“Designing future udder”
-Which conformation traits gives most value in relation to work using AMS data

NAV workshop
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Weight on Udder in NTM
What carries the value of a good udder – present situation?

Less work
Better health

More beautiful cows
Longer living cows
Less work: Value of traits in Udder

Problem: No good objective measure of value!

• How clean is the udder (fore udder attachment, udder depth)
• How fast can you put on the machine (teat placement)
• Do cow loose machine during milking (teats, udder balance)
  • Largely affected by right settings of hoses and liners
• Approx. 12,000 Danish 1. lact. Holstein cows
• Data from Lely AMS
• 15 percent classified
Breeding for shorter attachment time

Favorable correlation to:
- Wider front and rear teats (0.19/0.16))
- Thicker teats (0.17)
- Higher udders (0.14)
- More narrow rear udders (0.11)
- Longer teats (0.08)

Other traits not important
Teat length affects attachment time

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Teat thickness affects attachment time

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Conclusion

• Within normal range for udder traits - only limited effect on attachment time – low correlation!

• Very short and thin teat only gives extra 3 seconds attachment time – average 42 seconds

• Unfavorable correlation between milking speed and teath length and thickness – average milking time 800 seconds

• Bevare: Still no information on extra work load during rest of milking + other milking systems