietary Health

6.7: The UK household diet compared with the eating out diet in 2012¹¹



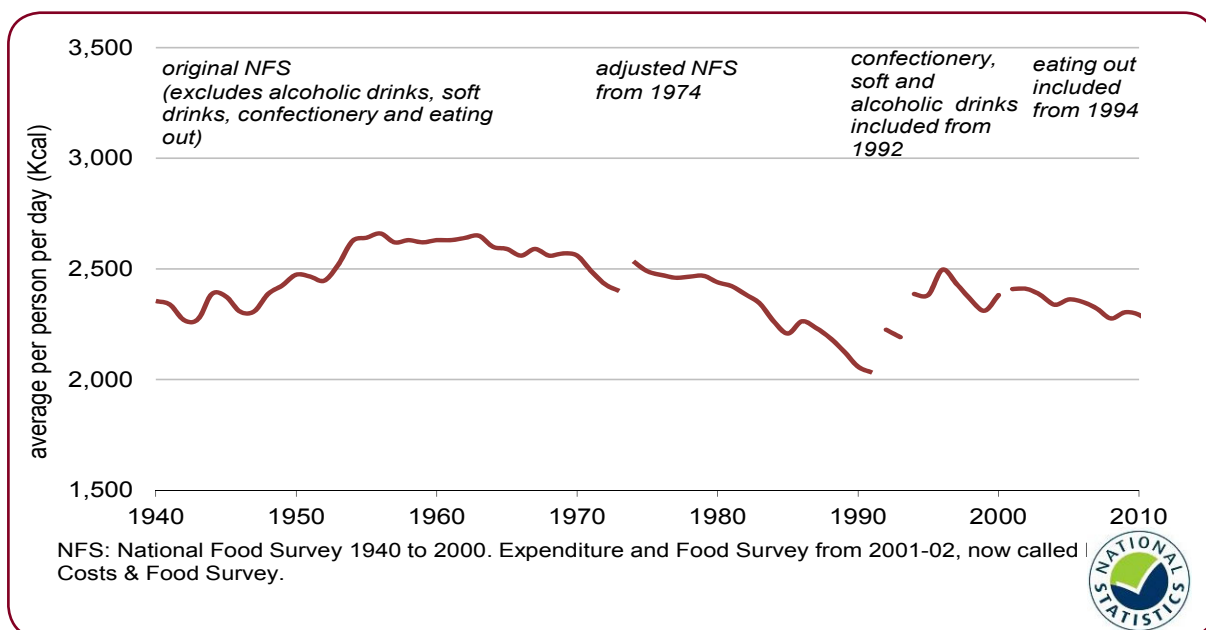
Source: Family Food 2012, Defra, December 2013.

- Eating out food and drink are products that are consumed before entering the household.
- In 2012 eating out contributed 9.5% of energy intake excluding energy from alcohol.
- The percentage of energy intake from eating out has fallen steadily from 12% to 9.5% since 2002-03.
- The eating out diet is higher in fat and protein but lower in carbohydrate and non-milk extrinsic sugars.
- Mono-unsaturated and poly-unsaturated fatty acids are higher in the eating out diet. They are found in olive oils, rapeseed oil, vegetable oils, fish oils, nuts, milk and some meat and meat products.
- Saturated fatty acids are slightly lower in the eating out diet. They are found in milk and dairy products, meat and meat products, biscuits, cakes and pastries.

¹¹ For recommended intakes see Dietary Reference Values (DRVs) for Food Energy and Nutrients in the United Kingdom, 1991 (Department of Health).

Dietary Health

6.8: Trends in average energy intake from food and drink to 2012

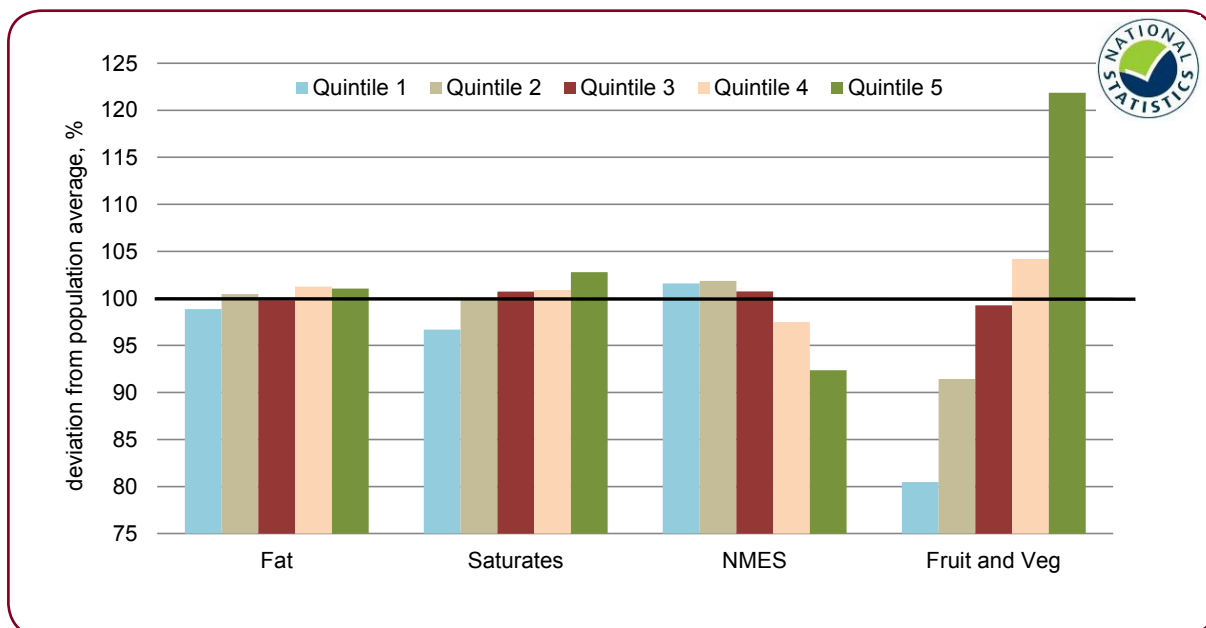


Source: Family Food 2012, Defra, December 2013.

- Average energy intake based on all food and drink purchases fell 1.6% to 2,209 kcal per day in 2012.
- Average energy intake based on all food and drink purchases has fallen 8.3% between 2001-02 and 2012.
- Energy intake from food and drink recorded as eating out fell 7.3% in 2012 and has fallen by 29% since 2001-02.
- There is a long term downward trend in energy intake since the early sixties (visible in all components of the chart). Combining year on year changes of estimates on like bases suggests that average energy intake per person is 31% lower in 2012 than in 1974.
- Despite decreasing energy intake, over-consumption of energy relative to our needs is a major factor in increasing levels of obesity, see Chart 6.10.
- Lowest income decile households purchased 6.4% less food for the household than the UK average in 2012, when measured by energy content.

Dietary Health

6.9: UK dietary indicators by equivalised income¹³



Source: Family Food 2012, Defra, December 2013.

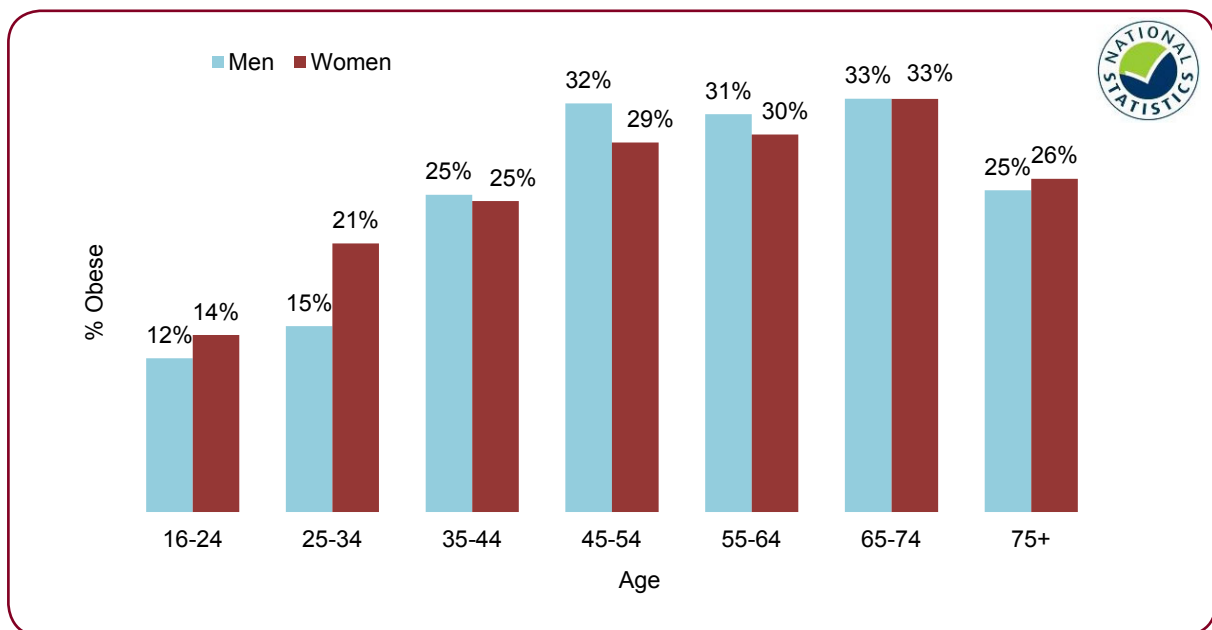
- The percentage of food energy derived from total fat does not vary much with income.
- The percentage of food energy derived from saturated fatty acids rises with income. Quintile 5 is 6.3% above quintile 1. The percentage of food energy obtained from NMES¹⁴ tends to fall when income rises. Quintiles 1 and 2 are 9.1% lower than quintile 5.
- Fruit and vegetable purchases rise strongly with income, 51% more being purchased in the highest income quintile compared to the lowest in 2012.
- In 2012 the highest income quintile purchased an average of 4.8 portions of fruit and vegetables per day. The lowest income quintile purchased 3.2 portions per day. (See Chart 6.3 for trends). The average across all households is 3.9 portions per day.

¹³ Household income adjusted for size and composition using the OECD scale.

¹⁴ NMES – free sugar not bound in foods e.g. table sugar, honey and sugars in fruit juices, but excluding milk sugar.

Dietary Health

6.10: Levels of adult obesity in England¹⁵



Source: Health Survey for England 2012, December 2013 (NHS Information Centre).

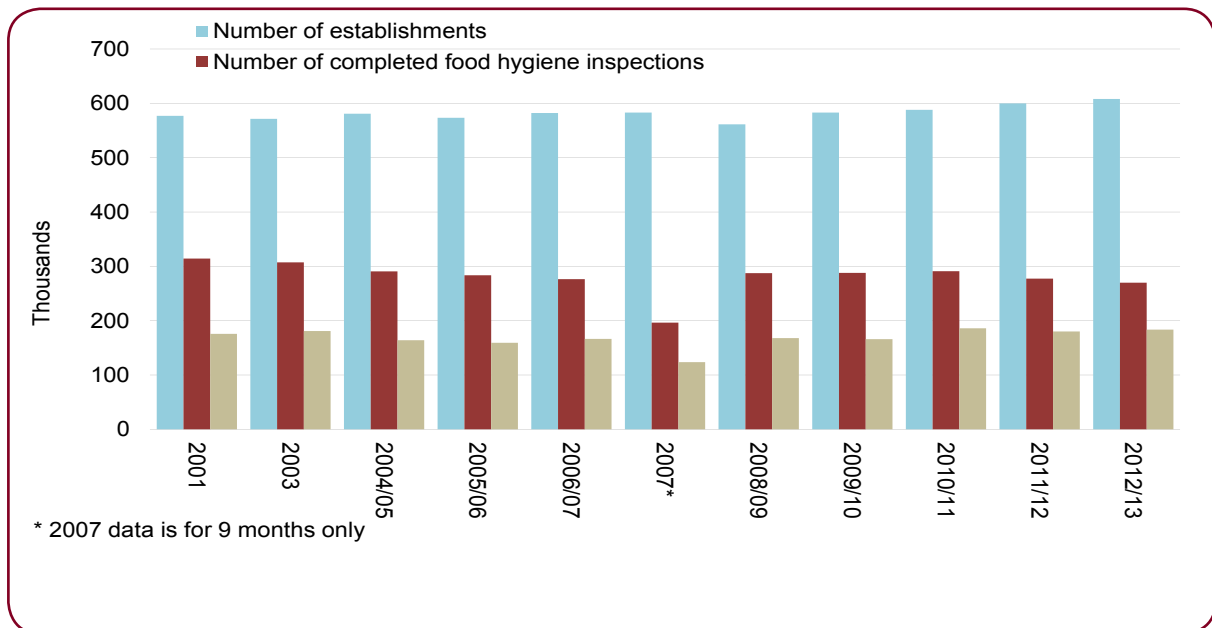
- Health problems associated with being overweight or obese are estimated to cost the NHS around £5bn per year. Obesity is associated with cardiovascular risk and with cancer, disability during old age, decreased life expectancy and serious chronic conditions such as Type 2 diabetes, osteoarthritis and hypertension.
- In 2012 25% of adults were obese and a further 37% were overweight.
- The obesity rate across all men was 24% in 2012, unchanged on 2011. The percentage of overweight (including obese) men was 67% in 2012, a 2% increase on 2011.
- The obesity rate across all women was 25% in 2012. The obesity rate in women aged 65-74 fell 13% in 2011 but increased 15% in women aged 75+.
- The OECD¹⁶ reported in 2011 that the prevalence of overweight and obesity in adults exceeds 50% in 19 of 34 OECD countries.

¹⁵ Body Mass Index (BMI) is a measure of weight relative to height: underweight = less than 18.5kg/m², normal = 18.5 to less than 25kg/m², overweight = 25 to less than 30kg/m², obese = 30kg/m² or more (includes morbidly obese), morbidly obese = 40kg/m² or more.

¹⁶ The Organisation for Economic Co-operation and Development: Health at a Glance 2011-2018.

Chapter 7: Safety & Confidence

7.1: UK Inspections and enforcement actions of food businesses to 2012-13



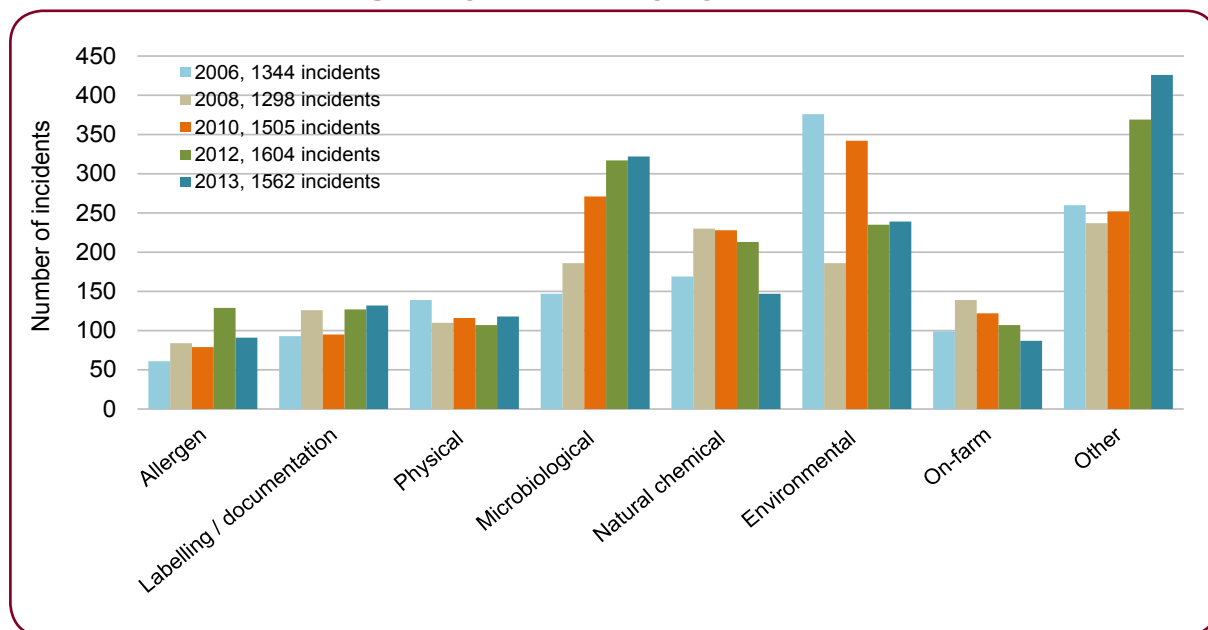
Source: Food Standards Agency Board report on monitoring of food law enforcement activity, 2013.

- The 434 UK Local Authorities (LAs) are responsible for inspections and enforcement of food hygiene and food standards legislation. Submitted returns are monitored, audited and reported on by FSA.
- There were 608,143 food establishments under LA control at 31 March 2013, 1.4% up on 2011-12.
- 525,588 interventions were carried out by LAs in 2012-13 (415,299 food hygiene and 110,289 food standards), a decrease of 5.4% on the reported number carried out in 2011-12 (555,350).
- 183,566 formal enforcement actions were carried out in 2012-13, an overall increase of 1.9% on 2011-12 (180,177).
- 5.9% of establishments were not yet risk rated in 2012-13, an improvement on (6.2%) in 2011-12.
- The level of broad compliance and above¹ was 91.2%.

¹ Equivalent to the top three tiers of the National Food Hygiene Rating Scheme; a partnership scheme between FSA and LAs in England, Wales and N. Ireland, launched in 2010. Following inspection, hygiene standards are rated on a scale of 0 to 5 where 5 is the highest standard and 0 means urgent improvement is required. A parallel scheme exists in Scotland.

Safety & Confidence

7.2: Contamination incidents investigated by the Food Standards Agency (FSA) by type², UK 2006-2013



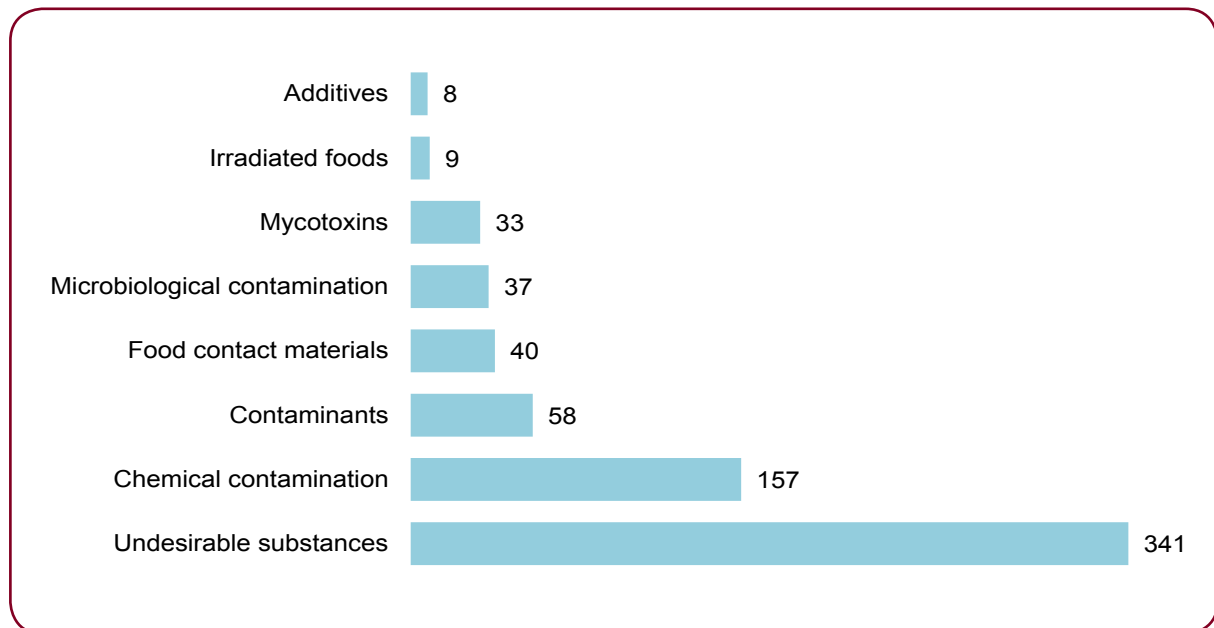
Source: Annual Report of Incidents, 2013 (FSA).

- In 2013, the FSA investigated 1,562 food and environmental incidents in the UK, in its aim to ensure that food produced and sold in the UK and imported food is safe to eat. The majority of incidents (58%) were classified as “low” as they are considered minor, with localised effects and few, if any, food safety implications.
- Microbiological contamination incidents make up the largest proportion of all cases at 21%, with incident numbers increasing steadily since 2006 to 322 incidents in 2013. In 2013, 30% of these incidents were due to Salmonella.
- Almost three quarters of environmental contamination was caused by fires in 2013, with the majority of the rest due to spills and leaks. Allergen incidents fell 29% in 2013 to 91 compared to 129 recorded in 2012.
- High level incidents dealt with by FSA in 2013, included an investigation into horse and pig DNA in beef products; two E.coli O157 outbreaks linked to watercress and Caribbean soft fruit drink contaminated with cocaine, which caused one fatality.

² ‘Other’ includes food contact materials, veterinary medicines, use of unauthorised ingredients, pesticides etc. Microbiological contamination is the main cause of food poisoning.

Safety & Confidence

7.3: Number of unsatisfactory analyses found in imported food by type, 2012-13



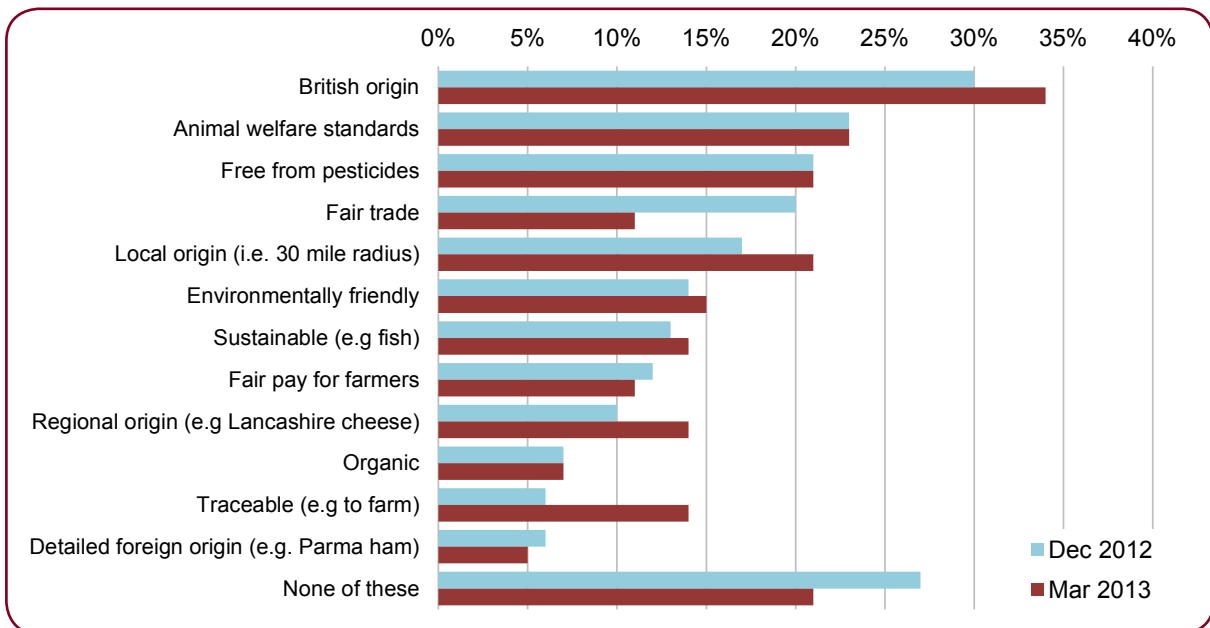
Source: National co-ordinated risk-based food sampling programme 2012-13, FSA.

- Samples taken as part of this programme are targeted towards areas of known or suspected risk³. As a result, it is expected that rates of non-compliance would be higher than those taken as part of randomly-selected foods.
- During the 2012-13 sampling programme, 4327 samples were submitted for chemical analysis. Of these, 4170 were reported as satisfactory. The most commonly sampled food groups were: fruit and vegetables (26%), fats and oils (14%), meat/meat products (12%), herbs/spices (11%) and fish/shellfish (6%).
- As seen in previous years, Asia was the source continent of the highest number of non-compliances, with the majority of these samples originating from China, India and Thailand.

³ Sampling was targeted at foods most likely to be affected by the specific areas of concern e.g. nut products were tested for mycotoxins

Safety & Confidence

7.4: Factors influencing choice when buying food and non-alcoholic drink

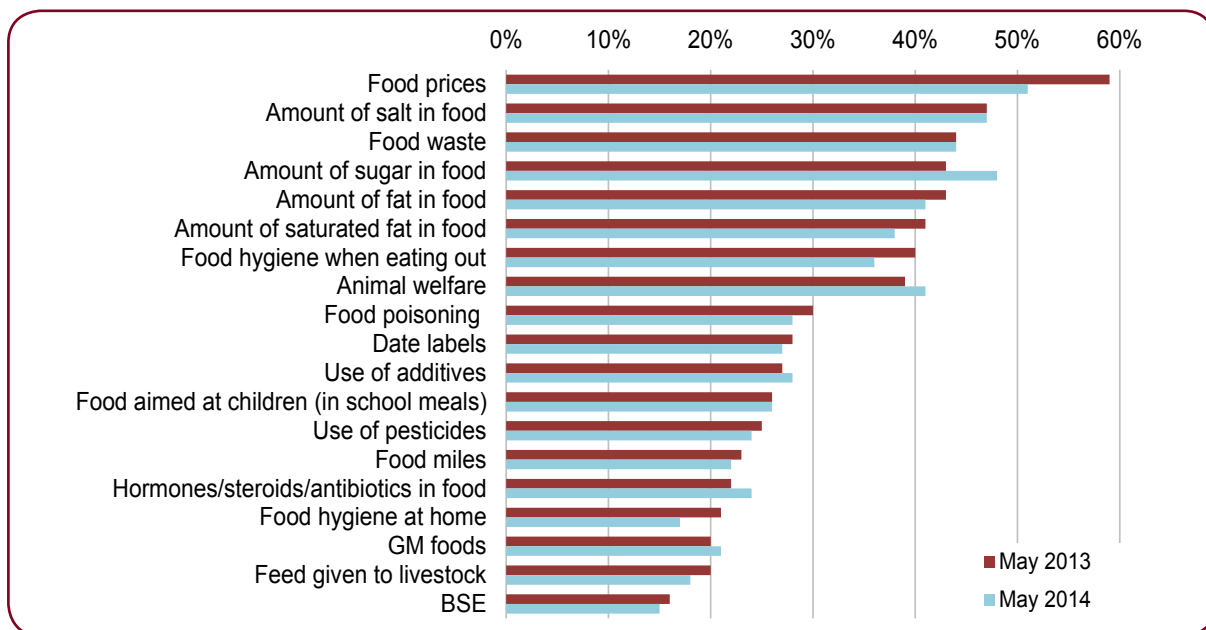


Source: *Consumer Trust in Food*, GMI/Mintel (Base: 1500 internet users aged 16+).

- British origin was deemed the most important factor in consumers' choice of food in both the December 2012 survey wave and its follow up in March 2013.
- Undeclared horsemeat was first discovered in some meat products in January 2013, mid-way between the two waves of the survey.
- In the second survey wave, British, local and regional provenance exerted more influence on consumers, with each of the three factors having increased by four percentage points. It is suggested that the highlighted role of non-UK meat suppliers in the fraud may also have drawn consumers' attention to the complexities of the food supply chain.
- The importance to consumers of traceability increased by 8 percentage points between the two survey waves.
- Almost 9 out of 10 adults in the UK eat animal-based protein, either meat, poultry or seafood. Incidents involving such foodstuffs are likely therefore to provoke a public response.

Safety & Confidence

7.5: Percentage of people concerned about certain food issues⁴, 2013-2014



Source: *Biannual Public Attitudes Tracker*⁹, (FSA) July 2014.

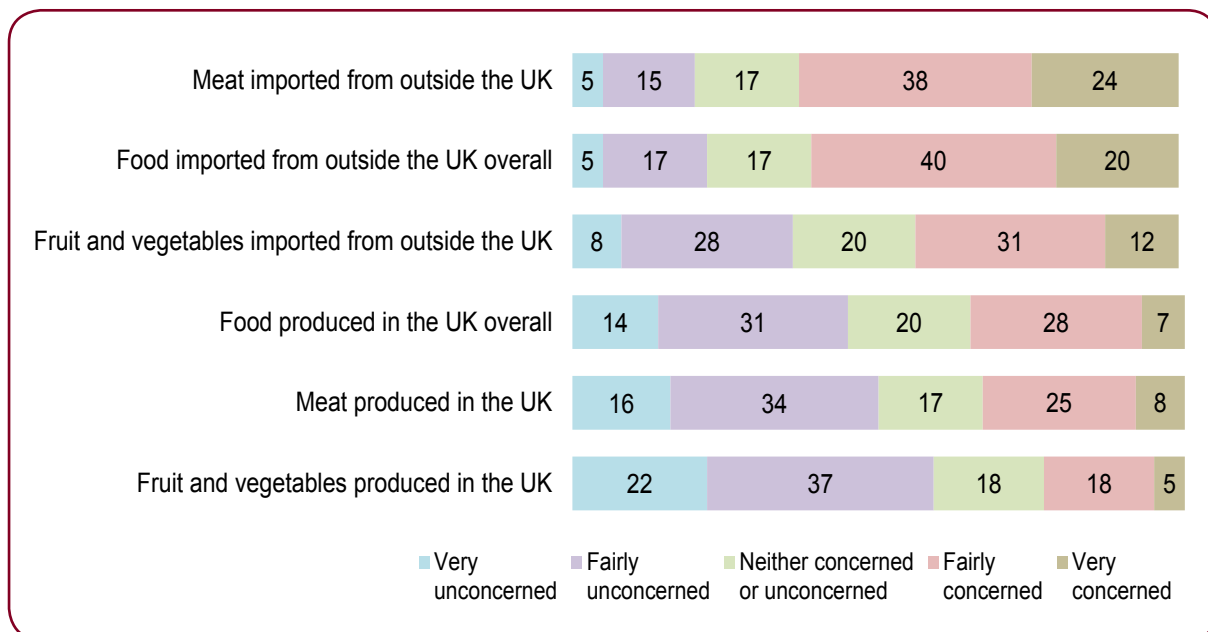
- The main food issue of concern to people is food prices, with 51% concerned in May 2014, a decrease from 59% in May 2013. Year on year food prices fell for the first time since 2006 in the year to May 2014 and food prices were below general inflation.
- Most food issues show an unchanged or lower level of concern than the previous year. Notable exceptions to this were concerns about sugar, animal welfare and hormones in food.
- A small proportion of respondents (1%) spontaneously reported horsemeat and halal products as food issues of concern in the May 2014 wave.
- Food prices, salt, sugar, fat, waste and animal welfare the issues where more than 40% of people are concerned. In May 2014 16% of respondents reported no food safety issues of concern.

⁴ Based on 'Total' responses (spontaneous plus prompted responses).

⁵ Uses a random location sample (UK).

Safety & Confidence

7.6: Percentage of people concerned about where food is produced



Source: Food and You Survey 2012⁶, (FSA).

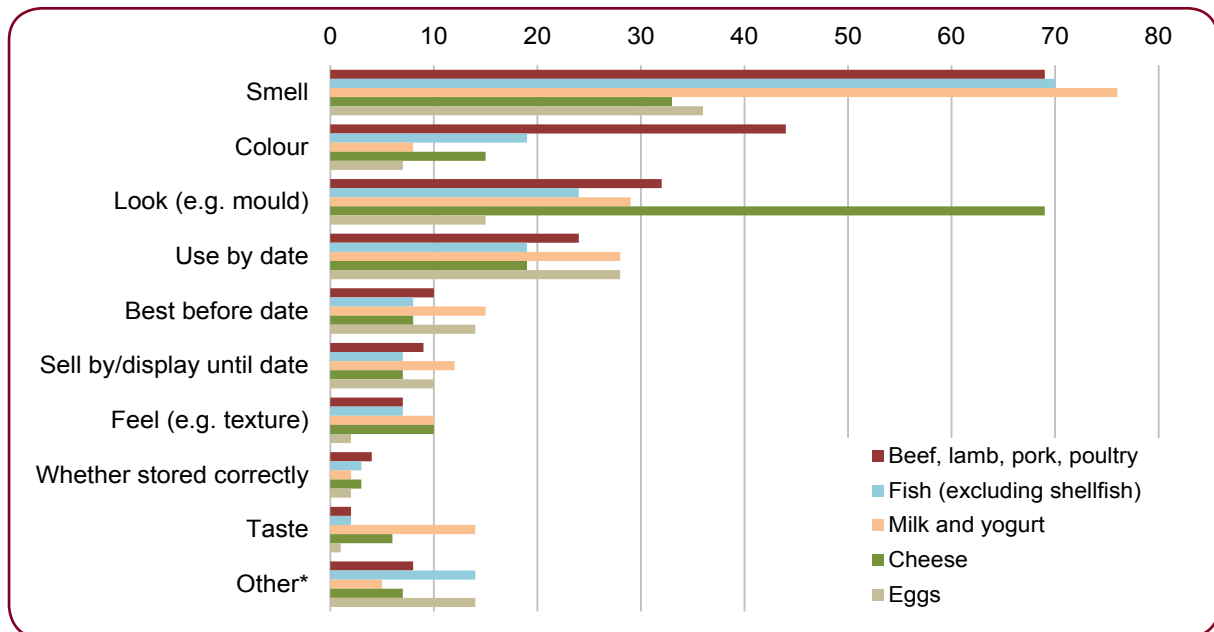
- Food safety in imported products, in particular meat from outside the UK, caused the most concern for respondents⁷.
- 62% of survey respondents expressed concern about imported meat, of which 24% were very concerned. This compared with 8% being very concerned and 25% showing some concern for meat produced in the UK.
- 45% of respondents were unconcerned about food produced in the UK, although 28% were fairly concerned.
- The safety of fruit and vegetables produced in the UK concerned the least number of respondents with only 5% being very concerned, whilst 77% expressed either no concern or no opinion.

⁶ Survey sample was a stratified, clustered random probability sample of private UK Households.

⁷ This survey was carried out during 2012; therefore these results have not been influenced by the horsemeat fraud activity in early 2013.

Safety & Confidence

7.7: Methods used to assess whether food is safe to eat



*Other includes: unspecified dates, buy fresh, damaged packaging and those that don't know/don't eat/buy a product.

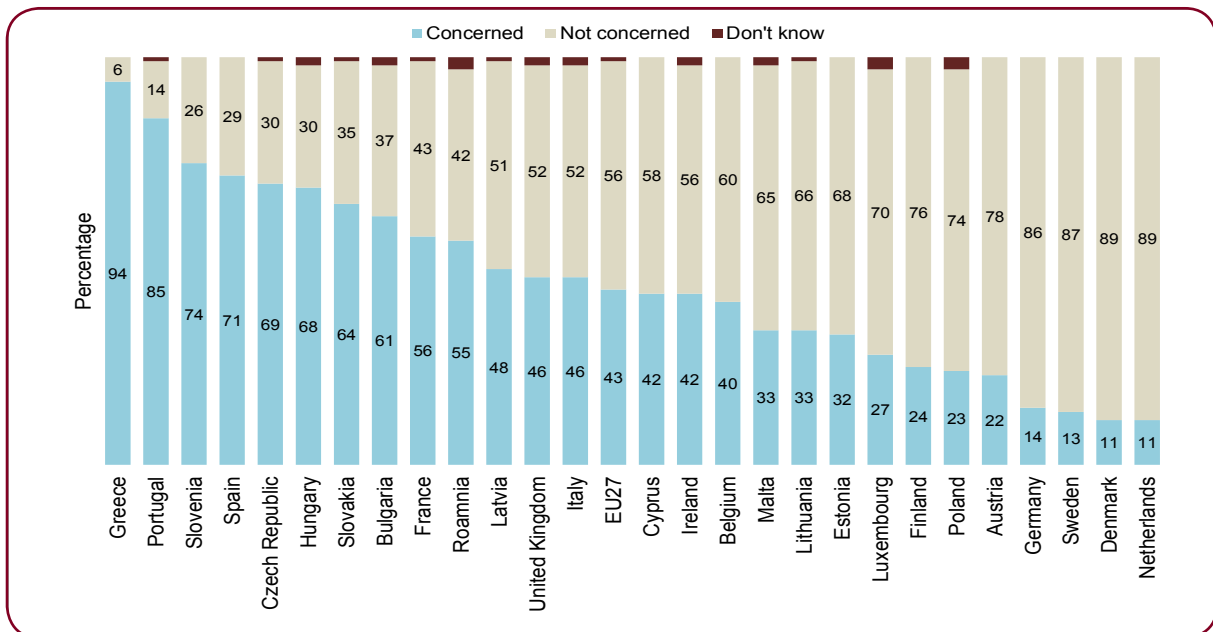
Source: Food and You Survey 2012⁸, FSA

- FSA guidance is that even if a food looks and smells fine, the use by date is the best indicator of whether it is safe to eat. In 2012, use by dates tended to be the third or fourth most commonly reported method of indicating food safety.
- How food smelled was the method used by between 69% and 76% of respondents to indicate whether meat, fish, milk and yogurt were safe to eat.
- How food looks e.g the appearance of mould, was the most common practice for assessing whether cheese is safe to eat.
- Smell and use by dates were the two most common methods used for assessing the safety of eggs, but 16% of respondents said that their preferred method was whether the eggs floated in water.
- Promoting food safety and protecting public health are central strategic objectives of the Food Standards Agency (FSA).

⁸ Survey sample was a stratified, clustered random probability sample of private UK Households.

Safety & Confidence

7.8: Extent of concern across EU whether food production meets population need in 'their own country'



Source: *Europeans' attitudes towards food security, food quality and the countryside*; European Commission, 2012⁹.

- People in Greece and Portugal are very concerned about their national food security. 94% of those polled in Greece and 85% of those polled in Portugal expressed concern.
- People in Netherlands, Denmark, Sweden and Germany are less concerned about national food security.
- Across the EU (most Member States) 76% expressed concern that sufficient food is produced to meet the needs of the world's population.
- Across the EU (most Member States) 43% expressed some degree of concern that sufficient food is produced to meet the needs of their country.
- In 17 out of the 27 Member States the proportion of respondents who are not concerned about food production in their own country is greater than the proportion of those who are concerned.

⁹A survey of 26,593 respondents across the 27 Member States of the European Union between 10th and 25th March 2012.

Glossary

Economic Definition of food and agri-food sector

The UK food sector is defined as food manufacturing, food wholesaling, food retailing and non-residential catering. In terms of the standard industrial classification (SIC 2007) it is defined as:

Food Manufacturing:	10 & 11
Food Wholesaling:	46.17 & 46.3 less 46.35
Food Retailing:	47.11 & 47.2 less 47.26 & 47.81
Non-residential Catering:	56

The deductions are to remove non-food items as far as possible.

The agri-food sector is the food sector plus agriculture and fishing. Agriculture and fishing are shown in several charts for comparison.

Net capital expenditure

This is calculated by adding to the value of new building work, acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.

Gross Value Added (GVA)

GVA is the difference between output and intermediate consumption for any given sector / industry. This is the difference between the value of goods and services produced and the cost of raw materials and other inputs which are used up in production.

Total Factor Productivity (TFP)

Productivity measures the efficiency at which inputs are converted into outputs. Total Factor Productivity provides a comprehensive picture of growth.

Glossary

Low income

The most commonly used threshold to determine relative low income is having an income which is less than 60% of the median in that year.

Absolute low income is considered to be having an income which is less than 60% of the median in that year, adjusted by the inflation level of (currently) 2010-11.

Equivalised income

The income a household needs to attain a given standard of living will depend on its size and composition. Equivalisation is a means of adjusting a household's income for size and composition so that the incomes of all households are on a comparable basis.

Small and Medium Enterprises (SMEs)

Outside of these statistics, the definition of a SME can depend upon several factors, including turnover. For these statistics, a 'small' business is a private sector business with fewer than 50 employees. A 'medium' business is a private sector business with between 50 and 249 employees.

A 'micro' business is a private sector business with between 1 and 10 employees, which, for the purpose of these statistics is incorporated within the 'small' category.