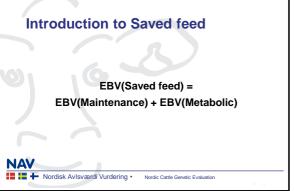
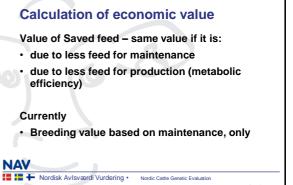


Saved feed in NTM why?

- Feed costs the biggest variable costs at dairy farms
- Saved feed is a hot topic internationally in cattle breeding – effect on market share
- Saved feed has a positive climate impact a positive signal to the society







Economic value of maintenance

The standard TMI-model for dairy is used by

· Analyzing the effect of changing cow weight

In the TMI-model the effect is:

- · Reduced feed intake for maintenance of cows
- Reduced carcass weight of slaughtered cows can be omitted
- Reduced weight at first calving including heifer maintenance and requirement for growth can be omitted

Basic model includes only reduced weight of cows NAV

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Feed intake for maintenance

Based on metabolic body weight (MBW = BW^{0.75})

Consequence: +10 kg BW require more maintenance feed in JER than in HOL ÷10 kg BW save more maintenance feed in JER than in HOL

Changing MBW by 1 unit has the same effect on feed intake across breeds and countries

Value of MBW only influenced by feed prices

- Highest in FIN
- Nearly similar in DNK and SWE

Value of 1 kg BW also depend on average weight

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Value of reducing cow weight

		€/MBW change	€/BW change		
	DNK RDC	3.73	0.56		
	DNK HOL	3.73	0.56		
	DNK JER	3.73	0.63		
	SWE RDC	3.84	0.58		
	SWE HOL	3.84	0.58		
	FIN RDC	4.22	0.64		
NIA	FIN HOL	4.22	0.63		
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	Troidisk / trisvacial value inig				

Assumptions Feed prices and slaughter value

Cows, beef kg carcass
2.77
3.63
2.24

NAV

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Assumptions: Cow weights

	Weight at 1st calving, kg	Weight at 2nd calving, kg	Mature body weight, kg
RDC	565	610	655
HOL	590	635	680
JER	375	403	430



Including reduced carcass weight of cows and weight at 1st calving

Lower weight of slaughtered cows

- · Lower carcass weight lower income
- · Lower value of reduced weight

Lower weight at 1st calving (But unchanged age at 1st calving)

- · Lower requirement for growth and maintenance of heifers
- · Higher value of reduced weight

In total: Value of reducing weight is slightly increased

NAV

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Conclusion:

Average value per breed across countries of 1 kg change of BW

	Only Maintenance
RDC	0.59 €/kg BW
HOL	0.59 €/kg BW
JER	0.63 €/kg BW

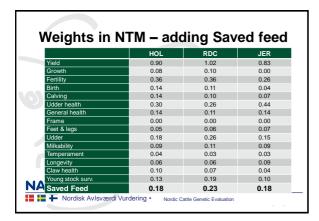


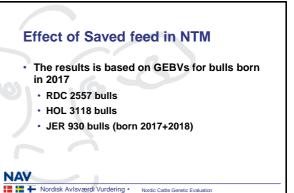
Next step:

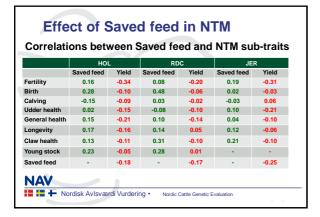
- · Transformation to value per index unit
- · Relative value compared to other traits of the
- Relationship to other traits of the NTM

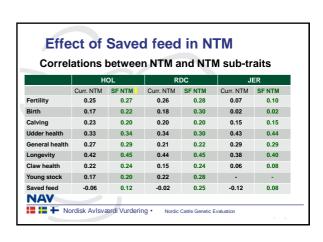
 Including breeding value for metabolic efficiency

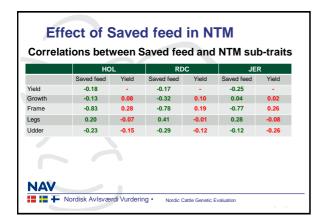
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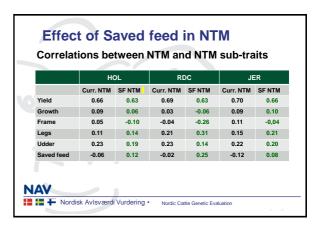




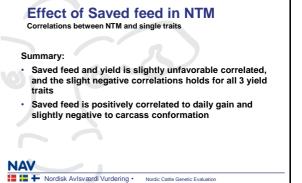


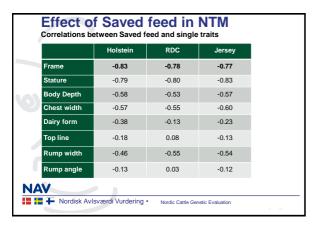


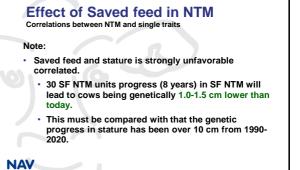




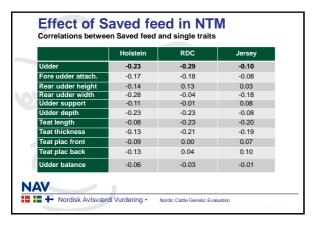
Effect of Saved feed in NTM Correlations between NTM and NTM sub-traits Summary: Saved feed and frame (strongly related to the size of the cow) is strongly negatively correlated Saved feed and yield is slightly unfavorable correlated Saved feed and udder is slightly unfavorable correlated Saved feed is in general positively correlated to longevity and health traits

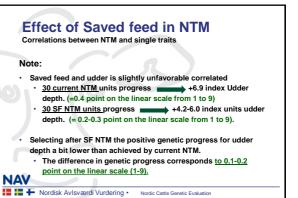






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Saved feed in NTM?

- · Proposed economic weight for Saved Feed:
 - · Prepared for including metabolic eff.
 - Increase of genetic progress with SF NTM of 2-3 % (compared to current NTM)
 - · Does not include all economic effects of maintenance
- · Group discussion are we ready to include Saved feed in NTM?



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Saved feed in NTM why?

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