Organic conform udder health concepts

How to reduce therapies

Michael Walkenhorst

Christophe Notz, Peter Klocke, Jörg Spranger, Fritz Heil
Stages of animal health management in organic farms according to EC Regulation

Horizon

- long-term

How?

- Breeding
  - Management & Prevention
  - Complementary Medicine
  - Conventional Medicine

Horizon

- medium-term

Horizon

- short-term

Horizon

- emergency
  - exit
The principles ... should limit animal-health problems so that they can be controlled mainly by prevention."
Engadin Project – Herd Sanitation

Evaluation of 20 Farms with about 350 cows, high mountain region of Switzerland

Measures:

- Sensibilisation of the farmers
- Control and optimizing of milking technology and hygiene
- Control and optimizing of housing
- Therapy of mastitis cases (antibiosis versus homeopathy)
- Dry off treatment (homeopathy versus placebo and partially additional antibiotic)
- Culling of cows with poor udder health prognosis
Engadin Project – Herd Sanitation

### Milking Hygiene

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Foremilking at first</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Correct teat cleaning</td>
<td>5</td>
<td>18</td>
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<tr>
<td>Correct udder stimulation</td>
<td>9</td>
<td>17</td>
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<tr>
<td>Correct handling during application of the teatcup cluster</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Correct handling during removal of the teatcup cluster</td>
<td>20</td>
<td>20</td>
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<tr>
<td>Disinfection of the teats after milking</td>
<td>5</td>
<td>13</td>
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<tr>
<td>Quiet atmosphere</td>
<td>15</td>
<td>19</td>
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<tr>
<td>Correct herd order of milking</td>
<td>7</td>
<td>15</td>
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</table>

* Status before starting the project  
** Status in the end of the project
Engadin Project – Herd Sanitation

Percentage of cows with an somatic cell count < 150‘000cells/ml

Project farms (n=20)  Controll farms (n=80)

Walkenhorst et al., 2001
FiBL Frick
Engadin Project – Herd Sanitation

Number of treated mastitis cases according to characteristics of mastitis

- 149 cases in 98/99
  - 56 clinical mastitis
  - 93 subclinical mastitis
- 38 cases in 99/00
  - 42 subclinical mastitis

Walkenhorst et al., 2001
Antibiotics Minimizing in Udder Health

Investigation in 3 Pilot-Farms with about 100 cows, north west of Switzerland

Measures:

- Sensibilisation of the farmers
- Control and optimizing of milking technology and hygiene
- Control and optimizing of housing and feeding
- Homeopathic concept in mastitis therapy and prophylaxis, Antibiotics in defined cases
- Culling of cows with poor udder health prognosis
Antibiotics Minimizing in Udder Health

Evaluation of 3 Pilot-Farms with 100 cows, north west of Switzerland

Placing emphasis on a better co-operation between practical veterinarian and the farmer in the issue of preventive herd health management
Antibiotics Minimizing in Udder Health

Cows with Somatic Cell Count < 100,000/ml

mod. nach Notz et al., 2001
Antibiotics Minimizing in Udder Health

Antibiotic therapies*

*dry off and lactation treatment

mod. nach Notz et al., 2001

FiBL Frick
Pro-Q
Promotion of the quality of biologically produced milk in Switzerland

Fritz Heil, Silvia Ivemeyer, Peter Klocke, Christophe Notz, Claudia Schneider, Jörg Spranger, Michael Walkenhorst
n= 300 farms / 3year

Analyse of mastitis risk factors

Preventive veterinary medicine

primarily complementary (homeopathic and physical) mastitis treatment

Reduction in the use of antibiotics in udder treatment

Improvement of udder health state

Improvement of milk quality
Pro-Q Analysis of mastitis factors

- Housing
  - stable
  - management
- pasture and feedlot

Human-cow interaction
Pro-Q Analysis of mastitis factors

Quality and quantity of feedstuff
Feeding management
Pro-Q Analysis of mastitis factors

cow status of nutrition
body conditioning score (BCS)
milk recording data
Pro-Q Analysis of mastitis factors

milking hygiene
milking management
Pro-Q Analysis of mastitis factors

milking technology
<table>
<thead>
<tr>
<th>Event</th>
<th>Clinical Examination</th>
<th>Quarter Based Bacteriology</th>
<th>Quarter Based SCC</th>
<th>Milk Recording Data</th>
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<tr>
<td>mastitis + 30d</td>
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</tbody>
</table>
Basic analysis of mastitis causing factors and mastitis status

Kick of meeting with farmer, practical veterinarian and FiBL veterinarian

Internet based information network according to herd health (mastitis) status - for farmers and veterinarians

Monthly advising with the practical veterinarian and the FiBL veterinarian
Pro-Q - treatment of mastitis

- primarily based on homeopathy and other complementary ways of therapy
- all treatments by practical veterinarian
- practical veterinarian will be advised and educated in complementary veterinary medicine by the FiBL veterinary team
- antibiosis only in specific individual cases of mastitis
Pro-Q summary and overall aims

- Guidelines for producers, veterinary surgeons and experts
- Investigation minutes on farm level
- Current control of the data
- Intervention guidelines and measures

- Information Center (Hotline, Internet, Newsletter)
- Permanent advice and training
- Expert network
Pro-Q: Quality milk network on producer level

FiBL Frick