

## Innovative Dairy Flavours

Researchers based at Teagasc Food Research Centre, Moorepark have developed a strong scientific base on the understanding of dairy flavour pathways, particularly in relation to cheese, cheese concentrates, butter and yogurt which is now available for exploitation by companies. We can provide specialist know-how and analytical services in formulating and processing natural cheeses in combination with other ingredients in order to develop a range of dairy flavour ingredients to suit particular food applications in the convenience and snack-food industry.

### Background

Less personal time for food preparation has led to an increase in the consumption of prepared and semi-prepared convenience foods. Food manufacturers have to target these developments to ensure competitiveness. Dairy ingredients are an important component in many foods, used to provide flavour, functional and/or visual attributes. At Teagasc a strong scientific base has been developed on the understanding of dairy flavour pathways, particularly in relation to cheese, cheese concentrates, butter and yogurt, through years of research and commercial interaction.

### Benefits to Industry

Engagement with Teagasc by food companies provides

- Access to expertise, state-of the-art infrastructure and specific technological services.
- Assistance in development of new dairy flavour ingredients.

### Areas of Expertise

- Development and use of concentrated dairy and cheese flavours, and enzyme-modified cheeses.
- Selection of commercial food grade enzymes through database of key enzyme activities.
- Biotechnological approaches to flavour development.
- Selection of bacterial cultures for flavour development.
- Identification of off-flavours e.g. lipolytic & oxidative rancidity.
- Use of micro-encapsulation for flavour protection.
- Advanced microbiological, biochemical and analytical capabilities.

### Facilities/Equipment

- Pilot plant facilities incl. mixers and tall-form spray drier.
- Separation, concentration, homogenisation and heating systems.



- Analytical capability incl. advanced chromatographic techniques, GC-MS, GC-O, GC-FID, GC-PFPD, HPLC.

### Range of Solutions

There are several routes by which companies can engage with Teagasc, from provision of technological services, to consultancy, contract or collaborative research.

### Of interest to:

- Food ingredient companies involved in development of dairy flavoured ingredients.
- Food manufacturers using dairy flavours in preparation of convenience and snack-foods.

### How to Proceed:

#### For further information contact:

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