

Where does our Food Come From?

Summary Document



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Background, Purpose and Scope

The aim of this review is to provide consumers with the most relevant information available about the origin of the foods they eat, to enable them to make informed choices.

While more food is produced on the island of Ireland than is imported, research conducted as part of the review showed that consumers are more concerned about food imports. This review therefore focuses on the food supply chain for foods from outside the island of Ireland. It explores key issues such as food imports, local food economies, food safety, food import controls, nutrition, labelling, organic production, and environmental issues such as carbon footprinting and food miles.

The review covers all food imported onto the island including meat and meat products, cereals, fruit and vegetables, beverages, dairy and dairy products, and seafood. Previous consumer focused reviews by **safefood** examined the chicken, finfish, fruit and vegetables, beef, milk and pork supply chains. This summary gives a brief overview of the findings of the review. A full report is available on the **safefood** website www.safefood.eu

Consumer Concerns About Food Origins

Research throughout the island of Ireland conducted on behalf of **safeFood** found that most consumers reported being concerned about the origin of their food, particularly meat and fish.

Forty three per cent of consumers were concerned about the quality of food imported from within the EU, and 54% were concerned about the quality of imported foods from non-EU/third countries. However, in general, awareness of the amount and type of imported food goods was relatively low. Consumers thought that most of the fresh produce produced on the island was consumed on the island.

Sixty per cent of consumers were concerned about the quality of imported fresh meat, 52% about fresh fish and 29% about fruit and vegetables from non-EU countries. Furthermore, 57% of consumers were concerned about the quality of frozen meat/poultry, 48% about processed foods (prepared meals) and 31% about tinned food from non-EU countries.

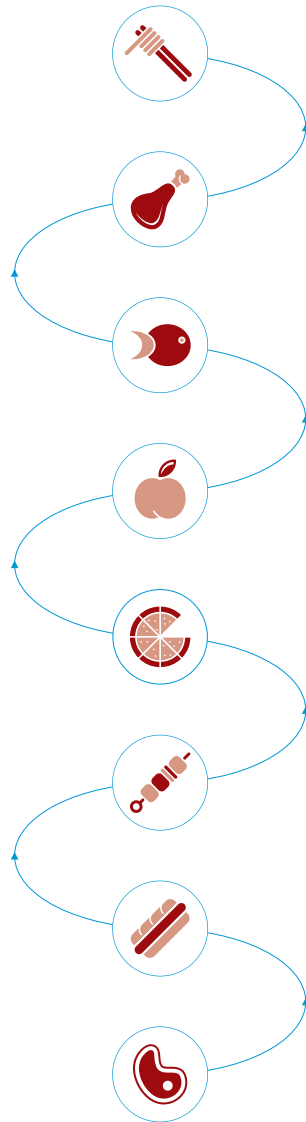
Among those who expressed concern the main food safety concerns with imported foods were in relation to poor production standards and regulations (48%), the quality of imported foods (27%) and the perception that the further distance food travels, the greater the risk of contamination (24%). Consumers perceived locally or nationally grown products to be more authentic and of higher quality than imported products. However, they were happy to pay the cheaper prices and avail of better choice that imported foods allow.

Consumers were aware of the terms 'carbon footprint', 'food miles' and 'ethical labelling' although understanding of these terms was limited. Fifty seven per cent of consumers agreed that less food should be imported onto the island of Ireland in order to protect the

environment, regardless of the fact that there would be less variety in shops and the cost of food would be higher.

Consumers reported that they find current food origin information misleading and unclear, and clearly expressed the wish for more honest and transparent information with regard to food sources/origins including where foods were packaged and processed.

Overall, while consumers expressed concern about country of origin, labelling and other issues, this fails to translate into purchasing behaviour. In reality, price is the most important factor for consumers when shopping.



Where Our Food Comes From

Food and food ingredients have been traded as commodities between countries and cultures since the dawn of civilisation.

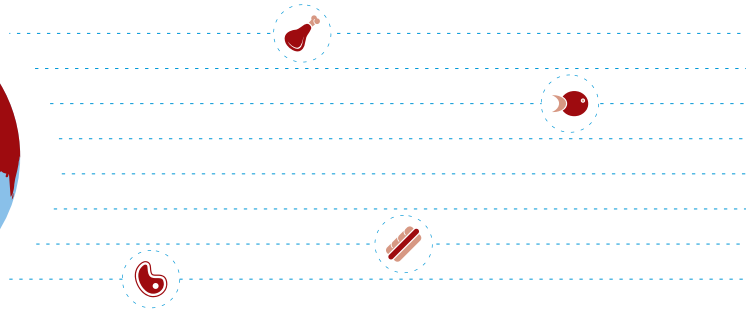
With the modern industrial age, food is now truly a global business, linking the smallest producer with retailers around the world. In recent years, there has been enormous growth in the food import and export trade. There are often many links in the food trading chain from growers, to transporters, processors, marketers, retailers and finally, consumers. The links in the chain can be complicated and food can travel across many miles-locally, nationally, and globally.

Food produced on the island of Ireland

While this review focuses on foods from outside of the island of Ireland, food production and processing constitutes an enormous part of the economic output on the island. The total gross turnover of Northern Ireland (NI) food and drinks processing sector was estimated to be

£2.7 billion (€2.9 billion) in 2007. In the Republic of Ireland (ROI), the food and drink industry had a gross output of over €18 billion (£16.5 billion) and accounted for approximately 7% of the Gross Value Added, approximately 10% of exports and 8% of total employment. In 2007, NI exported 1.055 million tonnes of food and food products valued at £537 million (€594 million). Food exports from the ROI were valued at €8.6 billion (£7.9 billion).

‘Local food economies’ are defined as a system of producing, processing and trading, primarily of organic and sustainable forms of food production within the locality or region where it was produced. This can deliver health, economic, environmental and social benefits to the communities in those areas. The local food concept, although relatively new to the island of Ireland



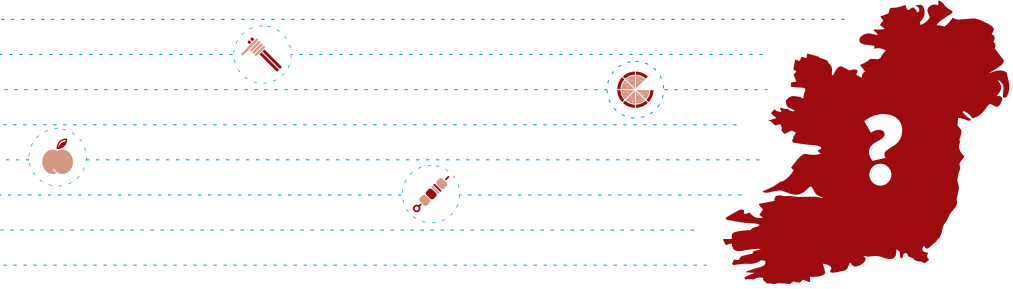
compared to some of our European counterparts, is becoming increasingly popular throughout the country. The evidence for this can clearly be seen in the opening of farmers' markets. There are now over 130 public, private and community markets, farm shops, and certain food service establishments in which locally produced foods are available on the island.

Imports

In 2002, the amount of imports onto the island of Ireland were recorded at 4.5 million tonnes, which increased by approximately 18% to 5.3 million tonnes in 2007. This was equivalent to an increase in value of approximately €1.5 billion (£1.4 billion).

Total food imports were valued at €4.6 billion (£4.2 billion) in the ROI in 2007 and £460 million (€502 million) in NI.

The largest amounts of foods imported onto the island were for cereals such as rice, corn, wheat etc, and fruit and vegetables. A significant amount of food imports, especially fruit, cereals and vegetables are imported from outside of the EU, i.e. China, Costa Rica, and South Africa. Meat and dairy produce are mostly imported from within the EU. There is also significant cross-border trade between NI and the ROI in soft drinks, live pigs and beer in particular.



Food imports from the EU and non-EU are necessary for economic reasons, seasonality, trade and because of consumer demand. These have led to a steady rise in food imports onto the island in recent years, with food imports now accounting for a significant amount of the retail market for the island of Ireland.

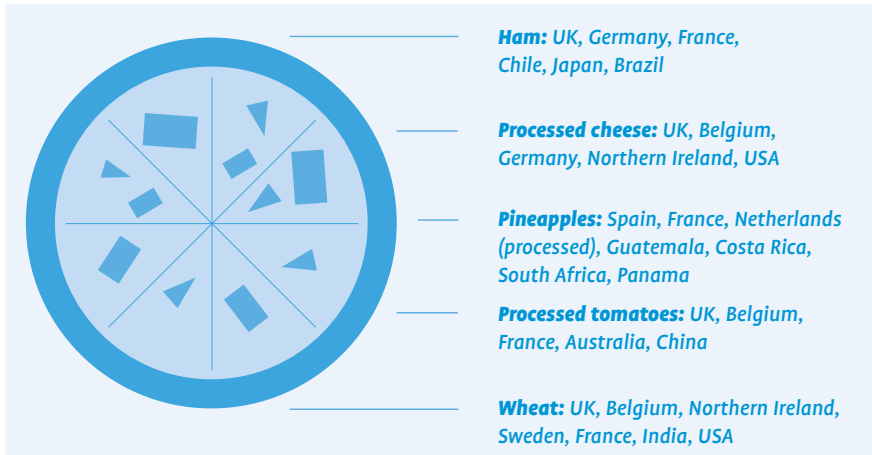
Case study

Pizza – tracing the world on a plate

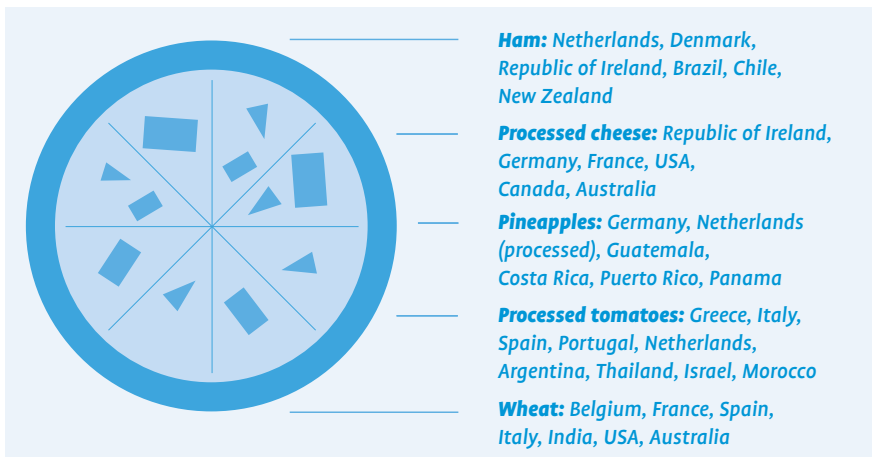
In this review, a Hawaiian-style frozen pizza was used as an example of a commonly consumed meal with ingredients from all over the world.

Pizza is just one example; many other meals with mixed ingredients could have been chosen. The ingredients, ham, wheat, pineapple, processed cheese and tomatoes can be imported from a range of different countries from the EU and non-EU countries. These are shown in the diagrams overleaf.

Import information for pizza ingredients for ROI



Import information for pizza ingredients for the UK.



Food Safety and the Food Chain – from Farm to Fork

Foodborne illness is the result of the consumption of food that has been contaminated with some type of microbiological, biological, chemical or physical hazard.

Food producers, processors, retailers and caterers take many steps to control both microbiological and chemical hazards to minimise the risk to consumers.

Furthermore, there are food import control systems on the island that strive to control both these hazards. The safety of the food supply chain is regulated by legislation primarily enforced by the Food Standards Agency (FSA) in NI and the Food Safety Authority of Ireland (FSAI) in the ROI.

Regulation of the food chain

Hygiene laws for EU member states, commonly referred to as ‘The Hygiene Package’, cover all aspects of the food chain from a food hygiene perspective, including extensive measures to ensure the safety of food and food products from farm to fork. The Hygiene Package also deals with imported foods. The regulation of produce onto the EU market

is the responsibility of the European Commission’s Food and Veterinary Office (FVO).

In the ROI, the FSAI has service level contracts with the Health Service Executive (HSE), The Department of Agriculture, Fisheries and Food (DAFF) and The Department of Communications, Marine and Natural Resources (DCMNR) to oversee the enforcement of the Hygiene Package and other national and EU legislative and safety programmes. DAFF is also responsible for the control of all food and food products from primary production through to the point of retail. Veterinary inspectors from the Department enforce EU standards through inspections on the farm and also at slaughter in abattoirs. Local authority veterinarians are responsible for small establishments. The HSE, through its Environmental Health Officers (EHOs) is

responsible from the point where food enters a distribution network until final sale to the consumer.

In NI, the FSA works with the Department of Agriculture and Rural Development and has similar service level agreements with local authorities through EHOs and official veterinarians, in enforcing the Hygiene Package and other food safety legislation.

If a health risk is discovered during the testing and monitoring of a food or food products, an investigation will lead to the issuing of a food alert. If necessary, a food recall will be undertaken by the respective food safety agency on the island.

Import food controls for food and food products from the EU

The single market concept of freedom of movement applies to imports of food from EU member states. Inspections of such imports at ports are generally only carried out following the receipt of information indicating a potential food safety problem. Inspections inland of

imported EU products are carried out at the same frequency as domestically produced food.

Import food controls for food and food products from non-EU countries

Imports of food and food products from non-EU countries must come through designated Border Inspection Posts (BIPs) and be subjected to a series of checks before they are allowed access to the EU market. The BIPs are situated in strategic locations in each member state and are under the supervision of the relevant competent authority of the member state. The Food and Veterinary Office of the European Commission routinely audits the controls exercised at these BIPs.

Live animals and animal products imported into the EU may only originate from a non-EU country, or part of a non-EU country, approved by the EU. The establishments from which these products are produced must be approved, in accordance with the relevant EU legislation, by the competent authority of that country.



The Food Chain and Import Controls

The food chain is very complex. Once a food has entered the island of Ireland and passed through the designated controls, it can be further processed or even re-exported as a finished product.

Foodborne human infections associated with food imports

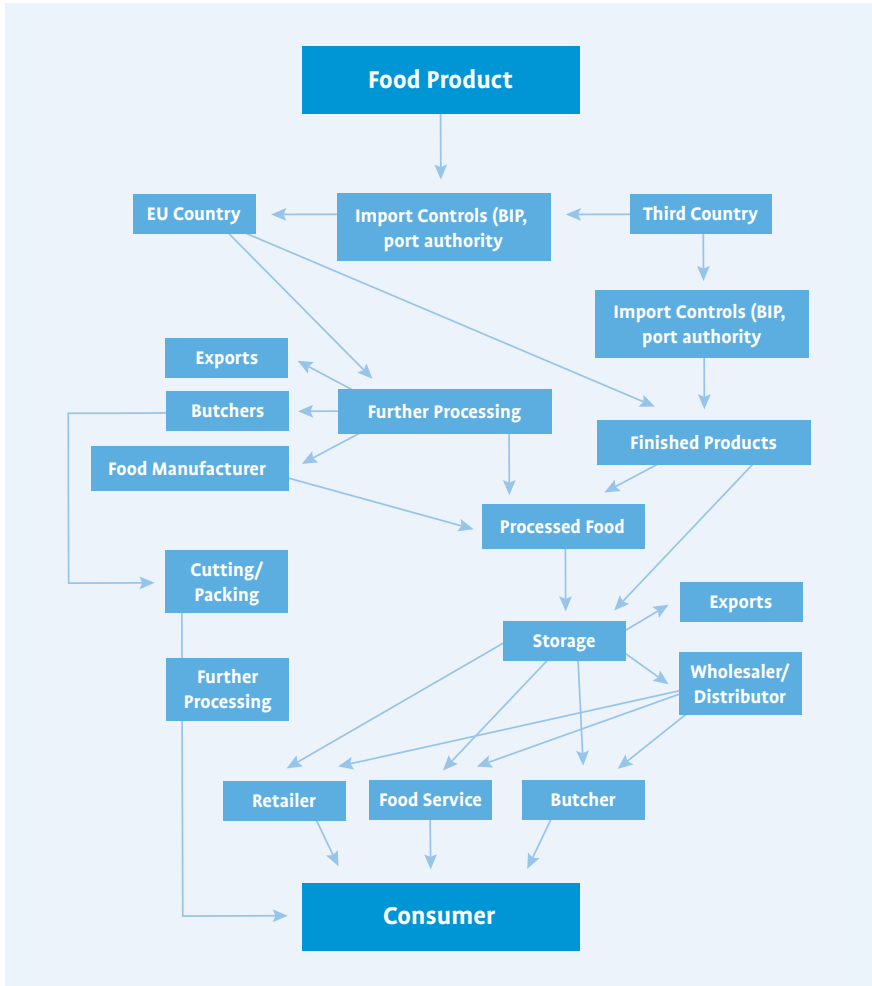
Imported foods are recognised as potential vehicles for foodborne illness in humans. Increased globalisation over the past two decades has made outbreaks associated with internationally distributed foods more common.

A very wide range of imported food products have now been associated with foodborne illness caused by a wide range of pathogens worldwide. Contaminated produce that is normally eaten raw is an increasingly recognised vehicle for transmission of *Salmonella* and other pathogens. Imported fresh fruit and vegetables have now been linked extensively, both epidemiologically and microbiologically, to infectious intestinal disease worldwide.

The involvement of multiple countries or regions is a particular feature of outbreaks associated with fresh produce. This is recognised as an important and emerging public health concern. In recent years, fresh produce such as raspberries, melon, lettuce, fruit juices and sprouted seeds have been implicated as vehicles in multi-country outbreaks of a range of intestinal infections including salmonellosis, shigellosis, hepatitis, and *E. coli* O157:H7.

The widespread geographic distribution of these foods results in outbreaks that are very difficult to detect. Only a few sporadic cases may be detected in any given jurisdiction. The identification of multi-country outbreaks is made easier if the organism responsible is of an unusual genetic make up and the public health authorities and laboratories collaborate at an international level.

The food chain for imported foods



On the island of Ireland, only one recorded outbreak associated with imported foods was reported by the Communicable Disease Surveillance Centre Northern Ireland. In September 2004, 113 cases of *Salmonella* Newport were notified and linked to lettuce that was thought to have originated from mainland Europe. There were no confirmed cases of the illness in the ROI; however, surveillance was increased as there was one case of *Salmonella* Newport in Co. Donegal which may have been associated with the UK outbreak. As the supply chain was very complex, a full trace back was not possible.

In 2007 the FSAI reported 76 food incidents of which 41% were attributed to chemical contaminants, such as mycotoxins. In the UK (data unavailable for NI), the FSA investigated 1,312 food incidents, 16 were attributed to chemical contamination.

Nutrition

There is a natural variation in the amount of nutrients in all natural foods. The reasons for this are relevant to both foods grown on the island of Ireland and food imports. Some key factors include

soil and growing conditions, animal feed composition, transport and storage. Differences in manufacturing processes and health policies internationally may also mean that foods may differ in their level of nutrient fortification. Many foods are fortified with nutrients before they are imported in order to comply with the fortification regulations of the target market.

The changing food environment and health

Healthy eating guidelines emphasise the importance of eating a variety of foods to obtain all the essential nutrients required for healthy living. An increased variety of foods is associated with a better quality diet among both adults and children and is often used as an index of diet quality. Food imports, coupled with advances in food production in industrialised countries such as the ROI and NI, have resulted in greater accessibility to and variety of available foods. However, this can have positive and negative effects on food and nutrient intakes. Increased imports of unhealthy products, i.e. those containing high amounts of fat and sugars, can cause shifts in the structure of the diet towards a more

energy-dense¹ diet. The consumption of cheap, energy-dense imported foods may lead to an increase in the risk of obesity, and may particularly affect those in lower socioeconomic groups.

Labelling

Labelling enables consumers to make informed decisions about the food they eat and also builds confidence in products. There are legal requirements in place that govern the labelling of food products, whether it be meat, cereals, fruit and vegetables, beverages, seafood or prepared foods.

Currently country of origin labelling is mandatory for certain food products, for example, beef, veal, fish, shellfish, most fresh fruit and vegetables (whether pre-packed or loose), wine, honey, olive oil, and poultry meat imported from outside the EU. New legislation for country of origin labelling within the EU is currently being reviewed. New labelling systems are also currently being developed by a number of organisations to communicate sustainability issues.

Sustainability issues

The food chain, especially farming, is a large contributor to global Green House Gas (GHG) emissions. Recent years have seen growing concern about the sustainability of agricultural and food systems and the unintended side-effects that can be imposed on the environment and human health. There is also a growing demand among consumers for ethically labelled products, which have become very popular with consumers, for example, 'fairtrade' coffee, chocolate and fruit.

In the ROI, the average distance travelled by imported food is 3,000 miles. In general, higher levels of vehicle activity lead to larger impacts; however evidence suggests that at some times during the year, transporting produce from other countries may have a lower environmental impact than heating or refrigerating produce grown locally. In Europe, the agricultural-environmental strategy of the common agricultural policy is largely aimed at enhancing the sustainability of agro-ecosystems.

¹ Energy dense foods are those that provide the most dietary energy per unit weight

Main Findings

Key facts

- A large proportion of consumers expressed concern about imported foods, particularly those from outside of the EU. Forty three per cent of consumers on the island of Ireland were concerned about the quality of food imported from within the EU, whereas 54% were concerned about the quality of imported foods from non-EU countries.
- Consumers are most concerned about the origins of their meat and fish.
- Among those who expressed concern the main food safety concerns with imported foods were poor production standards and regulations (48%), the quality of imported foods (27%) and the perception that the further food travels, the greater the risk of contamination (24%).
- The total food imports were valued at €4.6 billion (£4.2 billion) in the ROI in 2007, and €502 million (£460 million) in NI.
- The foods with the highest quantities imported onto the island of Ireland were cereals and fruit and vegetables. A significant amount of food imports onto the island, especially fruit, cereals and vegetables, are imported from non-EU Countries: China, Costa Rica, and South Africa. Meat and dairy produce are mostly imported from within the EU.
- Food imports from EU and non-EU countries are necessary for economic reasons, seasonality, trade and because of consumer demand.
- On the island of Ireland, various controls and legislation aim to control both microbiological and chemical hazards in the supply chain, and, thereby, minimise the risk to consumers.

- It is recognised that the increase in international trade means that imported foods are potential vehicles for foodborne illnesses. A variety of outbreaks have been recorded in other countries, particularly in foods served raw. However, no confirmed outbreaks have been associated with food imported onto the island of Ireland. In 2007 the FSAI reported 76 food incidents of which 41% were attributed to chemical contamination. In the UK (data unavailable for NI), the FSA investigated 1,312 food incidents, 16% were attributed to chemical contaminants, such as mycotoxins, or irradiation.
- Food transport, variety of soil, climate and transport conditions has an impact on the nutritional quality of food.
- The import of food has facilitated a greater availability and variety of food which can benefit healthy eating but could also lead to the increased availability of unhealthy foods.
- While consumers expressed concern about many food issues, including food origin, production methods and 'fairtrade', currently price is the most important factor predicting food purchasing behaviour.