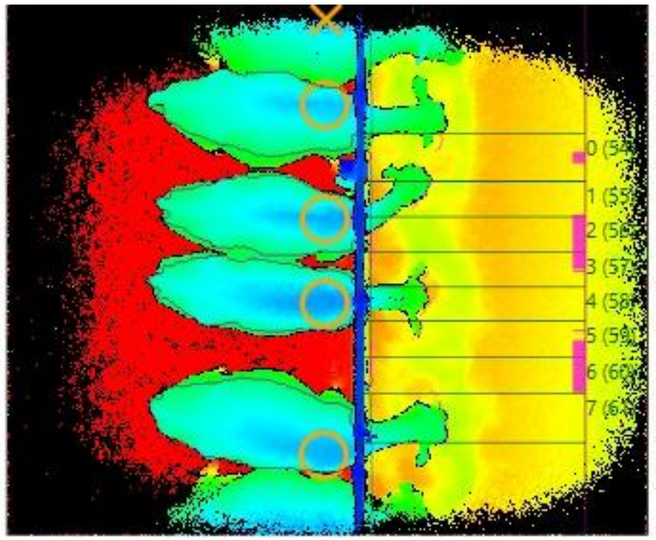
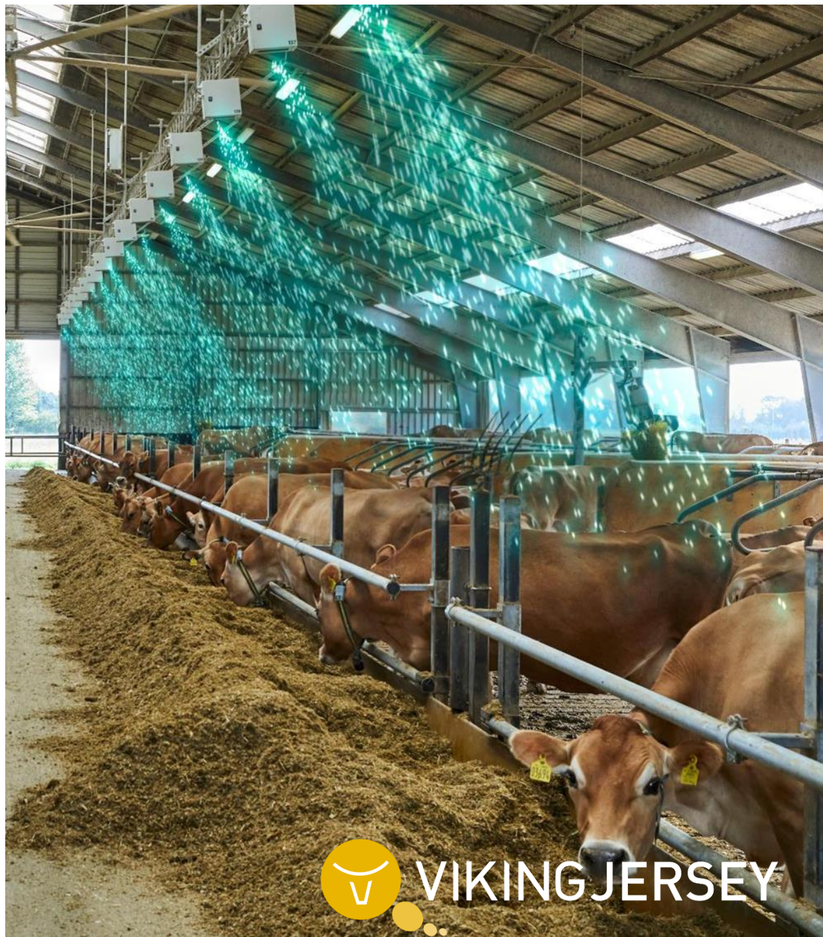
CFIT-Project to measure individual Cattle Feed InTake with 3D cameras







Saved feed = Maintenance + Metabolic

Up to two tons less feed intake - and the same amount of milk!

- The most efficient cows produce **more milk per kg of DM feed intake**
- Less feed per kg of milk produced results in **less methane per kg of milk produced**



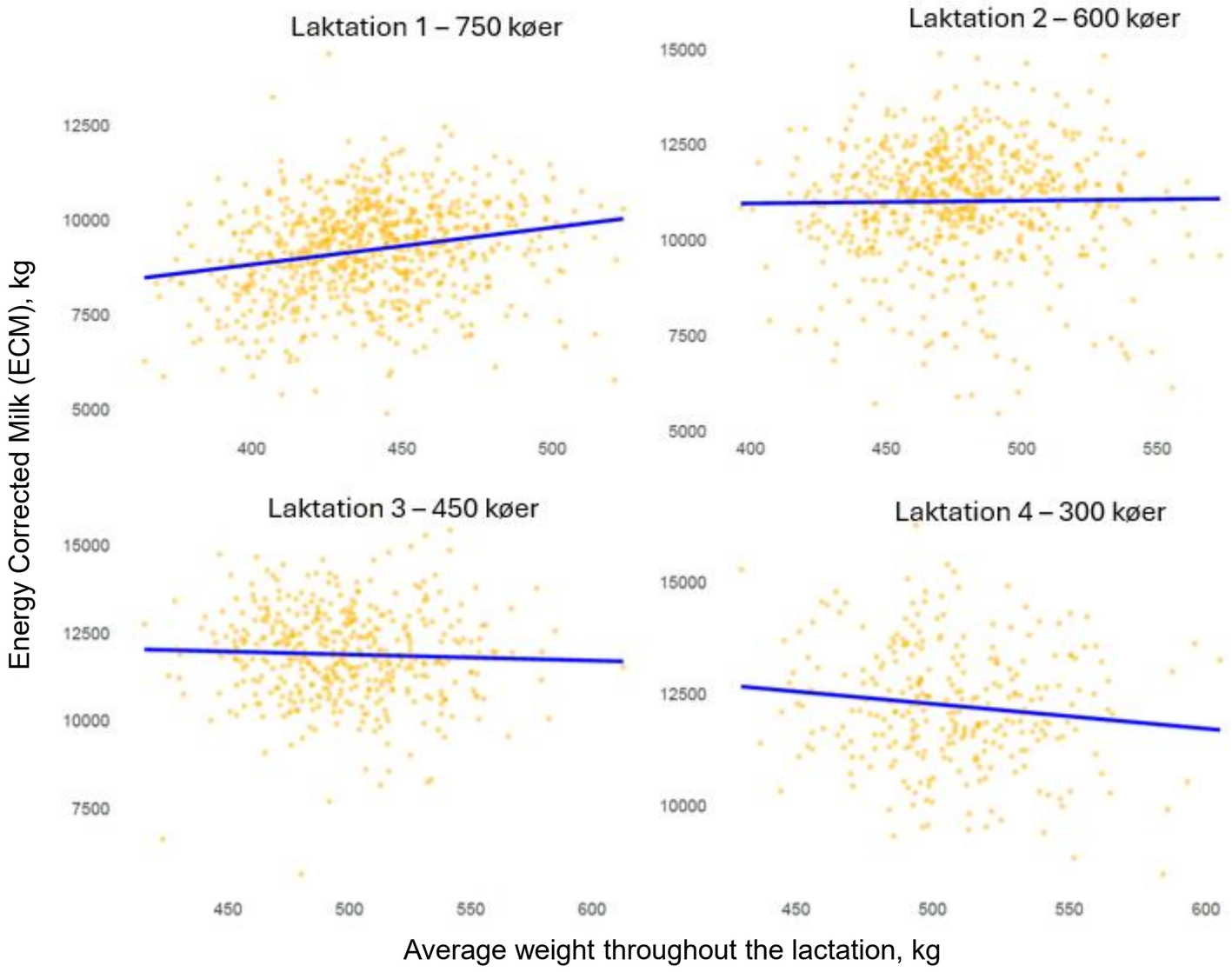
Jersey cows in the same herd & same management system

Cow	Lactation	Production 305 days, Kg milk	Feed intake 305 days, Kg DM	
1	**1.**	10,190	6,749	
2	**1.**	10,097	**5,407**	**-1.342**
3	**4.**	11,469	7,614	
4	**4.**	11,864	**5,662**	**-1.952**

Bigger cows are only highest producing in first lactation

VIKINGJERSEY

CFIT data indicate that it is not advisable to breed for bigger cows to increase production



Biggest cows have a shorter life

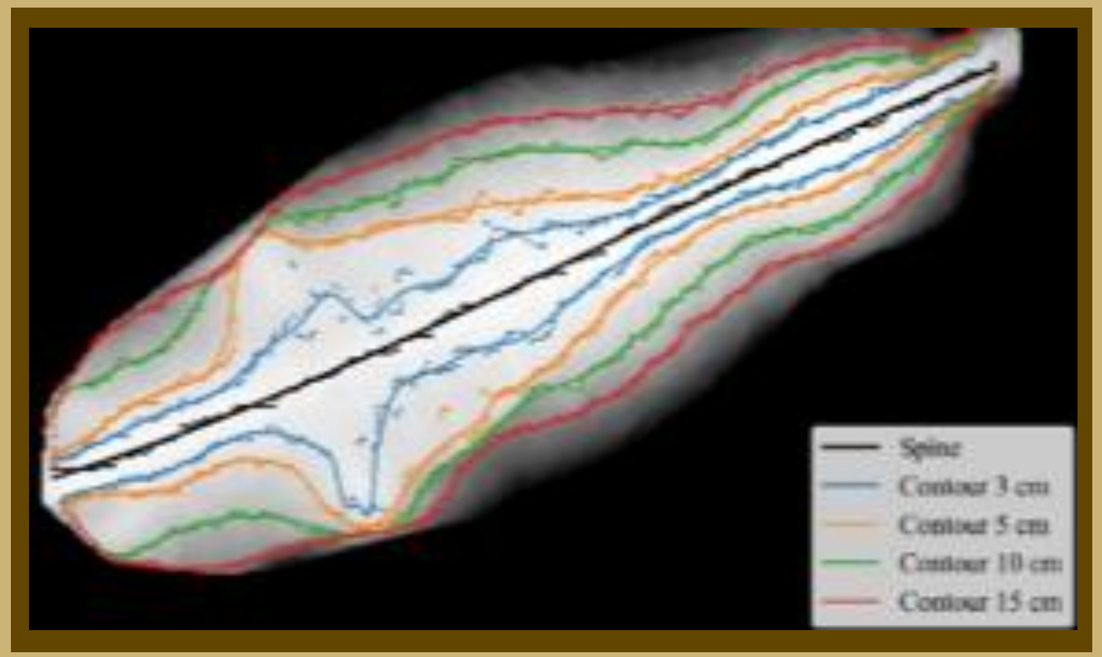
Average weight, kg, 1st to 6th lactation



Data from CFIT / CowFit

- Hoofs carrying 450 or 550 kg have app. same size
- It takes an exceptional management and environment to compensate for negative effects of breeding very big cows

Weight & reproduction



Cows split in four groups due to weight at calving:

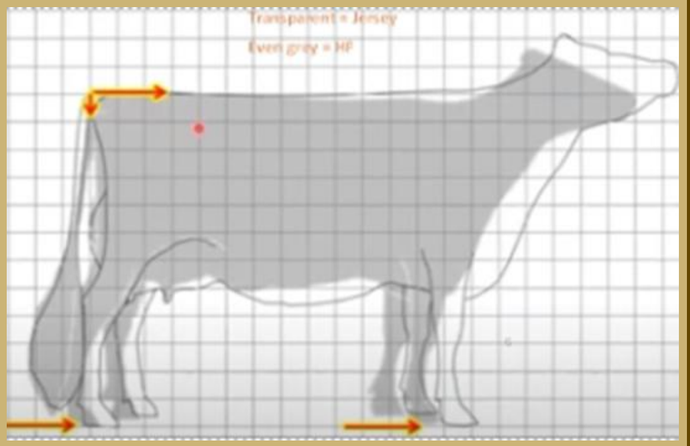
- Heaviest group had 10 more days empty than smallest cows
- Heaviest cows had 0.2 more inseminations per conception

Cows split in four groups due to weight change in dry period:

- The group with highest weight gain had 23 more days open than average

Jersey produce less but are way more efficient

ARLA Farmahead Climate check



	Units	Jersey 2025	Holstein 2025
Milk production	Kg FPCM per cow	10,033	11,486
Feed efficiency	**Kg DM per kg FPCM**	**0.35**	**0.38**
Ratio of roughage	% of DM	60.7	64.3
Feed to Young stock	**Kg DM per heifer**	**1,498**	**2,134**
CO2 emissions	Kg CO2 per kg FPCM	0.41	0.43

In an average Danish herd with 200 young stock, you can save app. 10 ha Maize (silage) from less young stock feed, in a Jersey herd compared to a Holstein

Global Methane Genetics - Jersey

"Accelerating methane mitigation for Jersey dairy cattle world-wide, through high throughput phenotyping and breeding"



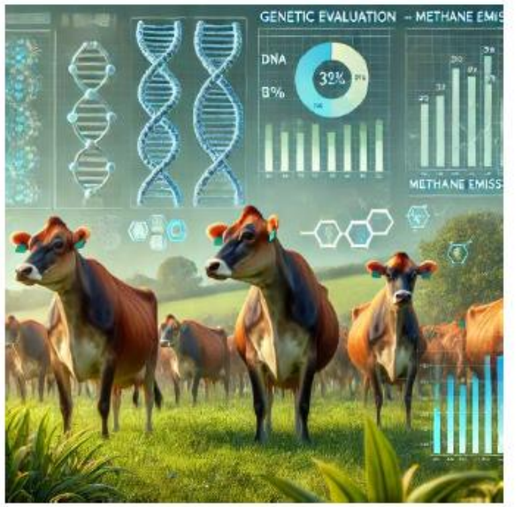
By ChatGPT

Global Methane Hub

What will this project do?

- **Collect** methane data in Canada & Denmark (32 Sniffers)
- Upload data to GMG database ***Jersey Methane Hub***
  - **Open** for new countries to join (fair share principle)
- Collaborate with **GMG projects** – e.g., microbiome
- Build **methane** national **evaluations** tailored for Jersey
- **Dissemination** by World Jersey

By ChatGPT



Global Methane Genetics

Jersey

#GoYellowCow

Initiatives and tasks:

- Measure differences between breeds
- Increase the number of registrations
- Cooperate with World Jersey in global information and knowledge sharing
- Sniffers' installed in Canada and Denmark
- First data expected to be uploaded to the GMG database by late 2026
- Rumen sampling has begun in mid-2026 (Denmark only)
- Generating interest in Jersey GMG in other countries. Support from all leading populations (except USA)

WORLD JERSEY

GLOBAL METHANE GENETICS HUB

The first Jersey Methane index

- In May 2026 VikingGenetics launched the first Jersey Metan index World wide
- Data is collected in milking robots in Danish Jersey herds (since 2026)
- Data collection is supported by VikingGenetics, Danish Jersey, Danish Jersey Support and **"The Global Methane Genetics Hub"**
- 550,000 registrations from app. 5,300 Danish Jersey cows
- We expect this initiative to contribute with a 1% emission reduction per year, from cows.

