



New strategies for milk recording and testing.

"Challenges in Milk Recording 2006"

Niels Henning Nielsen
RYK/Danish Cattle Federation



Organisation. "Registration and Milk Recording"

- Registration for all herds in Denmark.
- Administration of eartags.
- Milkrecording.
- Responsible for datacollection.
- Responsible for data quality.
- Independent non profit organisation under Danish Cattle Federation.



Milk recording in DK.

- 96% of cows and herds in one association.
- MR owned by Danish Cattle Federation.
- Database owned by DCF.
- Farmer owned and ruled.
- Lab owned by the organisation (DK + Swe).
- 50 technicians (full time).
- 65 full employes in MR total.
- We organize MR for all herds in DK.



Number of recorded herds distributed by size July 2005 in DK.

Herds size	No. cows	No. herds	Avg. No. cows	% cows	% herds
-50	40.289	1.170	34,4	8%	22%
-51-100	136.111	1.839	74,0	26%	34%
-101-200	283.904	2.140	132,7	54%	40%
-201-300	42.837	183	234,1	8%	3%
-301-400	11.802	35	337,2	2%	1%
-401-500	4.755	11	432,2	1%	-
-500-	3.326	5	665,1	1%	-
Total	523.023	5.383	97,2	100%	100%



Fast sampling is a demand, if the farmer still wants "our service"

- Herd size nearly doubled in 10 years.
- From 80-90 cows milked pr. hour up to 300 cows milked pr. hour
- No delay accepted due to sampling.
- Automatic sampling, and unique identification of sample and cow.
- Farms with more than 2 AMS milking units.

Fast and valid identification with sampling procedure ?

- **No** (yes with less than 100 cows).





Fast and valid identification with sampling procedure ? Yes







- Fast and valid identification with sampling procedure with AMS? Yes







Herd management.

- Parts of the technology is monitoring the day to day management.
- Replacement for recording data used for management.
- Tools, and flow of data.







Genetic evaluation.

Data quality if:

- Number of MR-days pr year 4-30?
- Number of sample 1-5 pr day?
- Identification of cows
- More information when we have MR.
- Quality in our work – price?





Veterinary issues.

- Healthy cows = more milk pr. cow. = good economy for the farmer
- Early warning/detection
- Increasing av. Number of cows pr. Herd gives less cow contact.
- Data-analysis.
- More information by the sample
- Benchmarking





The center is the sample - not the meter!

We already paid to get the sample from the cow to the lab



Why not collect more information, and add value to the productline? – and money to the farmers purse!





More information by the milk sample.

- Fat, protein, cell-count (standard service).
- Milk urea nitrogen (implemented but low succeed pr cow).
- Salmonella Dublin (working, implemented as a service).
- ParaTB (working, implemented 2006).
- IBR/BVD (from the bulk tank, not pr. cow).
- FFA (free fatty acids).
- Kasein (only interesting if the farmer earns more).
- Progesteron (Sweden?).
- Mastitis bacteria count (needs "fresh" sample).
- DNA .
- Calcium.
- CLA-fat.
- ??



Conclusion.

- Fast sampling because of large herds, and no delay accepted due to sampling.
- Identification in large herds – EID?
- The center is the sample – more information is possible, with unique identification of sample and cow.
- Veterinary issues – more information than standard service.
- More quality in MR with more information is a future demand from dairy-farms with a future. Of course related to price and benefit.



Thanks for your attention.

