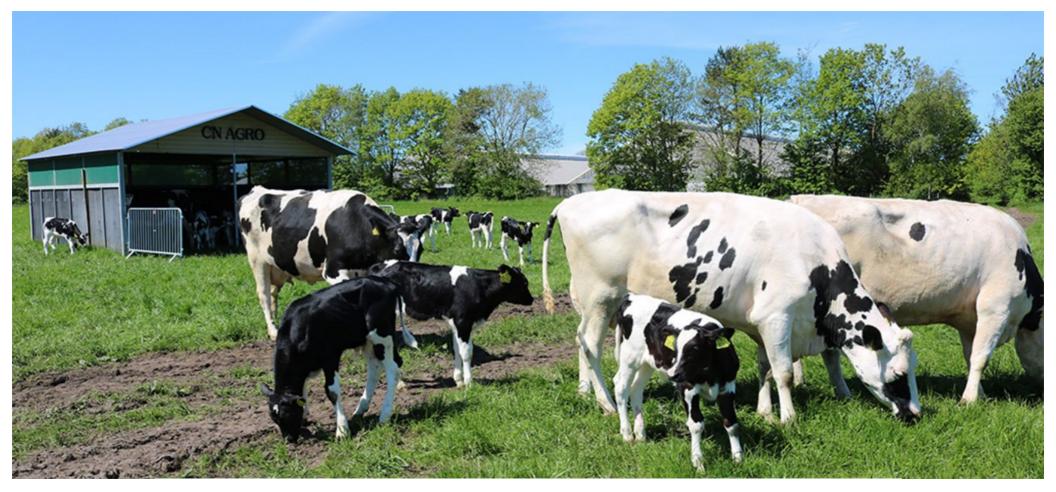
Cow-calf contact in full bloom at the Danish Cattle Research Centre at AU-Foulum

A new project at Aarhus University will promote organic and welfare-friendly veal and beef production based on a production system where two calves go together with a "suckler-aunt" until they are about six months old.



Liransiate to English: J Ammetante-køer og kaive er netop sat på græs ved AU Foulum. Dyrene indgår i det nye GrOBEat projekt, der omhandler bæredygtig og velfærdsvenlig kalve- og oksekødsproduktion. Foto: Linda S. Sørensen.

30 June 2021 by Linda Søndergaard Sørensen

On a sunny Monday, the last day of May, eight impatient culled dairy cows are standing on a juicy, green pasture at AU-Foulum. The cows have just been moved from the barn at the Danish Cattle Research Centre (DKC) and out into the field. Here, each of them is going to serve as a suckler-aunt, that is, a mother figure, for two adopted calves who will shortly arrive from the barn at DKC.

A new project focussing on cow-calf contact and sustainability

The cows and calves are included in a new project in which the production experiment is conducted at the Danish Cattle Research Centre at AU-Foulum. The project is an Organic RDD6 project called "GrOBEat" for which the purpose is to develop a more sustainable strategy for organic veal and beef production. GrOBEat wants to develop a production system based on grazing during the summer season and feeding with clover grass silage during the winter season. From June to September/October, the calves are going to be on pasture together with their suckler-aunts.

By turns, the eight cows call, graze and gaze across the landscape for the calves they are going to serve as suckler-aunts for. After a little while, the tractor arrives with the big trailer containing the 16 calves. The cows warmly welcome the procession – not for a second do they doubt what is in the trailer.





The cows intensively pay attention on the sideline while the calves are unloaded to reunite with their mother figures. Photo: Linda S. Sørensen.

After a couple of hours in a shed on the field, the calves reunite with their suckler-aunts for the great delight of both parties. To begin with, a few of the boldest calves are, however, more interested in the new surroundings. They jump around in the pen for the slight disappointment of their mother figures who walk behind them, intensively longing for the calves to suckle their udder which is tight and leaking by now.





Suckler-aunts and calves in a happy reunion. Photo: Linda S. Sørensen

Not all calves could find time for a meal - first they wanted to play.

Photo: Linda S. Sørensen.

In turns, cows and calves are to graze three pens, resulting in eight cows and 16 calves being in each pen at all times – meaning that the study includes 24 cows and 48 calves in total. Approximately three weeks before the animals were let out into pasture, each of the cows was connected to two calves in the barn at DKC, which is called bonding, so that each cow-calves pair had the time to bond. The calves have been purchased from private herds at the age of two weeks and have been fed milk via a nipple before arrival. The cows are cull dairy cows from DKC's herd. All calves are Holstein steers, that is, bull calves, who have been castrated at the age of 1 months.

Focus on high-quality veal and beef products

The new project focusses on sustainability in the organic veal and beef production. The purpose is to develop veal/beef products that live up to

consumer demands regarding animal welfare, biodiversity and climate,

concurrently increasing consumer satisfaction and pleasure for the product they eat. The project will deliver two high-quality veal and beef products on a grass-based system in which calves and cow go together until the calves are six months old:

- A. A product of a low fat content from calves (8 months old).
- B. A beef product of moderate fat content from young steers (14–16 months old) who have grazed intensively.

Extra funding has been applied for in order to be able to develop a third product:

C. A beef product of a high fat content from 25- to 27-month-old steers who have grazed semi-intensively before slaughter.

The effects of the new strategy will be quantified according to efficiency, animal welfare, biodiversity, meat quality, sensory profile and eating habits, and the overall climate impact. You can read more about the project via this link: https://icrofs.dk/aktuelt/nyheder/nyhed/artikel/sagen-er-velfaerdsboef/ (in Danish). You can also watch this video about the GrOBEat project (in Danish).





Facts about the project

Funding

The Organic RDD 6 fund. The programme runs from 2021 to 2024, is coordinated by ICROFS and is funded by the Green Development and Demonstrations Programme (GUDP).

Collaborators/Partners

Department of Animal Science and Department of Food Science, Aarhus University; Økologisk Landsforening; Center for Frilandsdyr.

More information

Link for the project website: https://icrofs.dk/forskning/dansk-forskning/organic-rdd-6/grobeat/

Contact

Overall project manager, associate professor Margrethe Therkildsen,

Department of Food, Aarhus University.

Email: Margrethe.therkildsen@food.au.dk.

Cow-calves experiment responsible, senior researcher Mogens Vestergaard,

Department of Animal Science, Aarhus University.

Email: Mogens. Vestergaard@anis.au.dk

Revised 07.04.2022 -