Webinar 29-10-2021

Lars Nielsen, VikingGenetics

VikingGenetics

- Owned by 22,000 cattle farmers in Denmark, Sweden and Finland

- Daughter companies in:
  - Australia
  - United Kingdom
  - Germany

Viking Focus

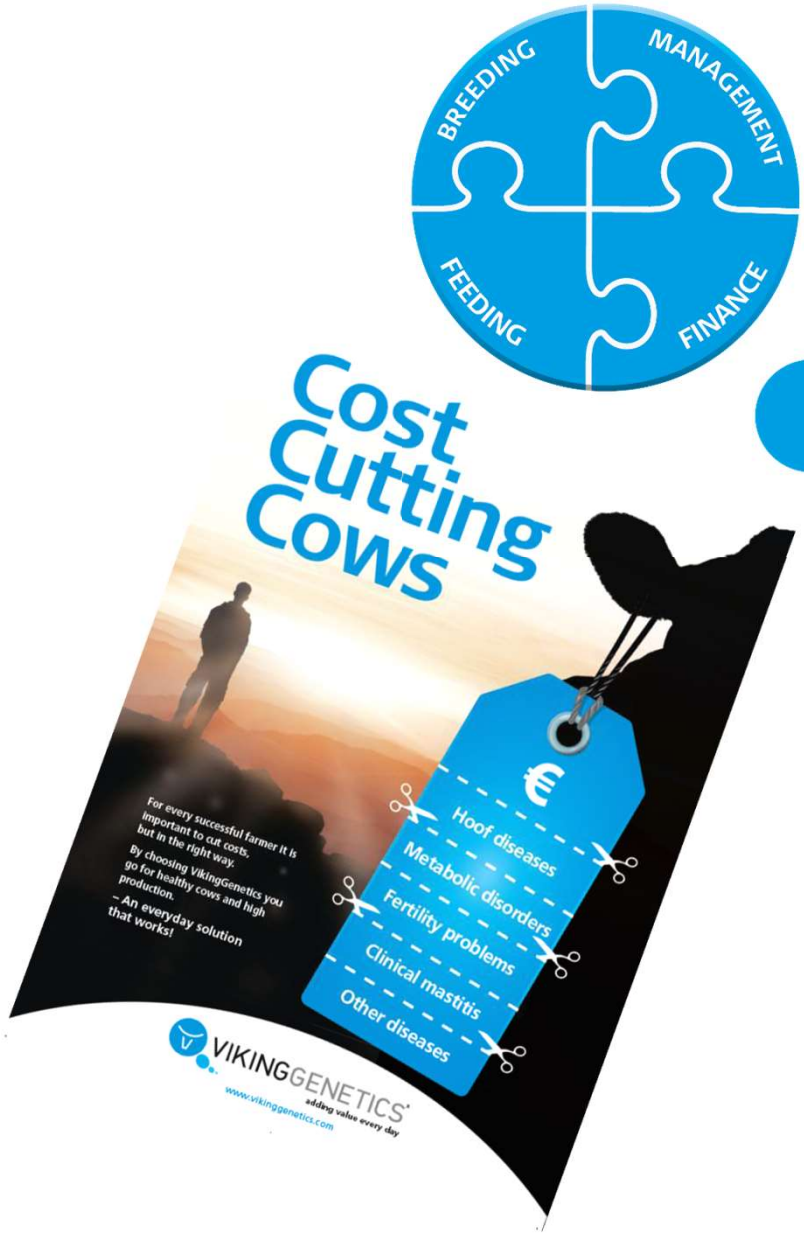
- **Needs for dairy cattle farmers**
  - Profit
  - Easy, fertile, healthy and long lasting cows
  - Easy and clear solutions

  - Respect we are producing **FOOD** with sustainable solutions

How to create profit

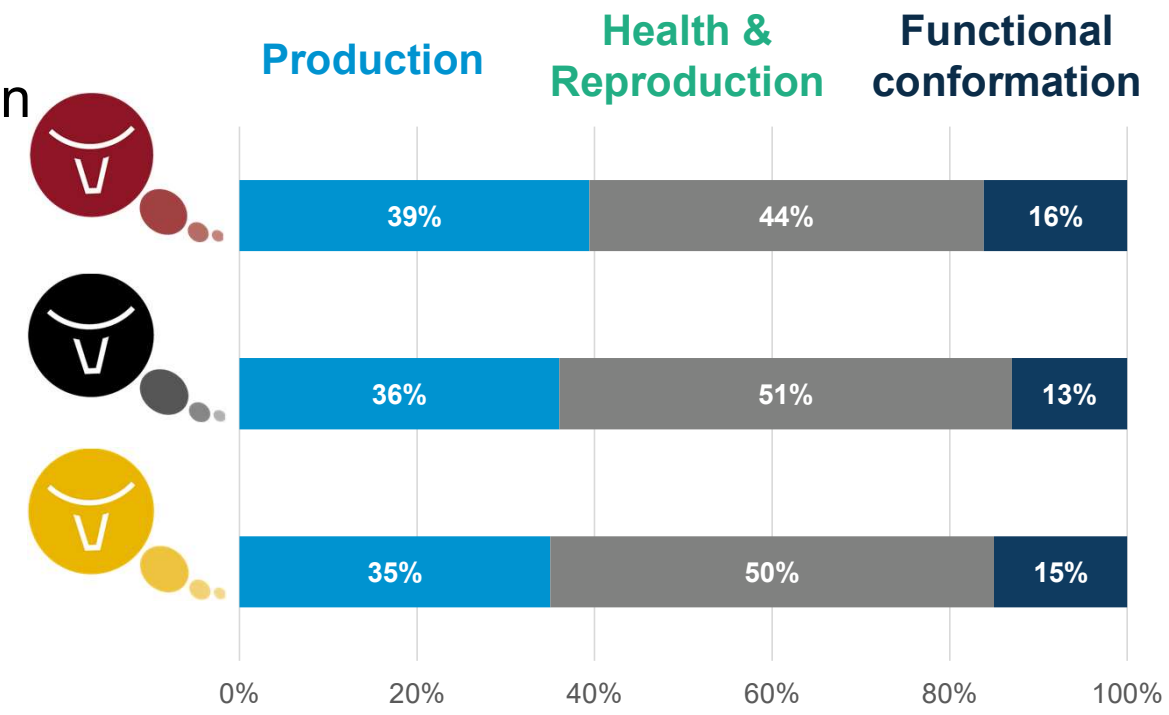
- **Increase income**
  - High production
    - Keep cows longer = higher production
  - Slaughter animals
  - Export / Sale of heifers

- **Lower the costs**
  - Less diseases
  - Easier cows = less work
  - Better reproduction



NTM is profitability

- NTM is composed by all the traits that have an economical impact on the dairy business
- Approx. 10 euro per unit



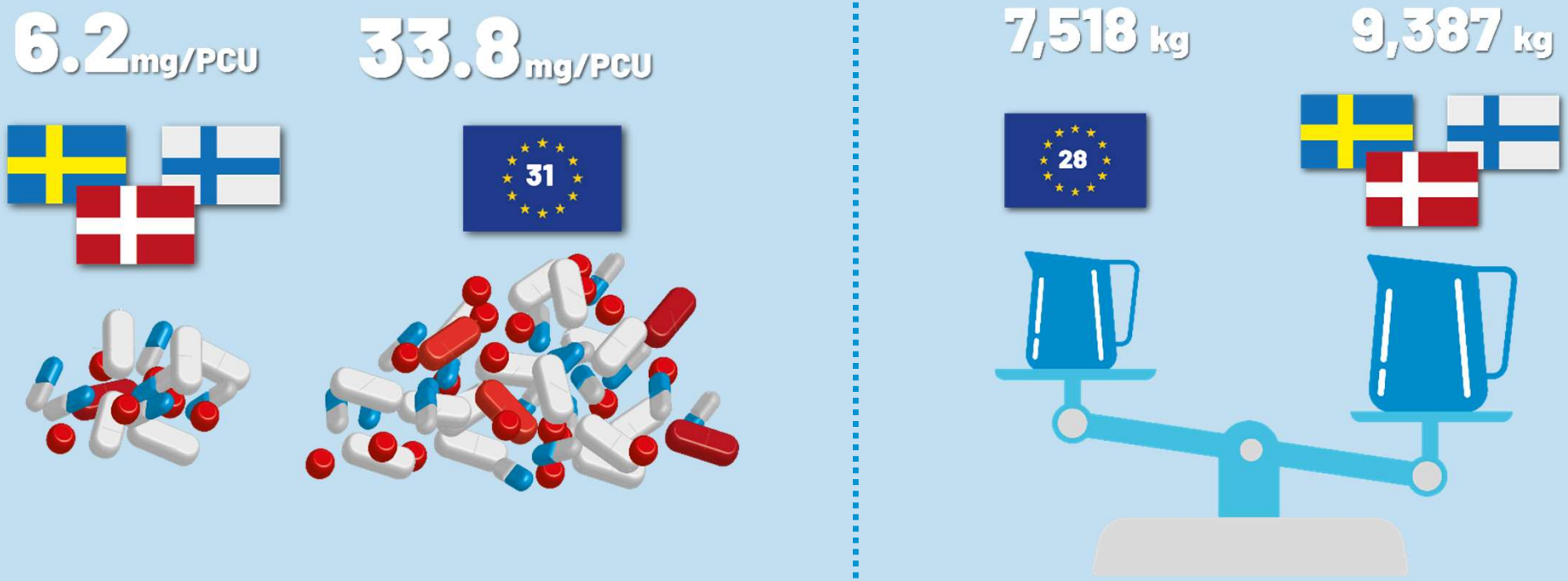
Updated: 2019-02-05

Make a long lasting cow

Trait	Correlation %
NTM	45
Daughter fertility	35
General health	40
Hoof health	32
Udder health	46
Feet & legs	22
Udder	31
Yield	-8
Body	-25

Figures from Holstein genomically tested cows, NAV 2018

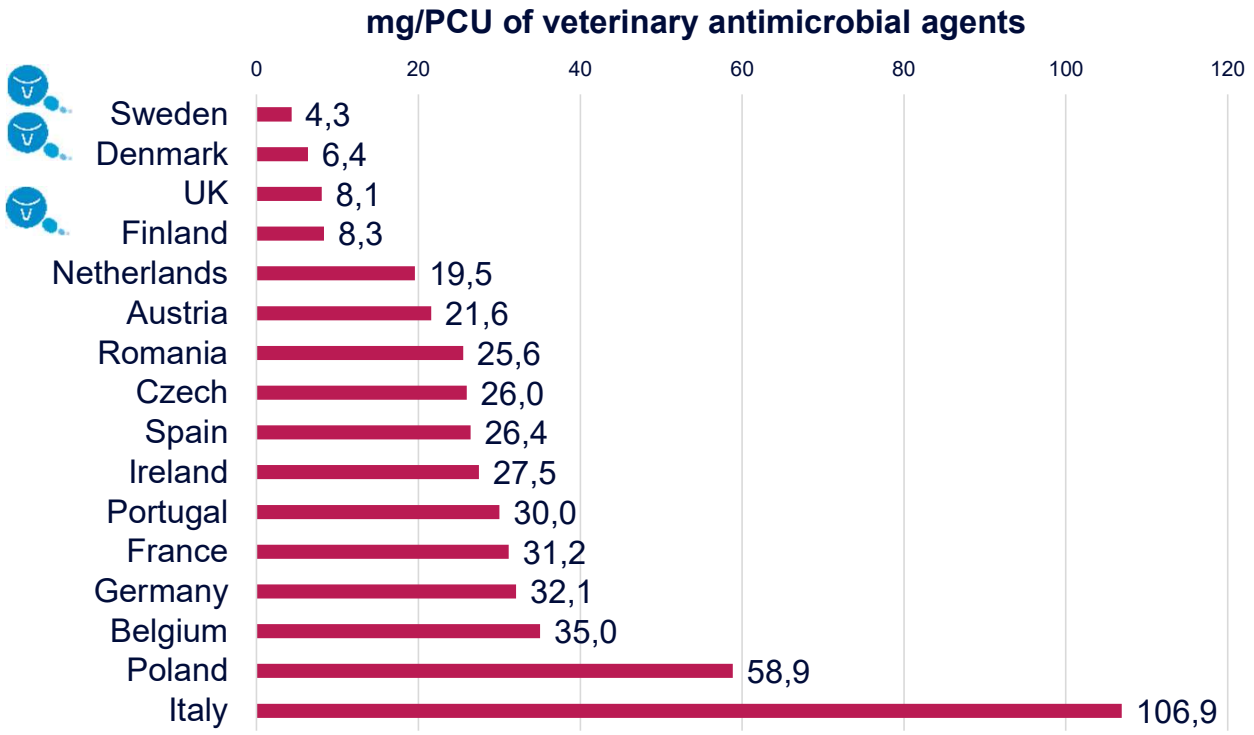
Low use of antibiotics in combination with high production



Source: Antibiotics: Adapted from the report by the European Medicines Agency, European Surveillance of Veterinary Antimicrobial Consumption, 2019. 'Sales of veterinary antimicrobial agents in 31 European countries in 2017' (EMA/294674/2019). Production: Eurostat (2018)

Lowest use of antibiotics

Sales in mg/PCU (Population correction unit) of veterinary antimicrobial agents marketed for food-producing animals 2017 weighted according to the proportion of cattle. The graph includes countries >215 PCU of cattle.



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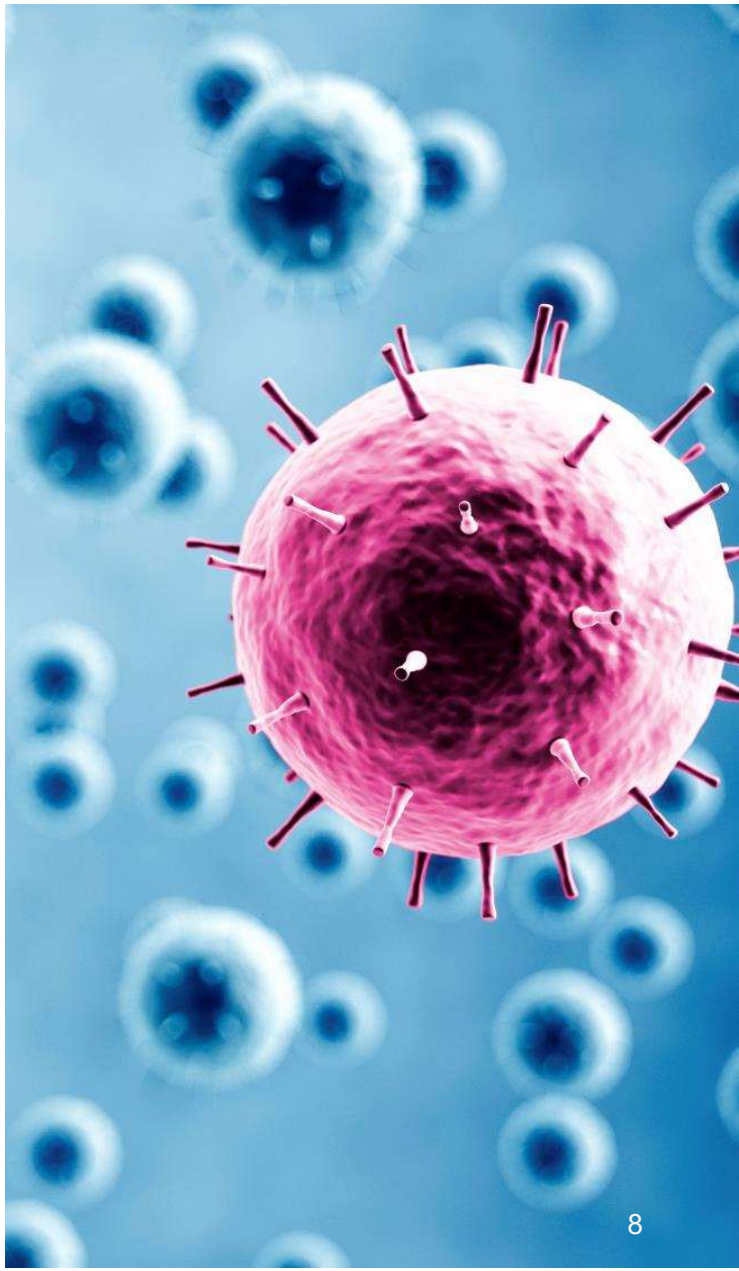
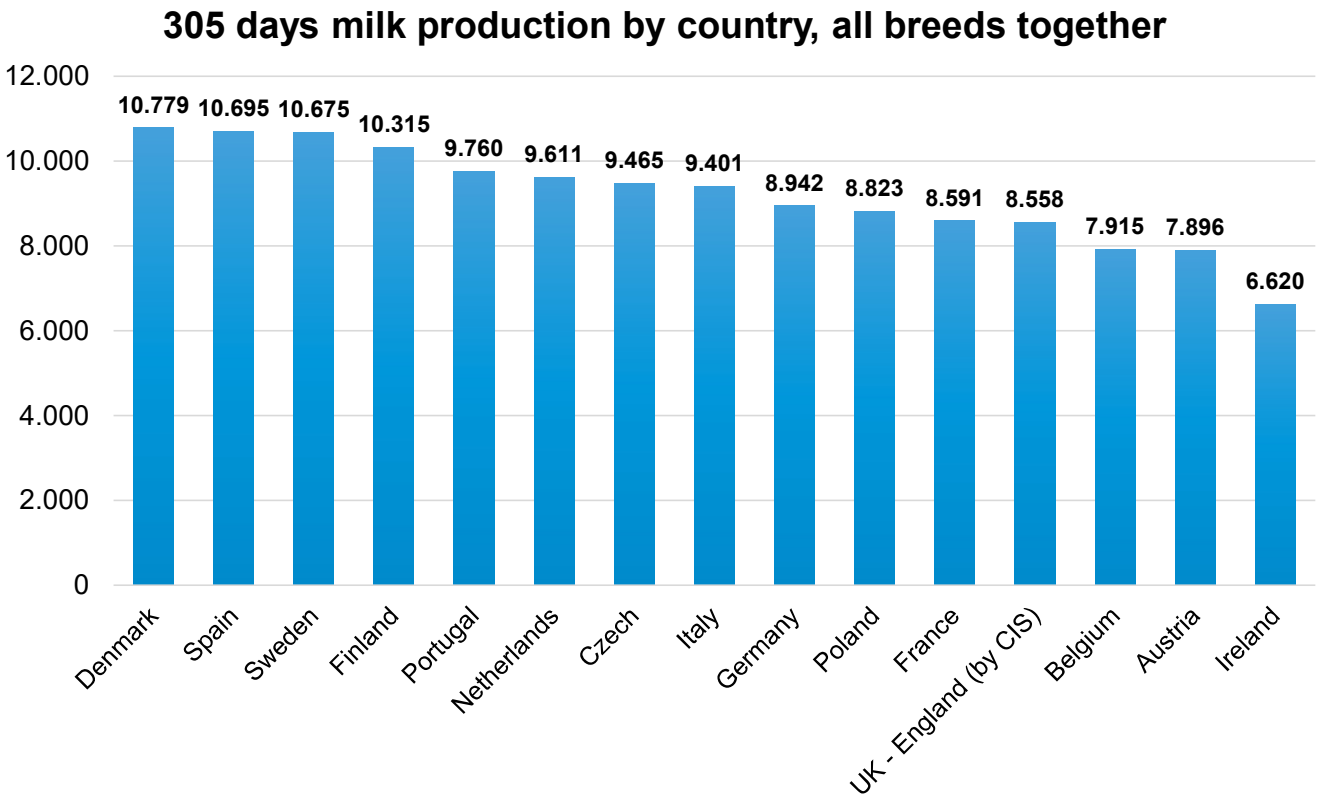


Highest milk yield



Source: ICAR (2020): Portugal & Italy (2019) & NAV 2021 (DK, SE, FIN)

Reliable breeding values – DATA

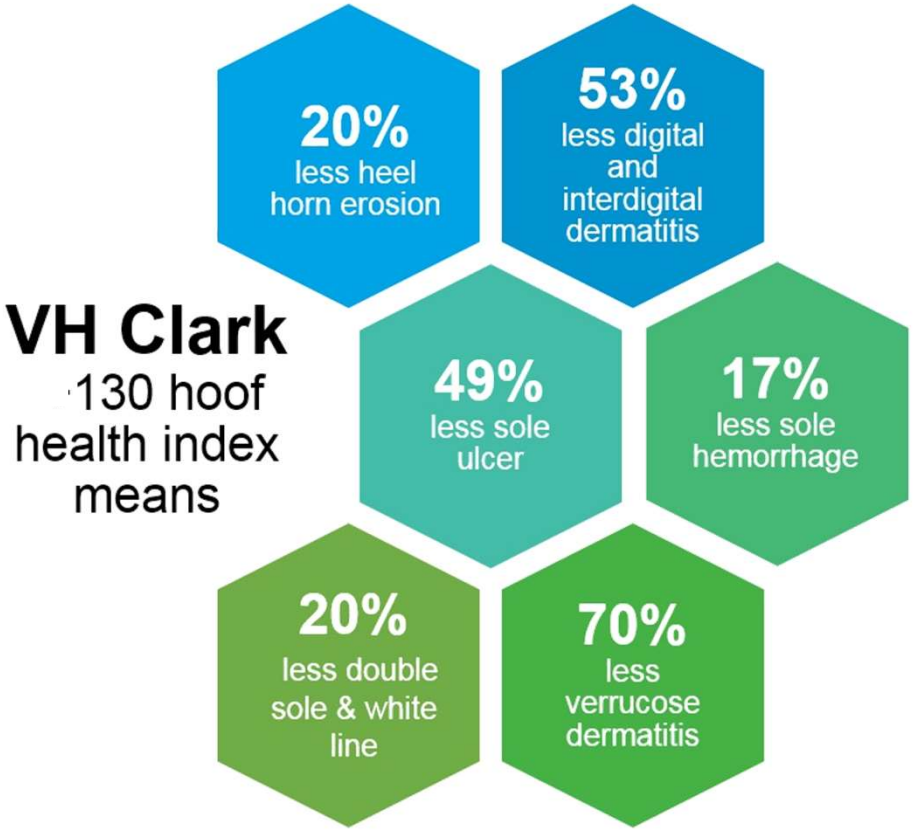
How to reduce lameness ?

Hoof problems do not only cause pain and distress for dairy cattle, but also have a huge impact on the economy of dairy farms…**and reduce longevity**


Hoof health
Powered by VikingGenetics
registrations since
2003
first Hoof Health index
2011
VIKING
HOOF HEALTH™

Breed for Hoof Health

VIKINGGENETICS
innovative breeding



Dairy Cross Concepts

GOLDENCROSS®

VikingHolstein x VikingRed x VikingJersey

PROCROSS

MONTBELIARDE / HOLSTEIN / VIKINGRED

VIKINGRED / HOLSTEIN / MONTBELIARDE

VIKINGGENETICS
innovative breeding

VIKING BEEF BREEDS®

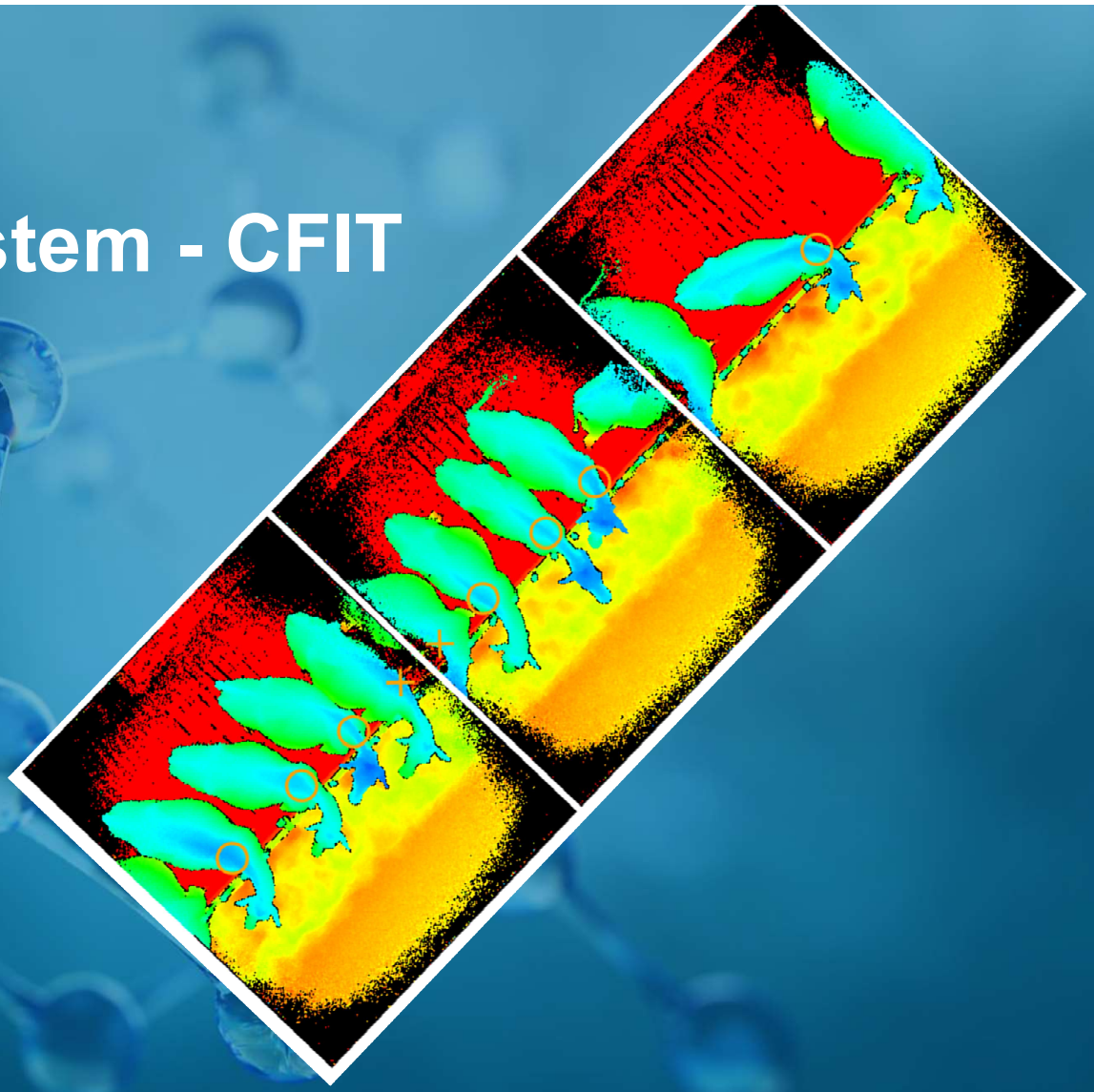
Designed for Beef x Dairy

Trends in dairy cattle sector

- Longer lasting cows
- More sexed semen
- More Beef semen

Cattle Feed Intake System - CFIT

measuring individual feed intake in commercial herds using 3D camera technology



Saved feed index timeline

2013 The research activities for developing a genetic evaluation for feed efficiency initiated

2015

Work to develop **Cattle Feed Intake Technology (CFIT)** started

2019 Aug

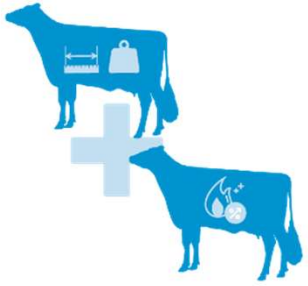
EBV for **Maintenance** Efficiency published

2020 Aug

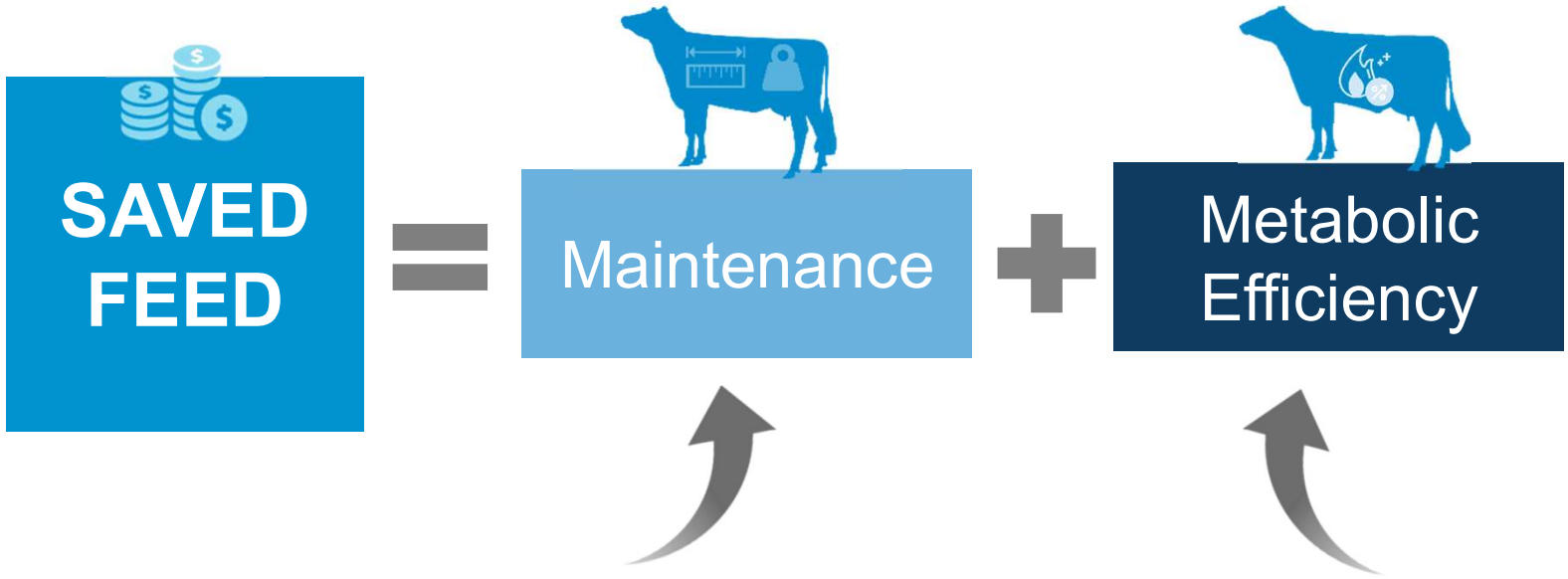
Saved feed index **included in NTM**

2020 Nov

EBV for **Metabolic Efficiency** published



Saved feed index



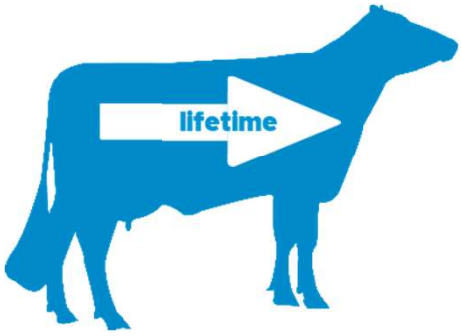
Data: Live weight measurements and conformation traits (stature, body depth and chest width)

Require information about individual cow's feed intake, yield, weight, pregnancy, etc.

Reliable data

1 Data collected from the **commercial herds** – without disturbing the daily routines and not only from a limited number of research farms

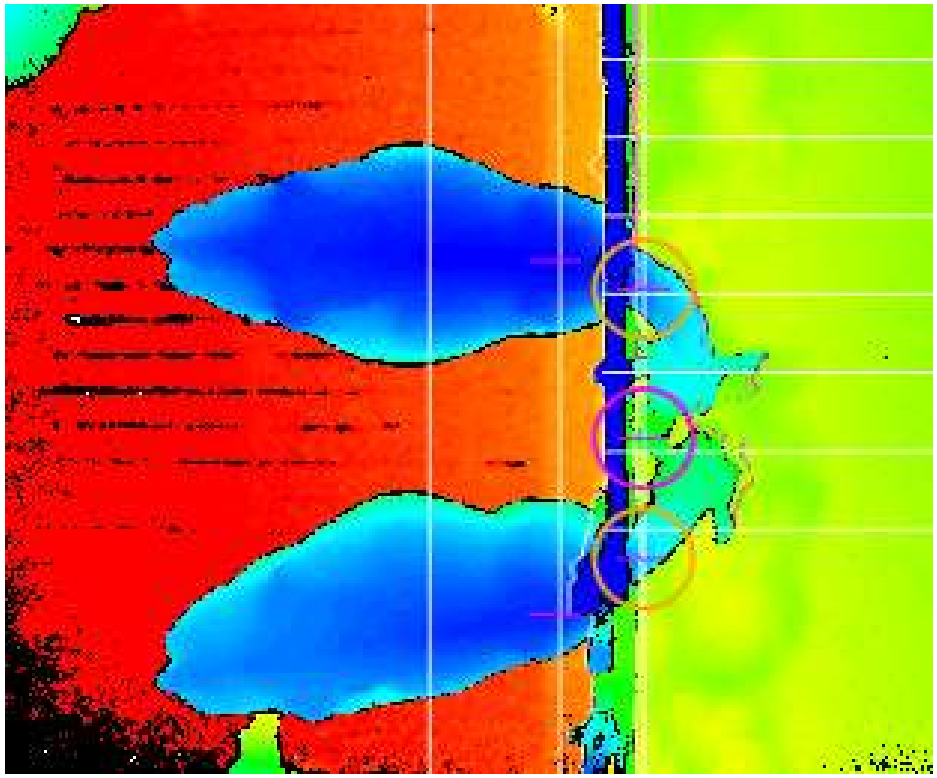
2 Data on **individual cow's feed intake** over her **lifetime** available for the different periods in lactation



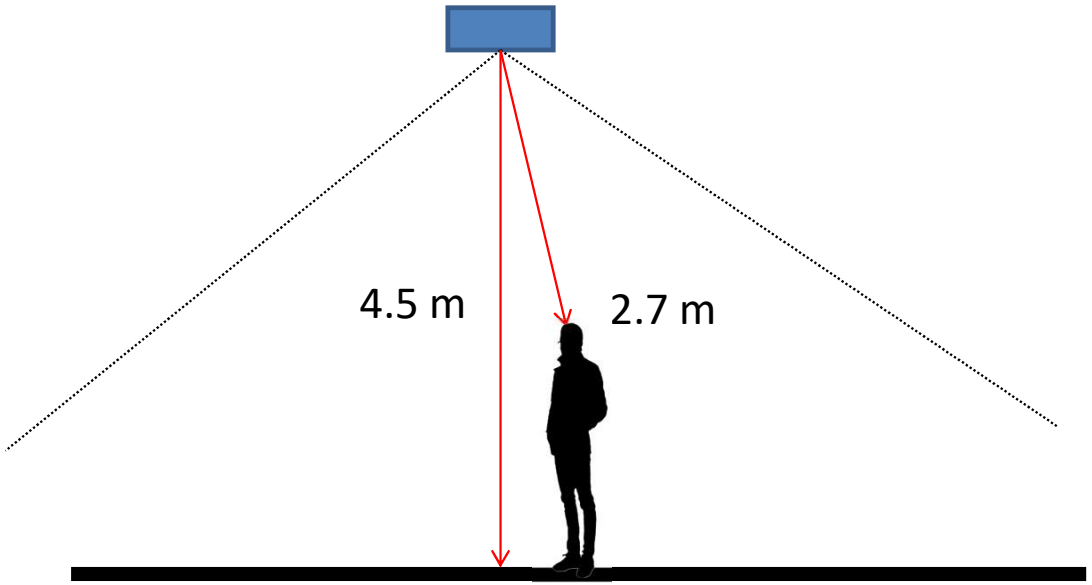
3 Data collected **across the breeds** and **herds** with different management levels

The 3 focus areas are all patented

- Identification of the cow
- Feed intake on individual level
- Body weight predicted based on shape of the back

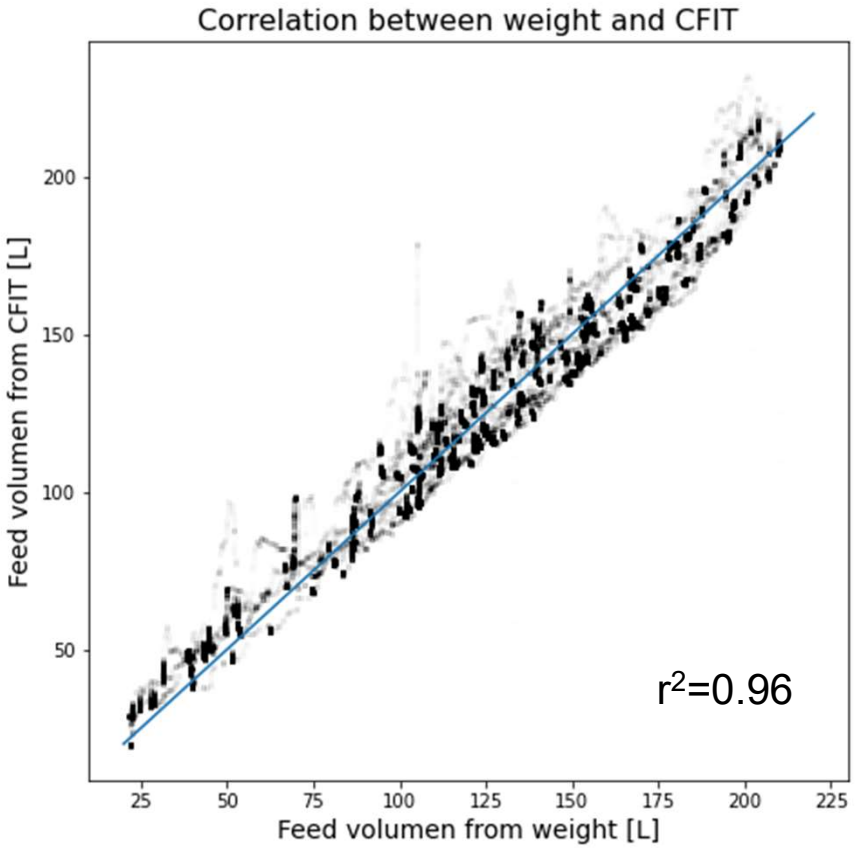


How 3D cameras work



We can quantify the height of an object across and along the object – here a person which is 180 cm high

What is the relationship between camera and scale weight?



VIKINGGENETICS
innovative breeding

Three strong partners

VIKINGGENETICS
innovative breeding

MASTERRIND
RINDERZUCHT UND VERMARKTUNG

EVOLUTION
Les éleveurs de vie

I dag

NR.	Firma	Land	TOTAL DOSER Millioner	TOTAL INTERNATIONALT Millioner	% EXPORT	Racer
1	**URUS**		32	19	53%	Holstein, Jersey, Angus, Nelore, Brahman
2	**Select Sires**		24	14	55%	Holstein, Jersey, Angus, Herford, Simmental
3	**ABS-Genus**		18	14	75%	Holstein, Jersey, Angus, Herford, Simmental, Zebu
4	**Semex**		12,7	6	47%	Holstein, Jersey, Angus, Brahman
5	**CRV**		*9,5*	2,8	29%	Holstein, Jersey, Fleckvieh, Nelore
6	**STgenetics**		7,5	5,5	73%	Holstein, Jersey, Angus
7	**Evolution**		6	2	33%	Holstein, Normande, Charolais, Limousine
8	**LIC**		4,5	1	22%	Jersey, Holstein
9	**GGI**		3,5	1	29%	Holstein, Fleckvieh, Angus, Limousin, Simmental
10	**Genes Diffusion**		3,5	1,1	31%	Holstein, Charolais
11	**AWE**		3,5	3,2	91%	Belgien Blue
12	**VikingGenetics**		3,2	1,2	38%	Holstein, Jersey, VikingRed plus Beef
13	**Masterrind**		3	1	33%	Holstein, Jersey, Angus, Limousine, Simmental

Efter fusion

NR.	Firma	Country	TOTAL DOSER Millioner	TOTAL INTERNATIONALT Millioner	% EXPORT	Breeds
1	**URUS**		32	19	53%	Holstein, Jersey, Angus, Nelore, Brahman
2	**Select Sires**		24	14	55%	Holstein, Jersey, Angus, Herford, Simental
3	**ABS-Genus**		18	14	75%	Holstein, Jersey, Angus, Herford, Sim,ental, Zebu
4	**Semex**		12,7	6	47%	Holstein, Jersey, Angus, Brahman
5	**ARCOWIN**		**12,2**	**4,2**	**34%**	Holstein, VikingRed, Jersey, Normande, Charolais, Limousine, Jersey, Angus, Simmental, Blue
6	**CRV**		*9,5*	2,8	29%	Holstein, Jersey, Fleckvieh, Nelore
7	**ST**		7,5	5,5	73%	Holstein, Jersey, Angus
8	**LIC**		4,5	1	22%	Jersey, Holstein
9	**GGI (et coop domestiques)**		3,5	1	29%	Holstein, Fleckvieh, Angus, Limousin, Simental
10	**Genes Diffusion**		3,5	1,1	31%	Holstein, Charolais
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