

# VikingGenetics – Holstein breeding program



# A complete breeding program – number of COWS

	Denmark	Sweden	Finland	In total
Holstein	375,000	149,000	92,800	616,800
Jersey	60,000	2,000	-	62,000
VikingRed	40,000	130,500	194,300	364,800
Red Holstein	5,500	-	-	5,500
SKB/Finncattle	-	1,200	2,900	4,100
<b>Total</b>	<b>480,500</b>	<b>282,700</b>	<b>290,000</b>	<b>1,053,200</b>



Holstein



Viking Red



Jersey

# • Effective breeding program



Tested bulls/breed	
Holstein	225
VikingRed	225
Jersey	55
Red Holstein	10
Beef Cattle	10
<b>In Total</b>	<b>525</b>

*NB: The number of tested bulls will change due to GenVik.*

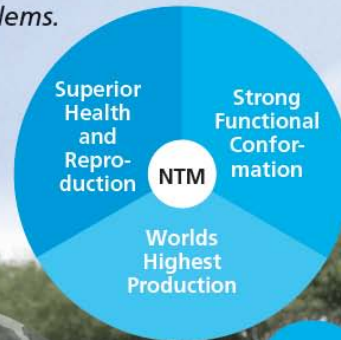


# The best cow is almost invisible

*Be progressive, choose VikingGenetics  
3 way system for maximum production  
and minimum of problems.*



*It spells NTM, the  
Nordic Total Merit.  
Profit comes  
naturally!*



[www.vikinggenetics.com](http://www.vikinggenetics.com) [export@vikinggenetics.com](mailto:export@vikinggenetics.com)

Your distributor:



Production +

Health +

Calving Ease +

Fertility +

Longevity +

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PROFIT



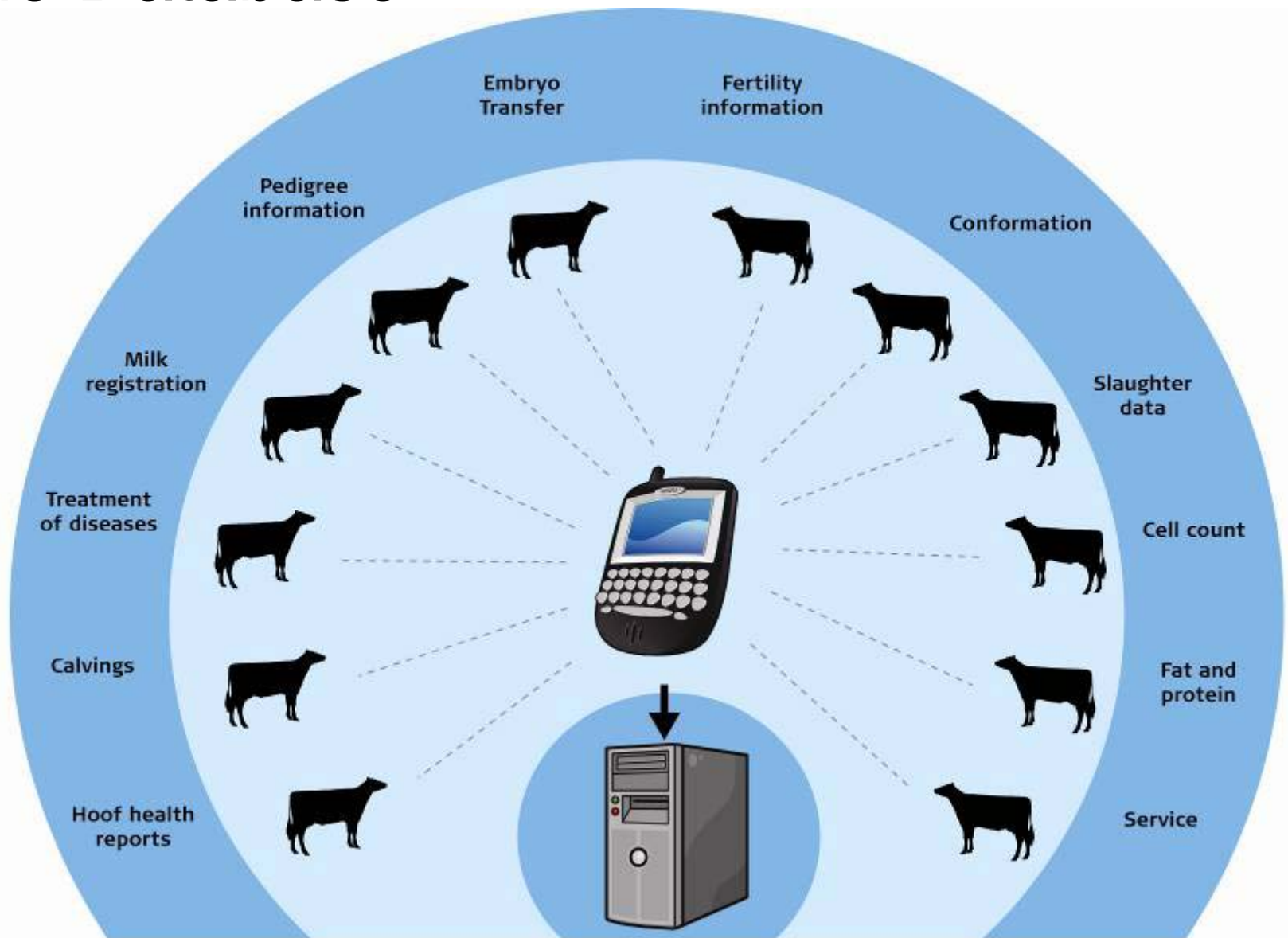


# • NTM – Nordic Total Merit

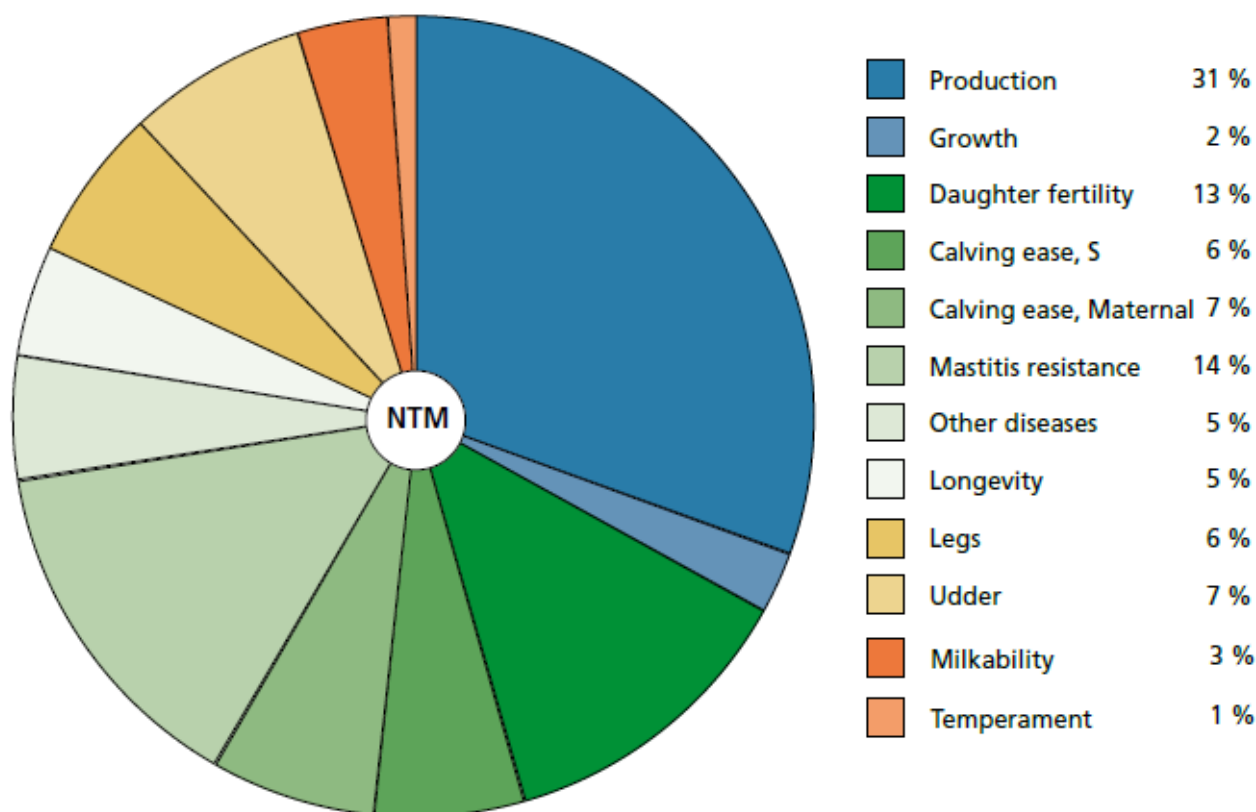


- Includes all economically important traits
- Takes genetic correlations into consideration
- Best tool for selection of bulls and cows for the breeding program
- Permits direct comparison between cows and bulls in Sweden, Denmark and Finland

# • The Database







# • Traits in NTM

## Index

Yield

Female fertility

Calving & birth

Meat production

## Data

Milk, protein & fat yield

Days from calving to first insemination

Days from first to last insemination

Number of inseminations

Fertility diseases

Vitality of calf

Calving ease

Size of calf

Carcass weight & carcass classification

# • Traits in NTM continued

## Index

## Data

Udder health

Diagnoses of mastitis

Somatic cell count,  
Conformation traits

Longevity

Days in herd (1<sup>st</sup> calving to culling)

Other health traits

Reproduction diseases  
Feet & leg diseases  
Digestive diseases

Conformation

22 conformation traits

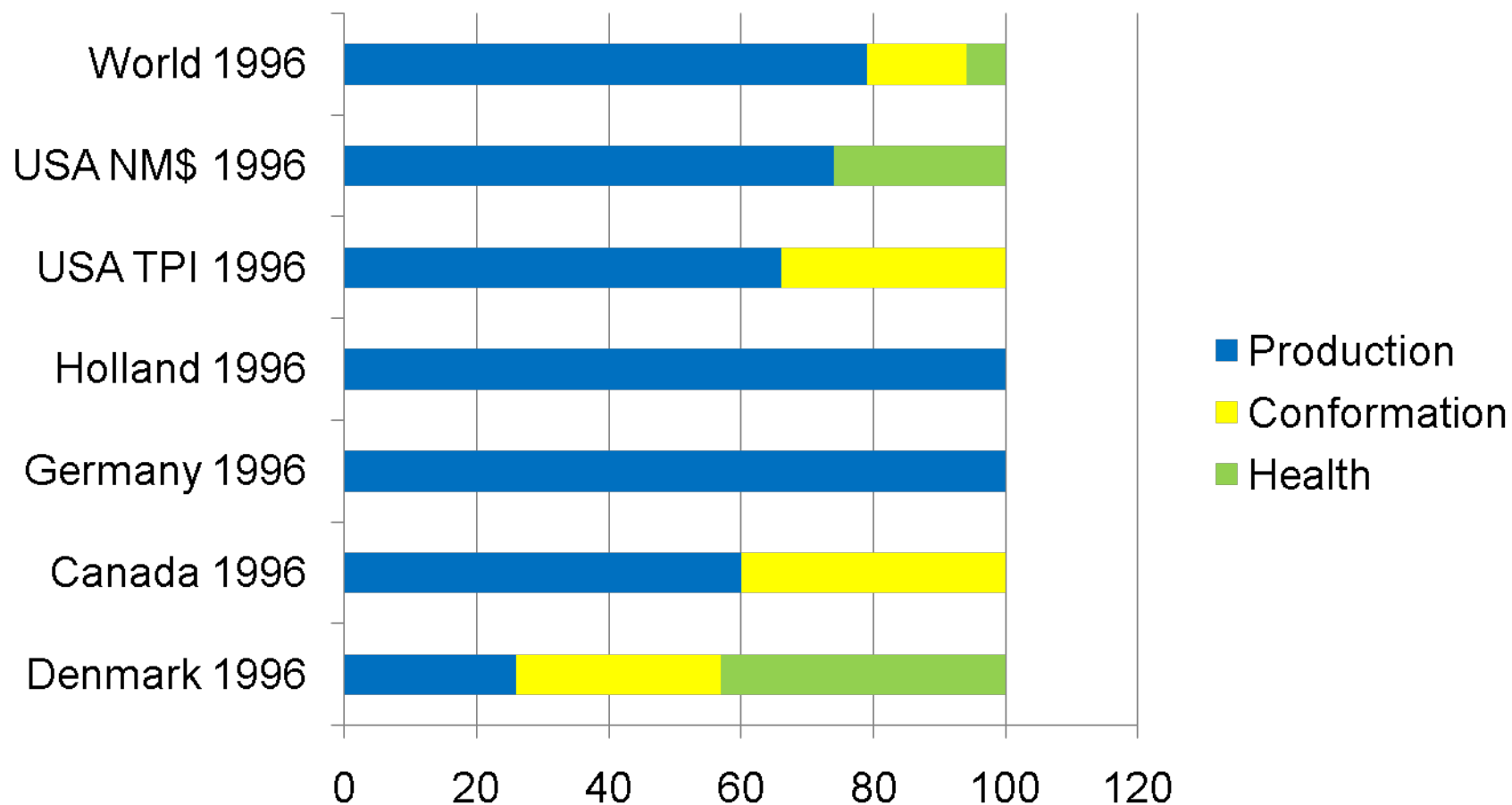
Milking speed

Temperament

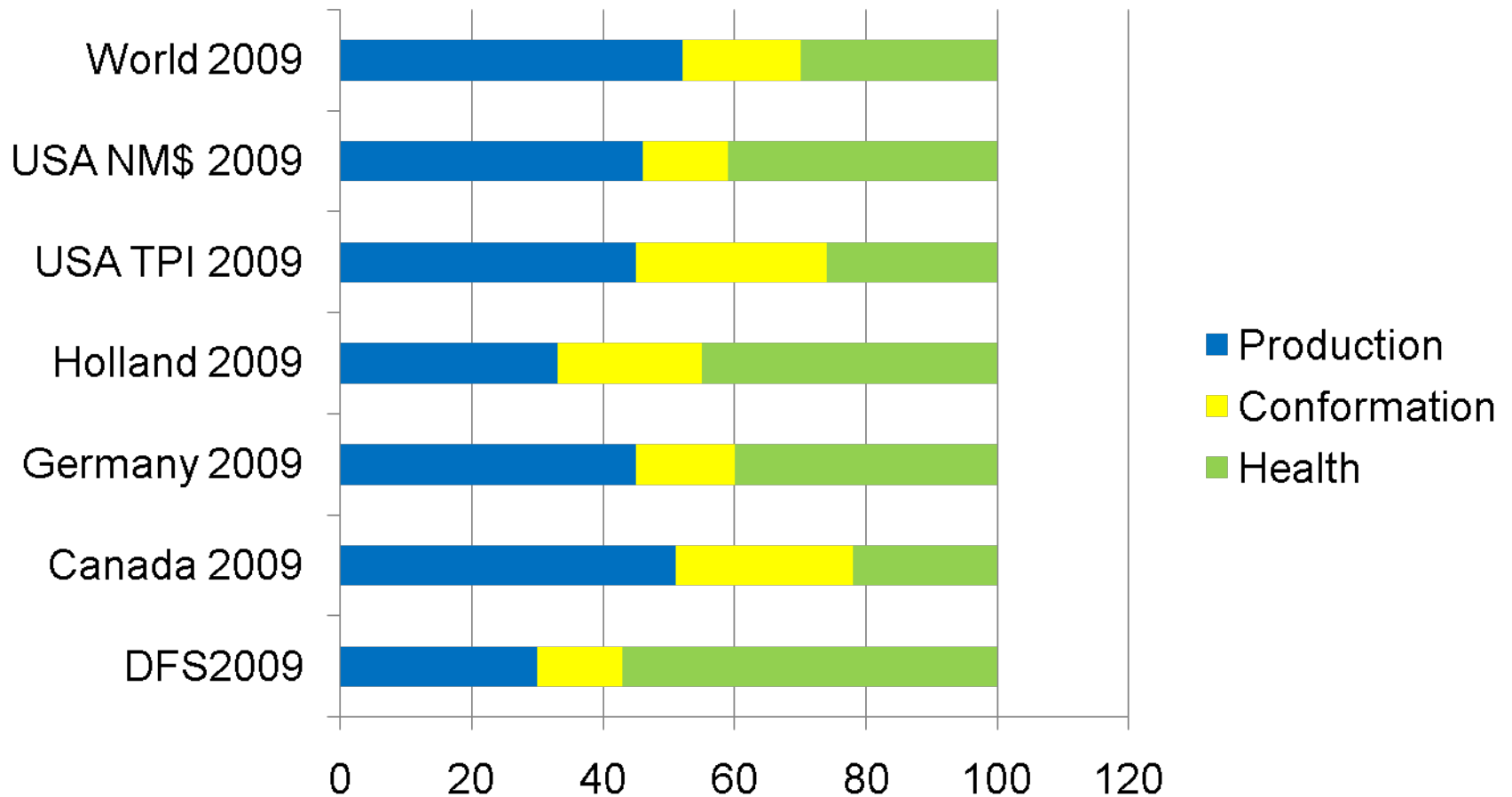




# Selection index 1996 -2009



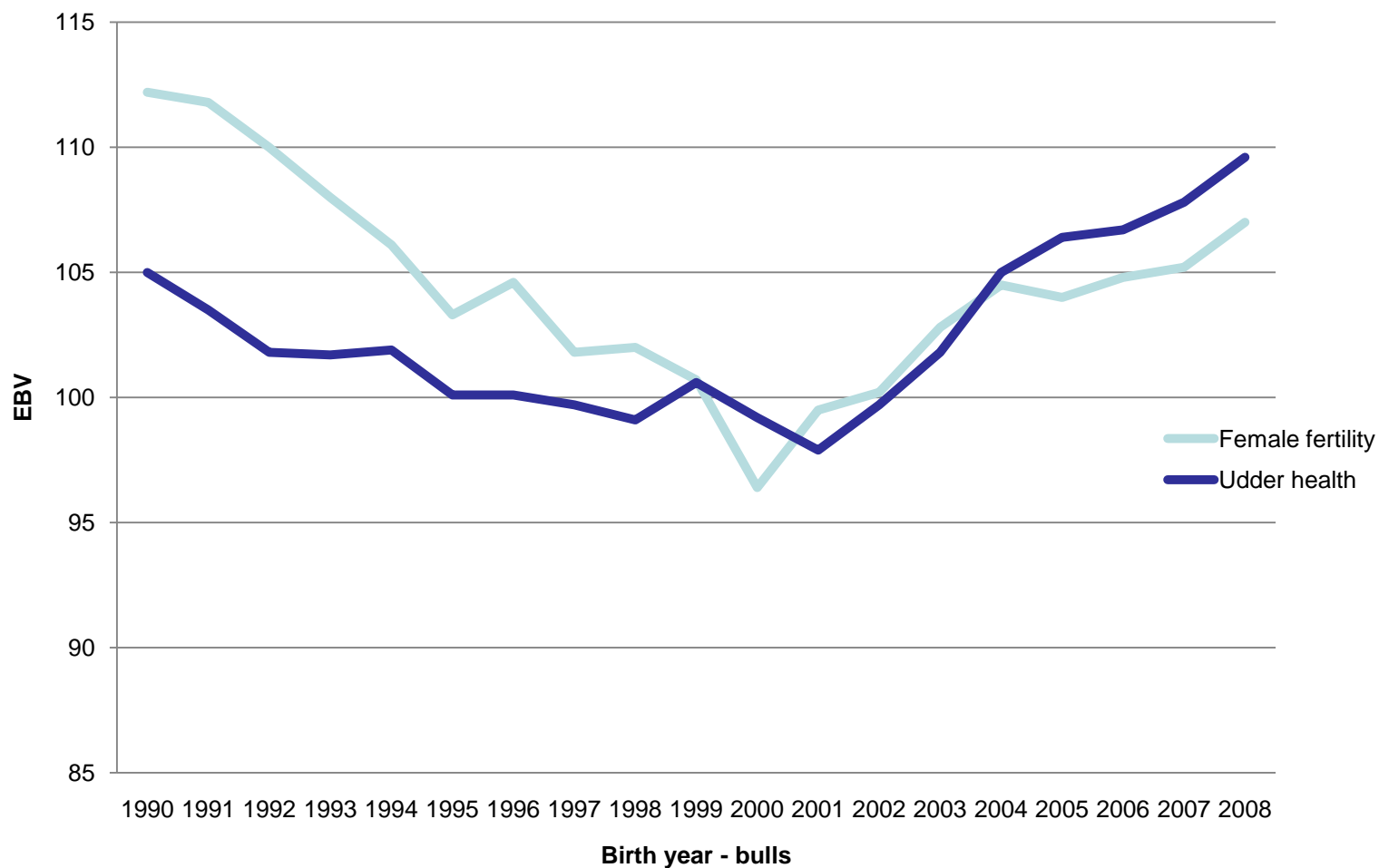
# • Selection index 1996-2009





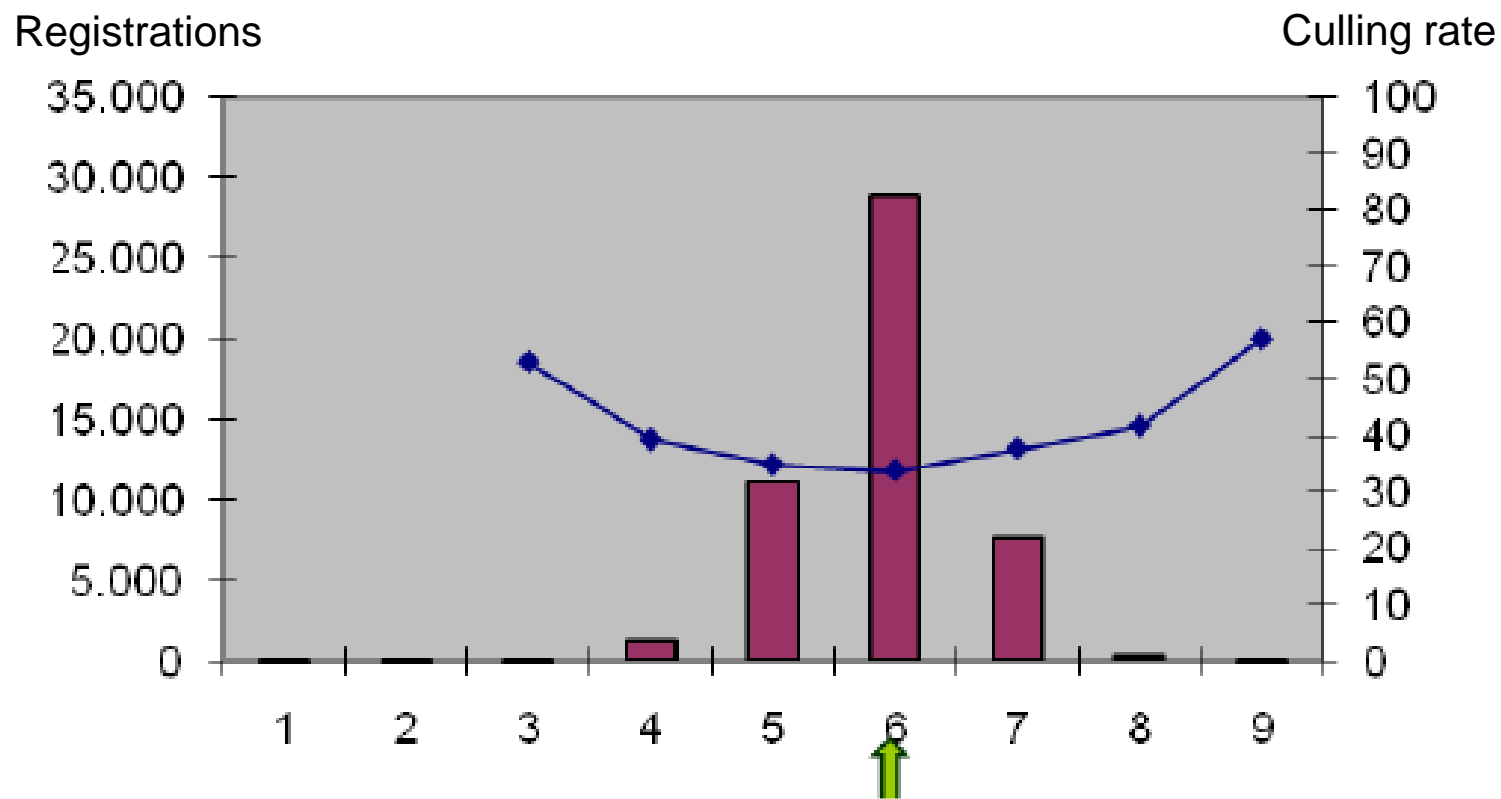
# Genetic trend

## Holstein Female Fertility and Udder Health



# Balanced confirmation

Ex: body dept



# New trait! Hoof Health!

## Yet another step for a healthy cow



© Elly Geverink



# Viking Holstein



No of cows	592 873
Milk, kg	9 543
Fat, kg	388
Fat%	4,1
Protein, kg	321
Protein %	3,4
Fat+Protein, kg	708

# • From calf to elite bull – many steps of selection



10-15 best approved as elite bulls



Registration of daughters for 4 years  
= breeding values for the bulls



**25-30** used as GenVikPLUS-bulls



**175**

approved as young bulls  
(1500-2000 doses)



All born calves in screening



**1800** selected based on NTM,  
and genomically tested



**260**  
bought  
based on  
GAV-values





# • Cooperation in EuroGenomics



- Common reference group in Holstein
- 16,000 daughter proved bulls (4\*4,000)
- Gain more than 10% in reliability
- Reduction of costs in the breeding program
- European partners:
  - UNCEIA – France
  - CRV – Holland
  - DHV and VIT – Germany
  - VikingGenetics – Denmark, Sweden and Finland



# Breeding programme with Genomic Selection



# • Recommendation today

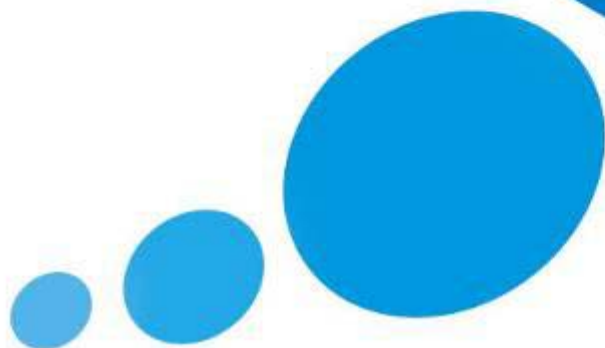
- 50% daughter proven bulls
- 30% GenVikPLUS-bulls
- 20% young bulls – random use



D Etoto (V Exces x VAR Calano)



# The Profitable Choice





# Thank you for your attention

