Low-fat and still creamy
Cheese specialist Zijerveld wanted its range of cheeses to include a tasty goat's cheese with only 30 percent fat. Nobody had managed that using traditional techniques. Wageningen UR Food & Biobased Research came up with a new formula. Healthier and just as tasty. **TEXT AND PHOTOGRAPHY HANS WOLKERS**

Goat's cheese light is healthier than the full-cream variety but not nearly as tasty. Cheese wholesaler Zijerveld in Bodegraven had had one of these 30+ goat's cheeses in the assortment for some time, but was not satisfied with it. It lacked the soft, creamy texture of the full-cream variety, and was harder and more rubbery. It did not seem possible to improve on this with traditional artisanal methods, however. At the behest of the cheese specialist, the team led by Miriam Quataert, product development project leader at Food & Biobased Research, went in search of a new 30+ goat's cheese which did not have the drawbacks of the existing low-fat goat's cheeses.

**CREAMIER**

Quataert's team and technologists from Zijerveld tested several possible changes to the formula. This was done at Amalthea BV in Rijen, where goat's cheese is produced for Zijerveld. The team studied whether the use of certain fats or of a different culture led to a better end product. 'Using the right fats can make the cheese tastier and creamier,' explains Quataert. 'But cultures have a big impact on the taste and the feel in the mouth as well.' Enzymes from extracts from calves' stomachs (rennet) cause milk proteins to clot into a solid mass. In combination with protein-splitting enzymes in rennet, these enzymes influence the ripening of the cheese. During this process the tasteless rubbery lump of clotted proteins is turned into a creamy, flavoursome product.

After various tests with different kinds of fat and cultures it turned out that using a different culture produced the best 30+ cheese. 'This ensures the presence of long carbohydrates in the cheese,' says Quataert. 'These weaken the protein network that keeps the cheese together, which leads to an open texture.' This makes the cheese retain more water, resulting a creamier end product.

**TURNOVER GROWING**

The client, Zijerveld, is enthusiastic about the new goat's cheese. 'Compared with the existing low-fat cheese, the new variety really is significantly tastier,' says food technologist Philippe Coerten, operations manager at Zijerveld. 'In blind taste trials, the new cheese scored convincingly better on taste and creaminess.' The new cheese is going down well with the consumer, partly thanks to active publicity. 'We are seeing a strong growth in the turnover; sales are going up by as much as 20 percent per year,' says Coerten enthusiastically. 'Sales of this cheese are running at more than 70 tonnes a year, and are still increasing.'

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