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Euroopa Maaelu Arengu Põllumajandusfond: Euroopa investeeringud maapiirkondadesse



- VikingRed is a breeding program
- The breeds are:
 - Finnish Ayrshire
 - Swedish Red
 - Danish Red
- The strongest red program in the world
- Selection across countries
- ~175,000 registered cows
- Low level of inbreeding compared to other breeds





Healthy, trouble-free cows

- VikingReds are naturally healthy cows with the highest production of milk and solids for red cows in the world
- VikingReds are known for their excellent fertility and easy calvings and are consistently amongst the top rankers on local indexes internationally
- VikingRed is a leading breed for crossing and will naturally boost the health, fertility, and efficiency of your herd.







Gives you fewer management costs and more time to focus on optimising your business

Makes your dairy business climate-friendly, sustainable and profitable



Naturally healthy

Excellent health, fertility and calving ease



High producing

Highest production of milk and solids



Trouble-free

Resilient, long-lasting cows



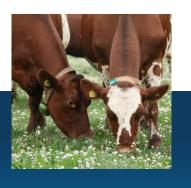
Ideal for crossing

Boosts health, fertility and efficiency in crossbreds





Naturally healthy



Naturally healthy

Excellent health, fertility and calving ease

- Excellent udder health* mastitis 8%
- Great general health*:
 - Eary reproductive disorders 3%
 - Late reproductive disorders 9%
 - Ketosis 1%
 - Other metabolic disorders 3%
- Excellent reproduction performance
 - Conception rate, heifers 63%
 - Conception rate, cows 53%
 - Calves born alive 95.2% (1st lact.), 96.6% (2nd and later lact.)

^{*} Health data based on the three first lactations



High producing



High producing

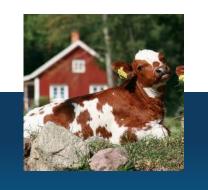
Highest production of milk and solids

Production, 305 days

- High level of production
 - Milk 9,837 kg
 - Milk 10,436 kg ECM
- High production of solids
 - Fat 431 kg
 - Fat 4.38%
 - Protein 353 kg
 - Protein 3.59%
 - Fat + Protein kg 784 kg



Trouble-free



Trouble-free

Resilient, long-lasting cows

- The high genetic level for the functional traits make VikingRed a robust and long-lasting cow
- Days in production from first calving to the end of the third lactation - 894 days
- Highest genetic level for longevity based on Interbull
 12 index units higher than other red populations
- Longevity +29 index units, Udder health +12 units, Hoof health +12 units genetic progress during 2001-2020



Ideal for crossing



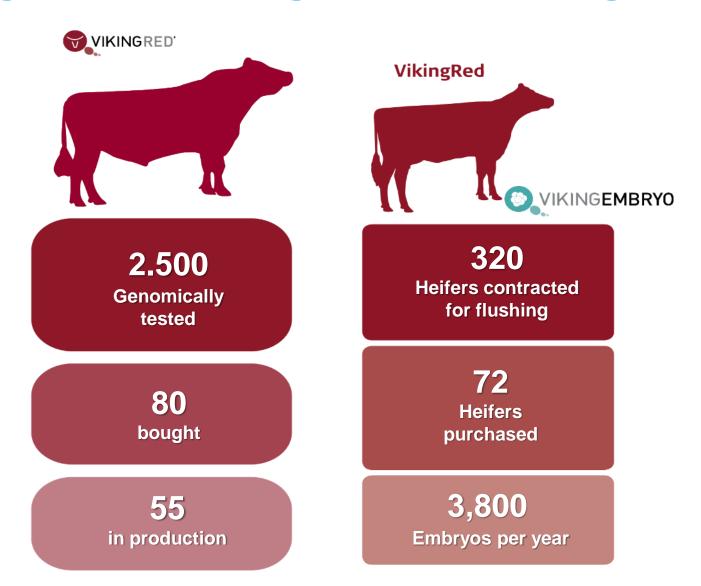
Ideal for crossing

Boosts health, fertility and efficiency in crossbreds

- Proven in crossbreeding studies in many parts of the world
- On the same economic level as VikingHolstein and VikingJersey
- Used in ProCROSS, the best proven crossbreeding programme in the world used by high-yielding herds
- Used on Hol x Jer cross in New Zealand for the ideal size, fertility and health traits

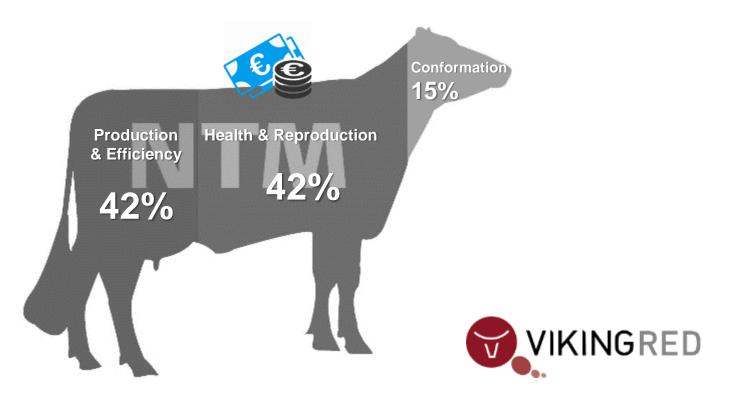


VikingRed breeding & female program



The Nordic Total Merit (NTM)

- ALL traits in NTM are of economic importance
- >90 sub traits combined into 15 main traits





Correlations to NTM

Trait	Correlation
Production	0.70
Growth	-0.05
Saved feed	0.17
Daughter fertility	0.20
Calving direct	0.26
Calving maternal	0.18
Udder health	0.30
General health	0.21
Hoof health	0.23
Longevity	0.47
Youngstock survival	0.28
Frame	-0.13
Feet & legs	0.27
Udder	0.18
Milkability	0.12
Temperament	0.07







Interbull ranking - RDC

	Production index	Udder health	Daughter Fertility	Calving direct	Calving maternal M	Longevity
+++	104	100	100	101	100	101
***	97	100	114	100	91	91
	90	97	97	95	95	92
	80	100	85	N/A	N/A	91
	90	95	98	N/A	N/A	82

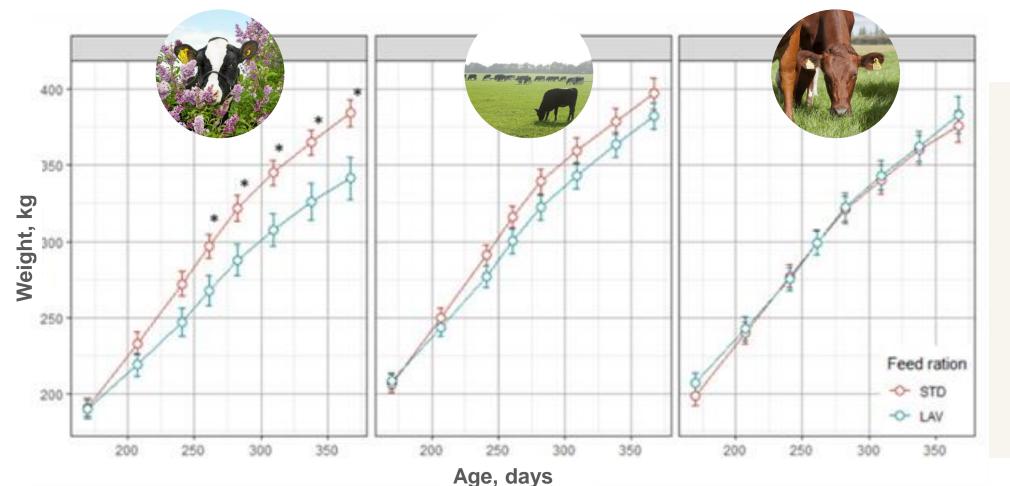






Danish feed efficiency study on heifers

The Danish Cattle Research Center led research to compare possible differences in weight, growth, feed intake and feed efficiency between Holstein (HOL) and VikingRed heifers, as well as heifers from crosses.



Feet rations:

STD Standard optimized for Holstein

LAV Low energy ration which has more filling

62 heifer calves were part of the research.

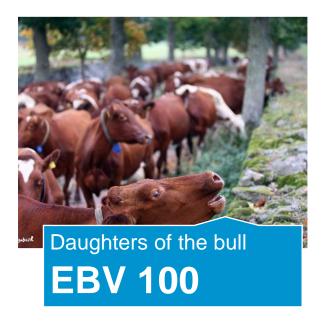
The trial took place from **02.2020 to 09.2020**



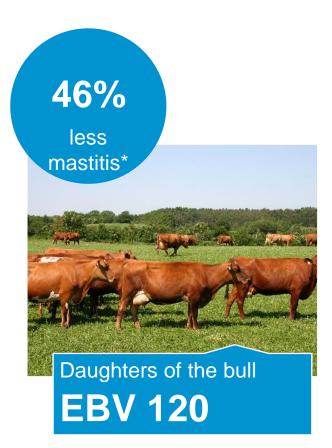


Improve udder health

Bull with EBV 100 equals population average for the breed





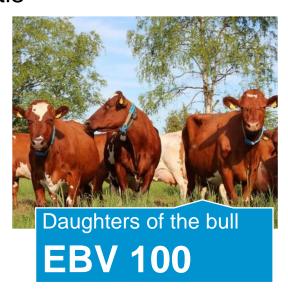


Note: Calculated based on phenotypic values (NAV 2021) *Compared to population average



Improve hoof health

- Sole ulcer
- Verrucose dermatitis
- Interdigital Hyperplasia
- Heel horn erosion
- Cork screw claw







Note: Bull with EBV 100 equals population average for the breed Calculated based on phenotypic values for VikingRed (NAV 2021)



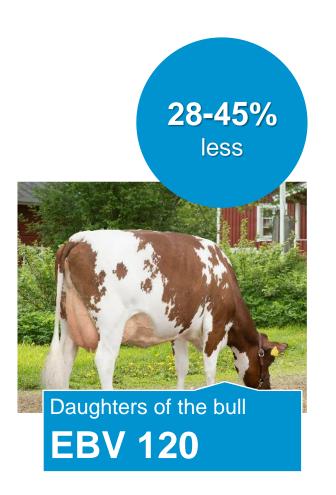
Improve hoof health

- Digital & Interdigital dermatitis
- Sole hemorrage
- Double sole + white line



Daughters of the bull EBV 110

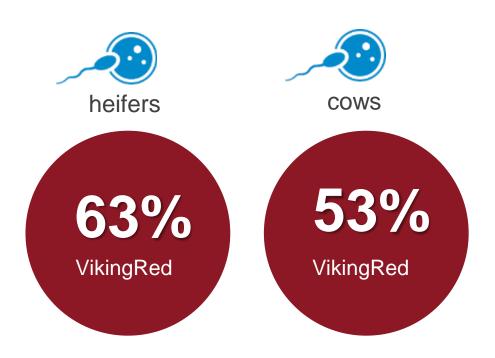
14-23%



Note: Bull with EBV 100 equals population average for the breed Calculated based on phenotypic values for VikingRed (NAV 2021)

VikingRed conception rate

• VikingReds have high conception rate.







Improve daughter fertility - VikingRed

% improvement relative to population average



Population average

Interval from calving to 1st insemination 81 days

Interval from 1st to last insem., heifers 26 days

Interval from 1st to last insem., cows 45 days

Number of insem., heifers **1.6**

Number of insem., cows **1.9**

EBV 110

- 2 days / -3%

- 2 days / -7%

- 4 days / -9%

- 0.08 / -4%

- 0.07 / -4%

EBV 120

- 4 days / -5%

- 3 days / -13%

- 8 days / -17%

- 0.11 / -7%

- 0.15 / -8%



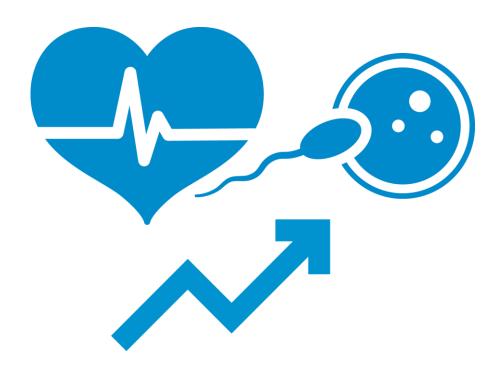




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