New strategies for milk recording and testing.

"Challenges in Milk Recording 2006"
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Organisation.
"Registration and Milk Recording"
- Registration for all herds in Denmark.
- Administration of ear-tags.
- 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.

<table>
<thead>
<tr>
<th>Herdsize</th>
<th>No. cows</th>
<th>No. herds</th>
<th>Avg. No. cows</th>
<th>% cows</th>
<th>% herds</th>
</tr>
</thead>
<tbody>
<tr>
<td>-50</td>
<td>40,289</td>
<td>1,170</td>
<td>34,4</td>
<td>8%</td>
<td>22%</td>
</tr>
<tr>
<td>-51-100</td>
<td>136,111</td>
<td>1,839</td>
<td>74,0</td>
<td>26%</td>
<td>34%</td>
</tr>
<tr>
<td>-101-200</td>
<td>283,904</td>
<td>2,140</td>
<td>132,7</td>
<td>54%</td>
<td>40%</td>
</tr>
<tr>
<td>-201-300</td>
<td>42,837</td>
<td>183</td>
<td>234,1</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>-301-400</td>
<td>11,802</td>
<td>35</td>
<td>337,2</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>-401-500</td>
<td>4,755</td>
<td>11</td>
<td>432,2</td>
<td>1%</td>
<td>-</td>
</tr>
<tr>
<td>-500-</td>
<td>3,326</td>
<td>5</td>
<td>665,1</td>
<td>1%</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>523,023</td>
<td>5,383</td>
<td>97,2</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

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).
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 product line? – and money to the farmers purse!
More information by the milk sample.

- Fat, protein, cell-count (standard service).
- Milk urea nitrogen (implemented but low success 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.