

Cows with higher NTM gives more profit

A profitable cow is superior because of a combination of higher milk yield, better fertility, better disease resistance, better calving ability, better conformation and so on. Profit depends on both higher income and lower costs.

NTM reflects genetic profit

NTM (Nordic Total Merit) is developed in the Nordic countries by NAV (Nordic Cattle Genetic Evaluation) as the best measure for genetic merit for profitability in an average herd. NTM is an economic index, which means that the value of each trait in the breeding goal is converted to euros and cents. Therefore it is important to stay focused on NTM if you want to improve profit of your herd through breeding.

Value of one NTM unit

The value of NTM is basically calculated as the annually value of improving all cows in the herd with one NTM unit. This definition means that the value includes costs and income from the individual cow, plus production of heifers for replacement and bull calves for meat production.

The value of NTM for the whole herd can also be expressed per cow by dividing with the number of cow-years in the herd. One NTM unit has the value of 9.05 euro per cow-year for red breeds, 10.15 euro per cow-year for Holstein, and 7.80 euro per cow-year for Jersey.

Earn 8.000-10.000 euros more per year in your herd

Calculations clearly show that it's economically very appealing to use sires with high NTM indices. If a herd of 100 Holstein cows is able to increase the breeding level compared to other herds by 10 NTM units, for example by a very consistent use of the best AI sires rather than for instance natural services sire the effect will be an additional annual revenue of approximately 10.000 euros. Similar results for red cows and Jersey are 9.000 and 8.000 euros respectively.

Insemination with the best bulls, instead of using bulls with lower NTM will therefore have an economic effect!

Good heifers make 150-200 euros higher income in their lifetime

The value of NTM can also be viewed at animal level or even at the level of insemination bulls. A newborn heifer calf superior with 10 NTM units compared to an average heifer calf is earning 150-200 euros more in her lifetime. Information which is worth considering when planning what bulls should be used in the coming period.

What do I gain from using the NTM?

In NTM the economic profit is optimized such that the greatest emphasis is placed on traits with greatest economic importance. The economic importance is different in different breeds. This means, that the gain in each trait by improvement of the genetic level by one NTM-unit is different for different breeds. Figure 1 shows the average increase in index units for some traits in the breeding goal, by improving NTM with one unit.

For Holstein it shows that improvement of NTM by one unit on average is caused by improvement by 0.6 units for yield- and udder health index and 0.2 units for feet&legs index.

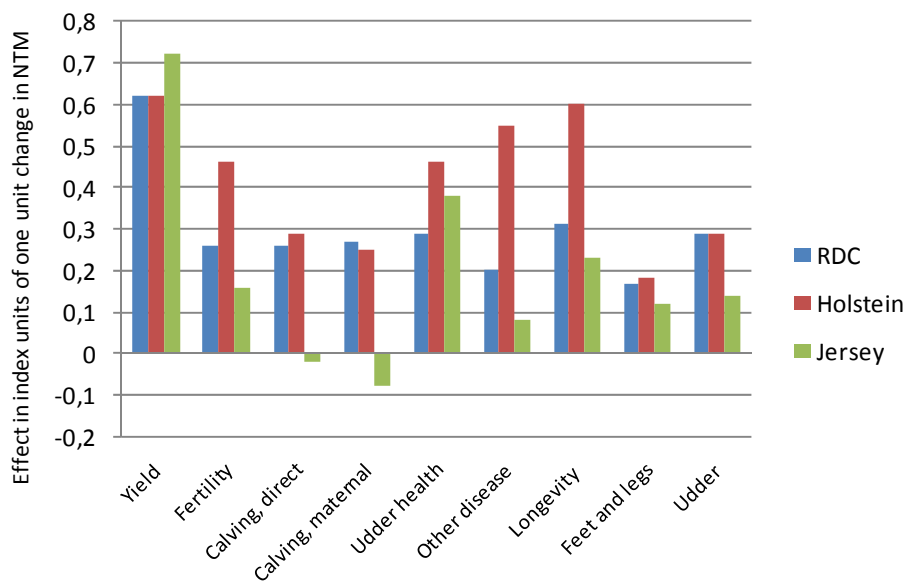


Figure 1. Change in other traits by improvement of NTM by one unit for RDC, Holstein and Jersey.

The figure shows that consistent use of the AI bulls with the highest NTM gives progress for both production, functional traits and conformation.

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