

Cheese Technology

Teagasc, through its resources at its Food Research Centre, Moorepark has extensive knowledge on the science and technology of a range of cheese types including Cheddar, Mozzarella and novel hybrid varieties. This knowledge, combined with an active ongoing research programme, offers the cheese industry a range of leading edge technologies to support the innovation of cheese products and optimisation of cheese making efficiency.

Background

The fundamental knowledge on the critical factors affecting the composition, yield, biochemistry, rheology, and cooking properties of natural cheeses and processed cheese products are well understood. Teagasc has been engaged in this research for many years with food research institutes and universities on national and international platforms.

Benefits to Industry

Engagement of cheese manufacturers with Teagasc gives access to state of the art facilities and an extensive research expertise in all aspects of cheese science and technology. This facilitates the innovation of new cheese products and optimisation of manufacturing efficiency.

Areas of Expertise

- Texture and functionality of natural cheese and processed-/analogue-cheese.
- Manufacturing efficiency and component recoveries.
- Cheese flavour control and diversification.
- Development, scale-up and diversification of a range of cheese types: brine salted, dry salted, reduced-fat variants.
- Advanced methodologies for assaying cheese texture and functionality.
- Range of analytical capabilities for composition, biochemistry, microbiology, rheology, and functionality.
- Ripening rooms, mixers, culture production unit for specialised starter blends.
- Filtration and dehydration equipment for manufacture of ingredients for use in cheese products.



Range of Solutions

Teagasc can provide a range of solutions through consultancy services, contract research and collaborative arrangements with industry, including:

- Identification and selection of micro-organisms with potential to influence flavour development.
- Development and scale-up of different cheese types.
- Increasing cheese making efficiency.

Facilities/Equipment

- Pilot plant facilities for milk standardisation equipment, pilot scale cheese vats 500-3000L.
- Cookers for processed-/analogue-cheeses.

How to Proceed:

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