

# Other DNA tests e.g. polled, milk genomics

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# Background

- **DNA tests might make selection for qualitative traits cheaper**
- **Some qualitative traits might have economic values**

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# Polled



- **Dominant inheritance**  
AA and Aa polled  
aa horned
- **DNA test for distinguish between hetero and homozygotes**
- **Phenotypic tests for distinguish between polled and horned**

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# Milk genomics= non-coagulating milk



- Project milk genomics has found that 18 % of SRB-cows have non-coagulating milk
- Quantitative inheritance? Or quite few genes= only SRB have the problem  
0 % JER and 2 % HOL have non-coagulating milk  
Heritability 0.45

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# Milk genomics= non-coagulating milk

- non-coagulating milk the most costly trait according to the milk genomic project
- If all non-coagulating milk used for cheese production doesn't give any cheese then 5,4 % of the SRB milk have a very low value

(30 % milk to cheese and 18 % non-coagulating milk )

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# Economic value

- **Polled**  
Yes, labour+ medicin+ animal welfare  
threats from definition of organic farming
- **non-coagulating milk**  
Individual farmers: NO  
Dairy industry: Yes??  
Breeds? Yes?

# How to include polled in NTM

- Polled add to NTM

X NTM units for Aa

and

2X NTM units for AA

and

0 NTM units for aa

- X=?

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# How to include non-coagulating milk in NTM

- coagulating milk add to NTM

Y NTM units

- $Y = ??$

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# How to continue?

- **Start with recording of phenotypic polled**
- **Test and record all valuable females individually for non-coagulating milk**

**If it is possible to do it on farm**

**Talk with the dairy industry about the value**

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# Suggestions

- **Start to record phenotypes**
- **Include the result in NTM**
- **Continue to develop DNA-tests for milk quality**

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