

# General health

General health index describes the bull's daughters' genetic potential to resist reproductive, metabolic and feet and leg diseases.

This trait includes breeding values for:

- Early reproductive disorders
  - Retained placenta
  - Hormonal & infective reproductive disorders
  - Other reproductive disorders
- Late reproductive disorders
  - Hormonal & infective reproductive disorders
  - Other reproductive disorders
- Metabolic diseases
  - Ketosis
  - Milk fever
  - Other metabolic and feed related disorders
- Feet and leg problems

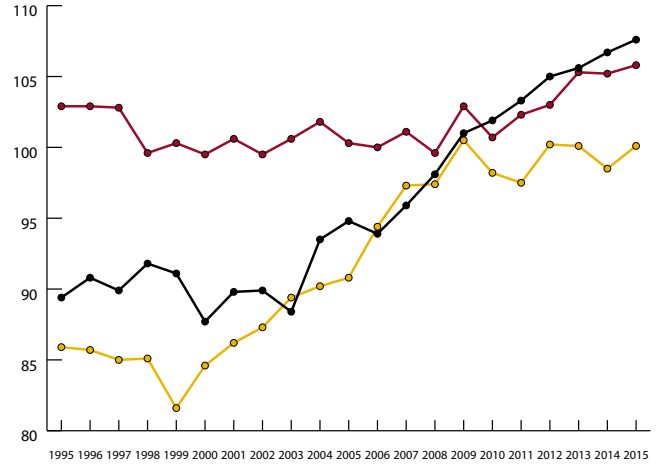


Figure 1 Genetic trend for General Health. Data from NAV for three breeds (December 2016).

Data: General health index is calculated based on health records made by veterinarian from first three lactations. Official registrations are done for all cows on all farms in Denmark, Sweden and Finland. That results in a high reliability of breeding values for general health.



EARLY & LATE REPRODUCTIVE DISORDERS



METABOLIC DISEASES



## Why is General Health important?

Table 1 Correlations between General Health and other traits in NTM

	Correlation to General health % (Holstein)
NTM	46
Longevity	39
Daughter fertility	32
Udder health	28
Hoof health	25
Calving direct	21



Despite the fact that health traits have a negative correlation to production, all our unique health traits, including General Health, have a strong positive correlation to NTM, longevity and daughter fertility. That means that healthy cows live longer and have higher lifetime production.

It is important to realize that reducing costs, such as reduced veterinary assistance because of healthier cows, is equally important in improving profitability as increasing milk yield is. They both have an effect on the profit of the dairy farmer.

## Effect of +10 units for sub-traits in General Health

Table 2 Effect of +10 index units for sub-traits in general health index

VikingHolstein ● VikingRed ●		<b>Bull with EBV 100</b> Disease frequency % population average	<b>Bull with EBV 110</b> Disease frequency % (Bull effect / % Difference from population average)	<b>Bull with EBV 120</b> Disease frequency % (Bull effect / % Difference from population average)
Early reproductive disorders	●	7.3%	6.3% (-1.05% / -14.4%)	5.2% (-2.10% / -28.8%)
	●	2.6%	2.1% (-0.53% / -20.6%)	1.5% (-1.08% / -41.1%)
Late reproductive disorders	●	5.0%	4.3% (-0.7% / -14.0%)	3.6% (-1.40% / -28.0%)
	●	7.3%	6.2% (-1.06% / -14.5%)	5.2% (-2.12% / -29.0%)
Metabolic diseases	●	4.9%	3.9% (-0.96% / -19.6%)	3.0% (-1.93% / -39.3%)
	●	3.1%	2.1% (-1.03% / -33.1%)	1.0% (-2.06% / -66.3%)
Feet and leg problems	●	16.3%	15.6% (-0.68% / -4.2%)	14.9% (-1.35% / -8.3%)
	●	4.4%	4.1% (-0.34% / -7.7%)	1.5% (-0.68% / -15.5%)

