

THE IRISH DAIRY INDUSTRY

Agri Aware's Farm Walk and Talk
for second level students
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THE IRISH DAIRY INDUSTRY



The Irish dairy industry and careers in the sector

The Irish dairy industry is a prospering sector that has a growing reputation for its sustainable grass-based production system, producing high quality and nutritious dairy products.

There are more than 17,000 dairy farms in Ireland, producing 5 billion litres of milk per year.


Milk production in Ireland is projected to increase by 50% by the year 2020, according to plans contained within the Food Harvest 2020 report. Some 495 million litres of milk are consumed as liquid milk in Ireland, with per capita consumption of liquid milk in Ireland being the third highest in the EU.

As milk output increases over the coming years, potential job opportunities in the sector will range from dairy farm managers, quality control technicians in processing plants and in the marketing of dairy products at consumer level.

The future is bright for the Irish dairy industry, which needs a continuous stream of young people at farm level, in processing or in the areas of marketing and sales, to deliver innovative ideas to help drive the industry forward into the future.

The dairy industry is a global industry that covers many aspects of business, from the actual production of dairy produce to manufacturing and even into the global world of financial markets, where many food commodities are traded. If entering the dairy industry, there are many different career pathways to choose from.

About the Irish Dairy Board (IDB)

 The Irish Dairy Board (IDB) is an agri-food commercial co-operative which markets and sells dairy products on behalf of its members and the Irish dairy farmer.

The IDB's core purpose is to bring quality Irish dairy products to markets around the world. It does this by sharing the story of Irish farming and explaining how Irish dairy products are produced from the milk of grass fed cows, the most sustainable dairy farming system in the world. By building markets for dairy products, the IDB aims to increase the value of Irish milk and to deliver strong returns for Irish farmers.

The IDB was established over 50 years ago. Since then, it has brought the best of Irish butter, cheese and milk powders to over 90 countries around the world. Operating from 15 subsidiaries worldwide, the IDB has sales and marketing teams working in-market across all four corners of the globe from Algiers to Beijing to Lagos and Moscow (to name just a few).

The Irish Dairy Board is the proud owner of the Kerrygold brand which is found in shops and in homes all around the world. The IDB's brand portfolio also includes Pilgrims Choice, Dubliner cheese, and BEO, a popular milk powder sold in Africa.

The success of the IDB's business is based on the unique provenance and quality of Irish milk from grass fed cows. In Ireland, we are very

proud of our traditional family farms and of our sustainable, low-carbon grass-based dairy system.

The Irish Dairy Board's cooperative ethos very much determines its values and the way it does business.

With the abolition of EU milk quotas in 2015, Ireland will be able to produce up to 50% more milk. IDB plans to use that milk to bring its product range to new markets and new customers all over the world.

Did you know?

- Irish cows graze on lush green grass for up to 300 days a year.
- In 1962, the name Kerrygold was chosen for the UK launch, and history was born.
- In 1973, Kerrygold launched in Germany and over forty years on, it's still Germany's No.1 butter brand.
- Almost 200 million packs of butter are sold in Germany each year - which is enough butter to stretch from Dublin to Berlin, 14 times.
- In 1991, Kerrygold reached America and by 2000 arrived in the Democratic Republic of Congo, and then Russia by 2007.
- Kerrygold are known for their TV advertising with the 'Who's taking the horse to France?' one of the most successful, and quoted, of these campaigns.

About the National Dairy Council (NDC)



The National Dairy Council (NDC) was founded in 1964 with the key objective of supporting growth in consumption of dairy products in Ireland. It is a non-profit making organisation funded by a voluntary dairy farmer levy.

The NDC connects with the Irish consumer to promote the quality, sustainable nature of Irish dairy products, while also giving advice on the nutritional benefits of Irish dairy products.

The NDC is a broad organisation, providing career opportunities for people based in the nutrition industry as well as the marketing and project management industries.

Common dairy breeds

British Friesian

- Originally came from the Friesland Islands and Holland via Eastern England
- Known for their high milk yield when well housed and offered a nutritious diet
- Well-built breed with a large appetite
- Can weigh up to 600kg



British Friesian

Holstein Friesian

- Originally came from the Friesland Islands and Holland via the United States and Canada
- Bred to produce higher milk and protein yields than any other breed
- Bred to make the best use of grass from milk production
- Good feeders but sensitive to cold wet conditions and require early winter housing



Holstein Friesian

Jersey

- Native of Jersey Islands located between England and France
- Produce very high quality milk with a high butterfat and protein content
- Pure dairy breed, small size but consume large quantities of herbage



Jersey

Liquid and creamery milk production

Liquid milk production

- Liquid milk is used for drinking
- Liquid milk production takes place on farms that have both autumn and spring calving
- Only 10% of milk is produced under the liquid milk system
- Production costs are higher during winter months (e.g. housing costs, more expensive feed, higher labour costs) and hence liquid milk farmers receive a higher price per litre to offset production costs; the price of milk in the shops, however, stay constant year-round

Creamery milk production

- Creamery milk is not used for drinking – it is used for the manufacture of cheese, butter, yogurts, skimmed milk powder etc.
- Spring calving only
- Grass-based system, hence a less intensive and lower cost system than liquid milk production
- Dairies pay for the quality of the milk in comparison to liquid milk systems in which dairies base their prices on the quantity of milk produced by the farmer

Milk composition

The Irish milk that we consume is of the highest quality. This is due to the stringent milk quality tests that each individual delivery of milk undergoes. The milk is then pasteurised and homogenised to ensure that it is of the highest quality and meets all safety standards.

The composition of milk is as follows:

Water: 87.8% Lactose: 4.7% Butterfat: 3.5%
Protein: 3.2% Minerals: 0.8%

Milk is produced in the cow's udder after calving. The cow's first milk is highly nutritious for the calf and rich in immunoglobulins. Energy is the most important nutrient to produce milk. The energy needed depends on the composition of the milk (i.e. fat and protein content), and the stage of lactation of the cow.

Grassland management and the dairy cow diet

The vast majority of Irish dairy herds eat grass, whether it is fresh or conserved. Unlike most other countries where dairy cows are housed indoors year round, Irish cows are at grass for the majority of the year and are only housed indoors when grass growth ceases in the winter months. This means that for Irish dairy farmers, grassland management is a key element in delivering a productive dairy herd.

As grass is such an important part of milk production a rotational grazing system is used. This is normally a paddock system where the dairy farmer has 21-24 paddocks and the cows get fresh grass every day. Strip grazing is also used. Some dairy farmers also use a zero grazing system.

Grassland management involves the following:

- Estimating the amount of herbage required for the year. The average dairy cow consumes 12 tonne of herbage/year.
- Maintaining a correct stocking density on farm. Understocking leads to wasted grass as well as indigestible and unpalatable grass, whereas overstocking leads to overgrazing and hence insufficient herbage availability.
- Applying the correct quantity of fertiliser at the correct times to achieve the herbage yield required.
- Organising a controlled grazing system, which involves having grass that is short, leafy, palatable and digestible. This is achieved by organising a carefully controlled rotational grazing system.

Silage

Silage is fermented grass, which is preserved using acid, preventing microorganisms from rotting the grass. It is the main source of fodder for dairy cows in Ireland during the winter months. Grass for silage can be produced 2-3 times per year. The first cut of grass in late May is the most important on terms of quality. At this time of the year, growth is vigorous and the grass is rich in energy.

Maize

Maize is commonly used in a dairy cow ration to complement the protein and sugar-rich grass silage. Good quality maize silage is rich in starch and fibre and is slowly digested in the rumen of the animal. By combining both maize and grass silage in a cow's diet, one can maximise the efficient functioning of the ruminant digestive system.

Concentrates

To maintain high levels of production and a good health status in dairy cows, concentrates are often added to the diet. Concentrates are comprised of a cereal (e.g. wheat), a protein source (e.g. soyabean meal), in addition to energy-rich ingredients such as molasses, citrus pulp and distillers grains. Minerals and vitamins are also added to concentrate feeds to optimise animal health and prevent disease.