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BORD BIA



Trusted European Beef from Ireland

European beef farming exemplifies the very best that the industry has to offer with the highest global standards in food safety, traceability, animal welfare and sustainability. European beef production is underpinned by strict EU food safety legislation that is recognized as the most stringent worldwide.

The EU food safety policy covers food from farm-to-fork and is designed to guarantee safe, nutritious food with high standards of animal health and welfare and clear information on the origin and labelling of food. 'European Beef and Lamb - Ireland, Working with Nature' is a joint initiative between the European Commission and Ireland, an EU member state. Ireland, who is leading this 3-year program exports high quality premium beef around the world.

Where Quality Meets Taste

The European Union is a unique economic & political union between 27 European countries that covers most of the continent. The EU is made up of unique climates and terroirs which is reflected in the unique quality and taste of our dairy products. Ireland is located in the western part of Europe bound by the Atlantic Ocean and the Irish Sea.

Ireland, who is leading this program, is the largest net beef exporter in the European Union and exports high quality, premium beef and lamb around the world.

For more information on European beef from Ireland, please email MeatLivestock@BordBia.IE

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European Beef Production -Working with Nature

To bring out the finesse in meat requires a fine natural environment. And reassuringly, the EU enjoys natural advantages for beef production. With vast array of environmental conditions among its member states, the EU is the cradle of genetic diversity.

Within the European Union, mainstream beef production relies primarily on two broad breed categories and their crosses: "Continental breeds" like Charolais and Limousin; Simmental and breeds from Ireland like Aberdeen Angus, Hereford and Shorthorn.

Furthermore, different favorable climatic conditions - like Ireland's temperate climate; fertile soil; green, lush grass; fine air quality - underpin our natural advantage for beef production. Cattle in Ireland are part of a grass-based system and spend most of the year grazing in lush green pastures, in total harmony with their natural habitat.

Continental breeds are generally larger in size and mature later. Angus, on the other hand, are generally smaller in size, mature earlier and produce a more marbled beef. These breeds and their crosses ensure the highest quality and taste in beef, meeting the needs of today's consumers.



Safety and Traceability

The EU is committed to sustaining the highest international standards of food safety and animal health standards through coherent "farm to fork" systems and continuous monitoring.

Animal identification and traceability through the whole beef production system are strictly implemented. These measures are reinforced independently by each member state's food safety authority. In Ireland that is the Department of Agriculture Food and the Marine.



Detailed EU regulations on the identification and traceability of bovine animals have been in effect since 1997. These regulations include:

- ment system)

This complex and detailed system of identification and traceability allows all beef to be traced back to birth, allowing the consumer to have absolute confidence in beef from the EU.

Every beef animal in Ireland is tagged at birth and issued with an individual passport to record all farm movements and health history during its lifetime. No animal can enter a production facility without its passport being verified through the Irish Department of Agriculture's AIMS (Animal Identification and Movement System). Thanks to the System, all Irish beef can be traced back to its birth and the farm of origin throughout all processing, manufacturing and packing procedures.

BEEF LABELLING

EU Beef Label: the consumer's key to all information. All Beef fresh, frozen or processed to be sold to consumers in the EU must include detailed label information that enables the consumer to trace back through the production chain to the farm of origin. This provides full transparency to the consumer.



ANIMAL IDENTIFICATION & TRACEABILITY

• Individual animal identification with 2 ear tags Individual passports for each animal containing data on all movements from birth to the point of slaughter Maintaining a register on each holding (farm, market, etc.) All data is centrally stored in a government national database -In Ireland, this is called AIMS (animal identification and move-



TRACEABILITY AND FOOD SAFETY OF EUROPEAN BEEF: ON THE FARM

European consumers are very demanding about the beef they purchase and have clearly conveyed that they want their beef to be produced in an environmentally sustainable manner in wide open spaces and from healthy animals. The veterinary controls and Beef Quality Assurance schemes are also developed by member countries to ensure the highest level of food safety and animal health.



The European Union aims to ensure the highest level of food safety and animal health through coherent "farm to table" measures and ongoing monitoring. EU Regulation 820/97 establishes a regime of individual identification and traceability of cattle by Beef labelling and system of bar codes.

EU Regulation 820/97



We are encouraged to improve our environment, to grow new hedgerows, to create habitat for wildlife like birds and bees and to grow crops that help to improve our soil and our environment.

The reason why beef in this part of Europe is of such high quality is the fact that our climate allows us to feed our cattle outdoors for most of the year on lush green grass.





When an animal is born, we must tag the calf and then we record this tagging with the Department. Within a day we get back a passport for this animal. The animal will have this passport for life.

Before animals are monitored and tested on the farm and the end product is exposed to a range of toxilogical and other tests. Hormones and growth promotors are forbidden and antibiotics may only be used under veterinary supervision.



BEEF QUALITY ASSURANCE

As the European leader in food excellence, Ireland goes an extra mile on top of EU mandated legislation. In recent years, Quality Assurance schemes for the beef sector have been widely introduced at the national level, further enhancing food safety standards and meeting the demands of consumers. The EU strongly supports this trend through actions, such as introducing EU wide quality schemes like the Protected Designation of Origin (PDO), the Protected Geographical Indication (PGI), & Traditional Specialties Guaranteed (TSG); and establishing the European Food Safety Authority (EFSA) which is based in Ireland. It is through the strength of National Quality Assurance Programmes that European Irish Beef produced and processed by approved suppliers may make use of claims approved under the USDA Process Verified Program, please visit processverified.usda. gov/ to learn more.

"The European leader in food excellence"

VETERINARY CONTROLS IN THE EU

All veterinary controls within the EU are independent. Processors are controlled by the national government's competent authority. These controls start at the farm level and follow the product through to the consumer. EU rules determine substances that can be applied to beef animals. Hormones and growth promoters are forbidden within the EU and antibiotics may only be used under strict veterinary supervision. Beef processing and packing facilities within the EU are under the supervision of the member state Government. Particular attention is paid to sanitary regulations to ensure that the cold chain is uninterrupted. Meat processing staff are highly trained and qualified to meet the highest EU food safety and sanitation standards.



USDA PROCESS VERIFIED PROGRAM

1. Irish Grass Fed Beef*

*Irish produced beef fed a diet greater than 90% grass (fresh weight) and at pasture for more than 220 days per year. See www. bordbia.ie/grassfed/ for more information.



2. Pasture Raised Beef*

*At pasture for more than 220 days per year (with a 40-day tolerance allowed where weather conditions, soil type and other environmental conditions are determined as an impeding factor to grazing outdoors). See www.bordbia.ie/grassfed/ for more information.

3. From Certified Sustainability Scheme*

*Verified sustainability programme from farmers to processors. See www.origingreen.ie/ for more information.

- 4. Raised on Family Farms
- 5. Raised Without Use of Growth Hormones
- 6. Responsible Use of Antibiotics
- 7. Full Farm to Fork Traceability
- 8. From Quality Assured Farms

Beef Processing

There are 395,000 beef farms in Europe produce 17.5 billion pounds of beef, 6.5 billion pounds of which is exported. The European Union lays down strict guidelines and responsibilities for the cycle of production of food animals from their birth through to slaughter and processing. This ensures the best possible food safety and quality during each step of beef production. In Ireland, there are 32 EU approved export beef processing facilities. EU legislation requires the presence of an official government veterinarian and support staff (official auxiliaries) throughout slaughter.



"395,000 beef farms in Europe produce 17.5 billion pounds of beef, 6.5 billion pounds of which is exported."

HYGIENE

The processing of the carcase after slaughter follows strict procedures to ensure that there is no contamination of the carcase during the production process. Factory operatives are highly skilled and trained to ensure that they operate to the highest hygiene standards. This is monitored and verified by the plant's quality control team and by the Competent Authority's staff. The adherence to strict verifiable hygiene practices aids in achieving a long shelf life for the product.

GRADING

Beef carcases are graded to the EUROP standard, an evaluation that takes into account muscle and fat content of the meat. In Ireland, all beef cut and order specifications are meticulously fulfilled by expert processors. Thus, while orders are made by many diverse consumers from over 80 countries (over 100 retail customers in Europe alone!), each with specific requirements, each order's specifications are guaranteed.

Traceability and food safety of European Beef: FROM PROCESSOR TO CONSUMER

1. Collection

< **50** km

Beef processing is a localized activity, with farms typically within a 50km radius (31 miles) of the plants they serve. Transport is efficient and highly controlled and stress minimized on animals.

2. Slaughterhouse

When the animals arrived at the abattoir, its identity and history are transferred into the processor's database. The label contains the product code, batch code, country of origin, and country of slaughter, factory of slaughter, factory of cutting, kill date, pack date, cut by date and use by date.

3. Processing

A hi-tech computer system shares information throughout the entire production chain. The animal's identity, all movements and full history can be traced to the carcass label attached to each guarter at the abattoir.

4. Cutting Stage

Quarters then enter the boning hall where they are cut to customer's specific requirements under natural conditions by highly trained and licensed professionals. Cuts are then weighed, vacuum packed and labelled with the barcode which contains the product code and information of slaughter and full traceability.

5. Distribution

When the distributor places an order of beef, the processor then picks product from the cold storage facility. The primal cuts are then scanned out of storage and transported to the depots of distributor where they are picked for the stores order for that particular day.

6. Store

All the prepacked products are sold in the store with a meat label that contains the records of when the beef was delivered and processed with the barcode that makes link between the primal cut and the batch of animals from which it originated.

7. Consumers

Sustainability

With the global population expected to exceed 9 billion by 2050 and income levels increasing, the demand for beef is on the rise and will continue to grow. However, quality beef production requires land, water and energy. It is therefore essential to improve environmental sustainability on a global scale.

The EU is committed to ensuring sustainability on farms and in the processing system through Agri-Environment schemes. The aim of these schemes is to encourage farmers to protect and enhance the environment on their farms. They commit themselves to adopt environmentally friendly farming practices and in return are paid a premium for producing sustainable food.

"best practice... measuring the continuous improvement"

In Ireland, the commitment to sustainability is a national philosophy under the national sustainability program Origin Green, implemented by Bord Bia, the Government of Ireland Food Board. Taking animal health and welfare, land management, biosecurity and safe farming practices into account, Origin Green sets out specific requirements for the best practice on Irish beef farms. It also provides a framework for measuring the continuous improvement of each participating farmer, recording and monitoring environmental credentials at the farm level.

Furthermore, it also assists companies, retailers and food services operators to meet their commitment to this philosophy. As part of this process, Ireland has set its ceiling on targeted greenhouse gas emissions, developing carbon footprint models with the Carbon Trust for beef. Today, Ireland is one of the most carbon-efficient beef producers within the EU.

> Origin Green IRELAND

ANIMAL WELFARE

As animals' ethical treatment is enshrined by the EU legislation, European citizens are cultivated to care deeply about animal welfare. Such principles apply to every part of the supply chain - on the farm, throughout transportation, and at the slaughterhouse.

GRASS FED BEEF

Livestock production across the EU relies heavily on fresh grass and conserved grass (silage or hay). Raising cattle in Europe, with its relatively small to medium-sized modern family farms, is very different from mass livestock production with the vast industrial feedlots in other countries. EU cattle spend most of their lives outdoors grazing on lush green grass.

The key to producing quality grass-based beef is to raise the animal in its natural habitat and by its natural behavior. Outdoor grazing is the most common practice in the EU. In many member states, especially in mountainous regions, there are long-practised grazing traditions: "transhumance practices"-where herds migrate from one grazing ground to another in a seasonal cycle; typically to the lowlands in winter and highlands in summer.

In the West of Ireland where the climate is particularly mild and favourable to grass growth, this practice is reversed where some farmers move their cattle up to the higher plateau to graze over the winter. These limestone plateaus are measurably warmer when compared to the lowlands. The proximity to ample grassland, dry lying area, and plentiful water provides a very good grazing environment for the cattle. The grass itself grows with a vast range of wild herbs alongside, supplementing cattle's diet and improving their general health and beef quality.

The beef sector in Ireland is rooted in grass-based production systems at farm level. With the natural advantage of the ideal climatic conditions for growing grass coupled with the management practices that have been developed and adopted by Irish farmers over generations the grass-based productions systems found in Ireland produce healthy, natural and great tasting beef products.



"EU cattle spend most of their lives outdoors grazing on lush green grass."

The Bord Bia Grass Fed Scheme for Beef and Dairy has been developed in response to the demands of the marketplace.

The development of the grass fed standard for Irish beef has involved ongoing, active consultation. The grass fed standard is built on two key criteria, namely:

- A minimum of 90% of an animal's diet during their lifetime on a fresh weight basis must be grass or grass based forages
- The annual average days of grass stands at 220 days with an allowance of up to 40 days where soil type or weather may prevent longer grazing seasons.

Research has highlighted a significant market demand for grass fed products. Grass fed is a term that consumers are familiar with that holds positive associations as premium, natural and healthy.

Consumers also believe that grass fed cattle lead more 'natural' lives outdoors and are more likely to be treated ethically. Furthermore, Ireland is already strongly associated with grass fed production and the grass fed standard allow Ireland to robustly verify claims we wish to make around our production systems.

"European beef has become the choice of the world's top Michelin Star chefs and top retailers."

Taste the Difference

European beef has become the choice of the world's top Michelin Star chefs and top retailers. Given the advantage of the natural environment and the way cattle are raised and treated in the European Union, the beef is always tender in texture and immensely rich in taste. The natural production system gives it the perfect flavor. It has a full, meatier flavor, making it one of the most succulent and appetizing beef offerings available on the global market. Each bite offers a burst of juicy palate-pleasing taste with exceptional quality.



Business Partnership

With Europe's ideal beef producing conditions, EU beef is of exceptional quality. The philosophy of 'working with nature' enhances the safety and quality of beef production. It also enables us to carry out the duty of care - to look after our valuable natural resources and protect them for our next generations.





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IRISH FOOD BOARD

EUROPEAN LAMB Ireland, working with nature



Trusted European Lamb from Ireland

European sheep farming exemplifies the very best that the industry has to offer with the highest global standards in food safety, traceability, animal welfare and sustainability. European lamb production is underpinned by strict EU food safety legislation that is recognised as the most stringent worldwide.

The EU food safety policy covers food from farm-to-fork and is designed to guarantee safe, nutritious food with high standards of animal health and welfare and clear information on the origin and labelling of food. 'European Beef and Lamb - Ireland, Working with Nature' is a joint initiative between the European Commission and Ireland, an EU member state. Ireland, who is leading this 3-year program exports high quality premium lamb around the world.

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EU Sheep Meat Production

There is a reason why European grasslands are called a "Green Goldmine". The ideal temperate climate boosts grass growth, allowing sheep to spend their time outdoor grazing on lush green grass in total harmony with nature. This is a major natural advantage for the European Union's sheep meat production.

There is a wide variety of mainstream sheep breeds in the EU. Sheep come in all shapes, sizes, and colors, and there are many ways to classify them. In the European context, sheep production relies primarily on 2 broad breed categories - those bred for meat and those bred for milk. In the EU, 60% of the breeding flock is made up of meat breeds. These sheep are selected and bred for their ability to gain weight rapidly and produce muscular, lean and high yielding carcases.

Apart from the mainstream sheep breeds, there are also numerous local breeds also known as "Heritage" breeds. These breeds are known for their distinctive geographical challenges and are adapted to their environment, be it moorland, seashore, or mountain. For instance, today, the main breeds in Ireland are the Suffolk and Texel. The Belclare can be considered a new Irish breed and has been developed over the last decades specifically for local conditions. Named after a village in Co. Galway, it is noted for its increased fertility. The more traditional breeds of the Blackface, a hardy animal which predominates in the rocky western uplands, and the white-faced Cheviot, which is more common on the eastern hills are still prevalent in Ireland's hills and mountains. Heritage breeds bring genetic diversity to the EU sheep flock and are important stewards of their environment.

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Identification and Traceability

When it comes to food, consumer's health and safety, the EU makes no compromises. EU legislation on the traceability of sheep is based on the principle of individual animal identification, with the objective to ensure food safety and traceability.

- Individual animal identification with a minimum of 1 ear tag
- Flock register maintained on farm
- Movement document to accompany animals when moved off farm
- Recording of ear tags onto a computerized database at the point of slaughter

Through a system of bar codes, individual processing plants are able to trace the finished product throughout the production chain back to the farm of origin. This system of identification and traceability allows the consumer to have absolute confidence in sheep meat products originating within the EU.

Ireland has one of the most comprehensive lamb traceability systems in Europe, regulated by the National Sheep Identification System (NSIS), monitored and controlled by the Department of Agriculture, Food and the Marine. This system ensures that all sheep presented for slaughter are tagged with documented movement certification and flock register records, maintained by both the processor and farmer. With full traceability guaranteed, European lamb from Ireland offers a level of food safety assurance that few can match.





ORIGIN LABELLING

Being completely transparent to one's customer ensures quality and food safety. The EU has introduced legislation that mandates indication of sheep meat origin or place of providence. The regulation requires food business operators, including processors, retailers and butcher shops, to ensure that country of origin label information is clearly displayed on pre-packed lamb products at the point of purchase. This enables consumers to trace back through the production chain to the farm of origin, granting full transparency to the consumer.



QUALITY ASSURANCE SCHEMES

In addition to EU mandated legislation, Quality Assurance schemes have been widely introduced at the national level in recent years, further enhancing food safety standards and meeting the demands of consumers. The EU strongly supports this cause through actions such as the introduction of EU wide quality schemes like the Protected Designation of Origin (PDO), the Protected Geographical Indication (PGI), & Traditional Specialities Guaranteed (TSG); and the establishment of the European Food Safety Authority (EFSA), which is based in Ireland. Individual member states also operate a variety of voluntary quality assurance programs that operate in addition to the regulatory standards. Such schemes define a series of technical requirements that cover the entire production chain - from animal handling on the farm, through welfare and transport, product traceability in the abattoir, cutting halls and manufacturing plants. The schemes are built on ISO quality management principles and incorporate HACCP (Hazzard Analysis Critical Control Points). These schemes highlight the qualities and ensure the safety of sheep meat.

SUSTAINABLE SHEEP FARMING

Sheep are wonderous animals - not only do they produce meat, milk and wool, but they also ensure the protection of rural areas, the maintenance of landscapes, and the conservation of biodiversity. Sheep are also guardians of the environment. Many sheep breeds can help turn rocky, dry hillsides into productive pastures. They are known for being resourceful grazers, capable of finding good nutrition where few other animals would survive. In fact, sheep are less dependent on harvested grains, water and shelter than other livestock.

Sheep farming ties in well with the eco-friendly policies of the European Union. Agricultural environment measures such as the Rural Environment Protection Scheme (REPS) and more recently the "Greening" initiative, which aims to turn the EU into a resource efficient, green and competitive low carbon economy, are designed to encourage farmers to protect and enhance the environment on their farms. Farmers commit themselves to adopt environment friendly farming practices that go beyond legal obligations.

"continuous improvement"

In Ireland, the commitment to sustainability goes an extra mile through the operation of the national sustainability program Origin Green, operated by Bord Bia - the Irish Food Board. Taking animal health and welfare, land management, biosecurity and safe farming practices into account, the oneof-its-kind program sets out specific requirements for the best practice on Irish sheep farms. It also provides a framework for measuring the continuous improvement of each participating farmer, recording and monitoring sustainability credentials at the farm level.

SHEEP WELFARE IN THE EU

As animals' ethical treatment is enshrined by the EU legislation, European citizens are cultivated to care deeply about animal welfare. Such principles apply to every part of the supply chain - on the farm, throughout transportation, and at the slaughterhouse. Animal welfare regulations are routine-ly monitored by national Governments and kept under ongoing review.

Lamb - The Chef's Choice



EU production standards are among the highest in the word for both sheep meat and cheese, both of which are exported worldwide. In addition, grass-based lamb is said to have a more distinctive "meaty" flavour due to its varied pastoral diet. Hence, lamb from the European Union is world-renowned for its palatability and is the topof-mind choice for many global top chefs. By passing down traditional family recipes for centuries, Europe has developed a variety of authentic lamb dishes over hundreds of years. Lamb is deeply ingrained in the European diet and culture. Each region has developed its own traditional dishes using skills passed on from generation to generation.

Lamb is an incredibly versatile meat and pairs well with an array of worldly flavours. It finds its presence in almost every cooking method - from luxurious lamb racks or simple grilled chops to exotic dishes seasoned with Asian flavors to the world renowned Chinese hot pot. Additionally, it is a good source of protein and is rich in vitamins and minerals. Products originating from the EU sheep farms are of the highest quality.

"highest quality, grass-based lamb... is said to have a more distinctive "meaty" flavor"