FutureBeefCross
- Breeding for sustainable beef

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Meeting with Atria

The aim of the project

Design the future veal calf through breeding

Deliver genomic breeding values for:

- **Feed efficiency**

- **Methane emission**

- **Eating quality**

We will record novel phenotypes and genotype on 12,000 veal calves

Foto: Colourbox

The partners

The project – step by step

Record new phenotypes in commercial herds

Record new phenotypes at Holsted slaughterhouse

Genotype and validation of data

Develop genomic breeding values

The "breeding plan"

- In total 12,000 Beef x Dairy veal calves

  - Beef breeds used:

    - 100 Danish Blue bulls – selected on calving traits

    - 80 Charolais bulls – selected on calving traits

    - 80 Angus bulls – selected on growth

  - Only offspring from Holstein cows

Novel phenotypes from commercial farms

Measurements on veal calves (6-8 months old):

- Feed intake and body weight (All-feed by Allflex)

- Methane emission (CO_2 method - Madsen et al., 2012)

Novel phenotypes on commercial farms

TMR

grain + pellets

Setup

- In total 12,000 Beef x Dairy veal calves over a 5 year period

	750 Beef x Dairy	250 Beef cattle - high IMF (HER, ANG)	11.250 Beef x Dairy
Eating quality	• Chemical analysis • Picture	• Chemical analysis • Picture	• Picture
Feed intake + BW	• Yes	• No	• Yes
Methane	• Yes	• No	• Yes
Genotyped	• Yes	• No	• Yes

Outcome of the project

Genomic breeding values for

- **Eating quality**

  - IMF, Shear Force, subcutaneous fat, etc.

- **Feed efficiency**

- **Methane emission**

  - What is the core trait? Residual methane emission, absolute emission?