



Yeast to replace cow

Can you make milk proteins from yeast and do away with the cow? A group headed by WUR is about to try.

You currently need a cow for dairy products. But one question in the National Science Agenda is: could there be an alternative? Intensive livestock farming has downsides for the environment and animal welfare. So could we do away with the cow as the source

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of casein, the main milk protein? Etske Bijl of Food Quality and Design thinks the answer is 'yes': you can genetically modify yeast to make it produce casein.

Bijl is leading a consortium of companies and universities that will be working on this for the next five years. It is not just about getting the yeast to make casein but also about getting the protein to clot like it does in real milk. That structure is essential, says Bijl: 'There are plant-based substitutes for milk protein but the products are nowhere near like real dairy products.'

The project is getting 1.7 million euros from the Science Agenda fund. Professor of Soil Geography and Landscape Jakob Wallinga was also awarded funding, in his case for research on how we can make sandy soils more resilient and able to cope with climate change. RK