

Commercialisation opportunity



A novel reduced-fat, reduced-salt Cheddar cheese

Background

As consumers become more health conscious, the demand for healthier cheese with reduced levels of fat and salt is growing. Despite this, there are very few reduced-fat, reduced-salt Cheddar cheeses on the market, and flavour and texture is typically inferior to full-fat, full-salt cheese. We have now developed a reduced-fat, reduced-salt Cheddar cheese that conforms to both fat and salt EU regulations but retains excellent flavour, texture and sensory qualities.

Problem addressed

Existing cheese-making processes may be customized for the production of reduced-fat or reduced-salt Cheddar cheeses. However, both cannot simply be combined to produce a quality Cheddar cheese low in fat and salt. This is due to the differing effects of fat and salt on cheese composition, sugar metabolism, pH, starter culture autolysis, proteolysis/lipolysis, texture, cooking properties and sensory properties. The level of these effects depends on the extent of fat and salt reduction. Consequently, reduced-fat, reduced-salt Cheddar cheese, in which both fat and salt have been reduced to 70% of normal, is not yet a commercial reality.

Solution/competitive advantage

We have developed a unique manufacturing process which produces reduced-fat, reduced-salt Cheddar cheeses with a texture and flavour on par with full-fat, full-salt Cheddar cheese. The cheese has 30% less fat and salt than normal Cheddar; additionally it has more protein and calcium. This was achieved through careful optimisation of the cheese-making process parameters, cheese composition and selection of appropriate starter and adjunct cultures blends.

Opportunity

This technology, which is scalable, would be an attractive licensing opportunity for Cheddar cheese manufacturers and would also be adaptable to other cheeses, especially dry-salted cheeses.

Intellectual Property status

The proprietary cheese-making process and cheese composition is protected as confidential know-how.



How to proceed

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