

# Organic conform udder health concepts

## How to reduce therapies

**Michael Walkenhorst**

**Christophe Notz, Peter Klocke, Jörg Spranger, Fritz Heil**

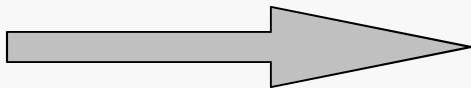
# Stages of animal health management in organic farms according to EC Regulation



**Horizon**

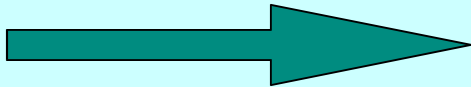
**How?**

long-term



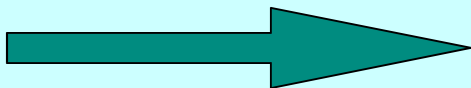
Breeding

medium-term



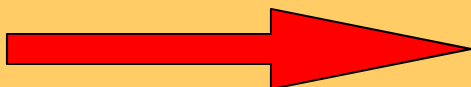
Management & Prevention

short-term



Complementary Medicine

emergency exit



Conventional Medicine

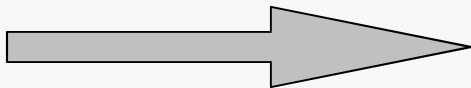
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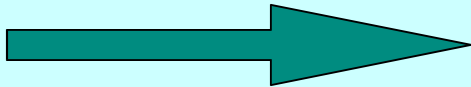
**How?**

long-term



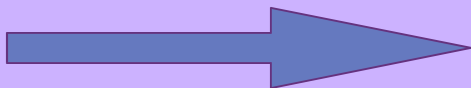
Breeding

medium-term



Management & Prevention

short-term



Complementary Medicine

**EC Regulation 1804/1999 and 2092/91, Annex 1 B, 5.2 :**

**„The principles ... should limit animal-health problems so that they can be controlled mainly by prevention“**

Conventional Medicine

# Engadin Project – Herd Sanitation

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**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

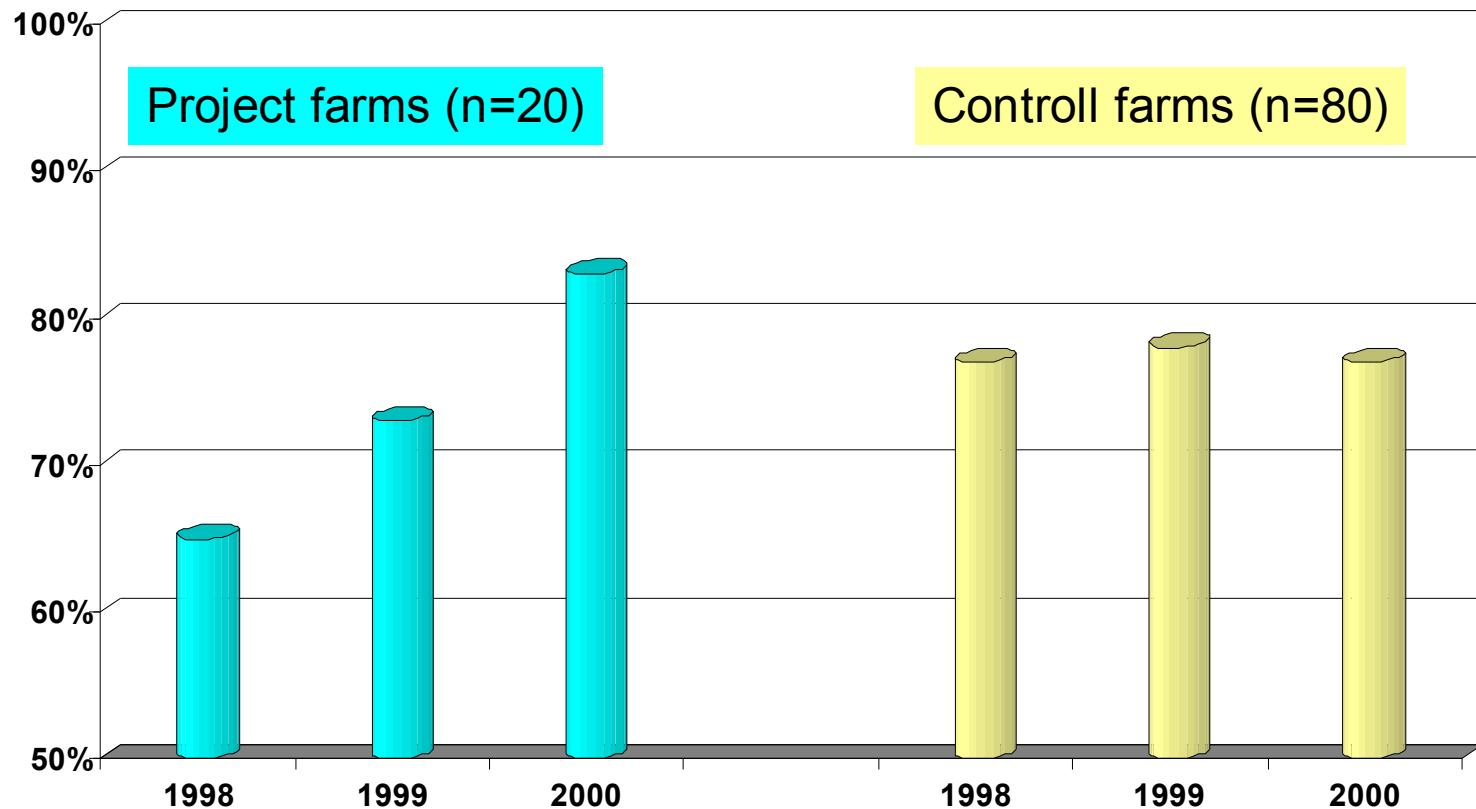
	1998/1999*	1999/2000**
• Foremilking at first	7	14
• Correct teat cleaning	5	18
• Correct udder stimulation	9	17
• Correct handling during application of the teatcup cluster	10	10
• Correct handling during removal of the teatcup cluster	20	20
• Disinfection of the teats after milking	5	13
• Quiet atmosphere	15	19
• Correct herd order of milking	7	15

\* 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

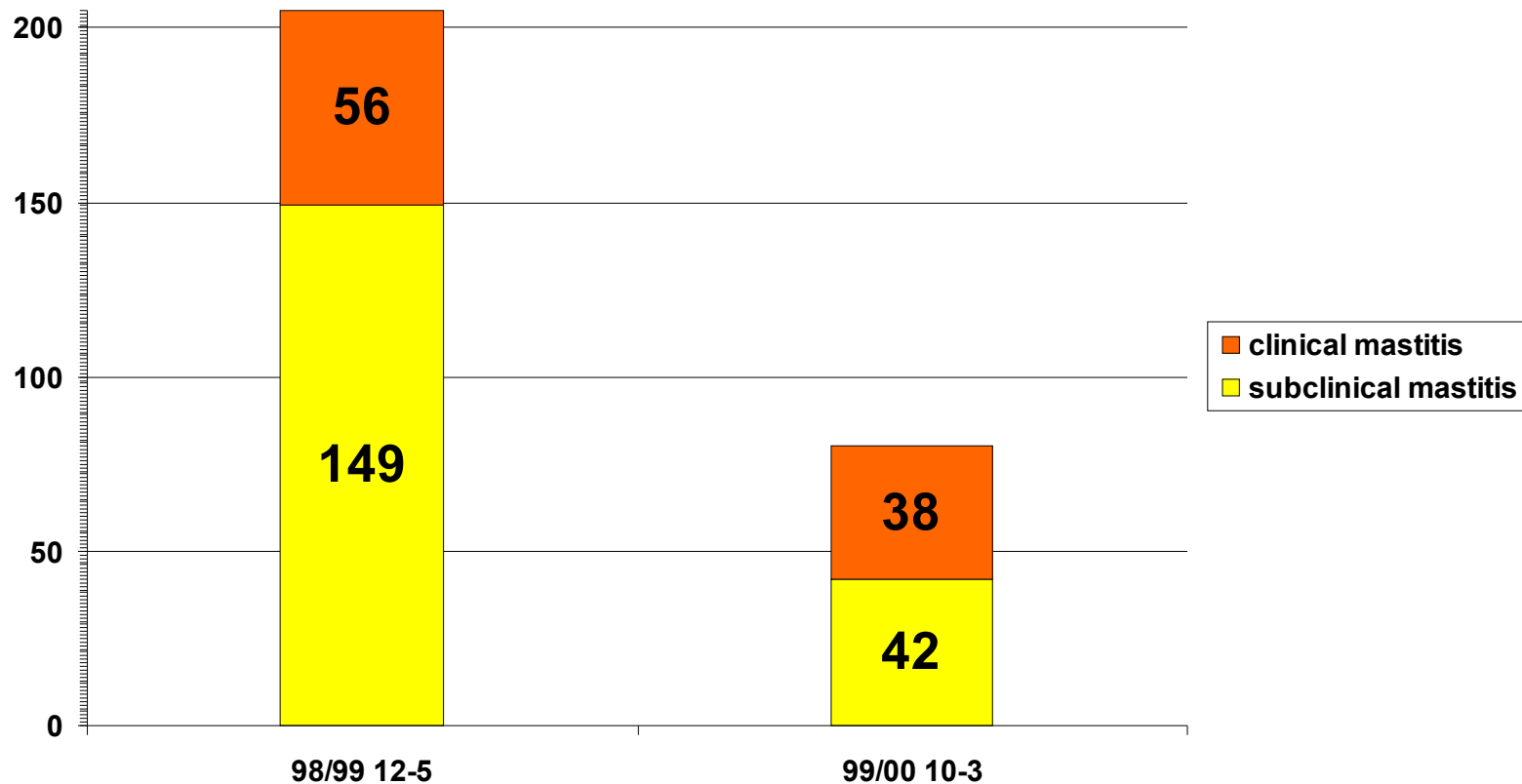


Walkenhorst et al., 2001

FiBL Frick

# Engadin Project – Herd Sanitation

number of treated mastitis cases according to characteristics of mastitis



Walkenhorst et al., 2001

FiBL Frick

# Antibiotics Minimizing in Udder Health

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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

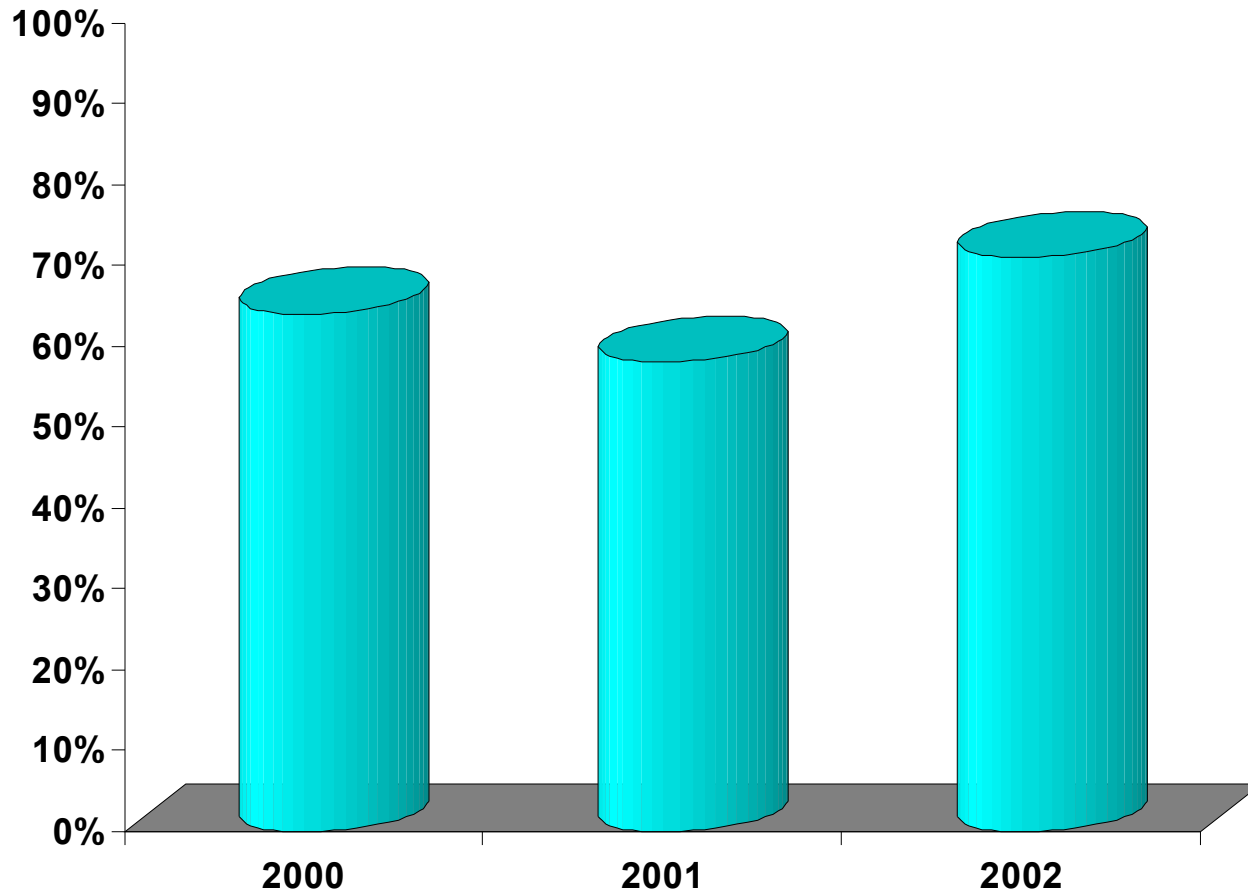
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**Evaluation of 3 Pilot-Farms with 100 cows, north west of Switzerland**

**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

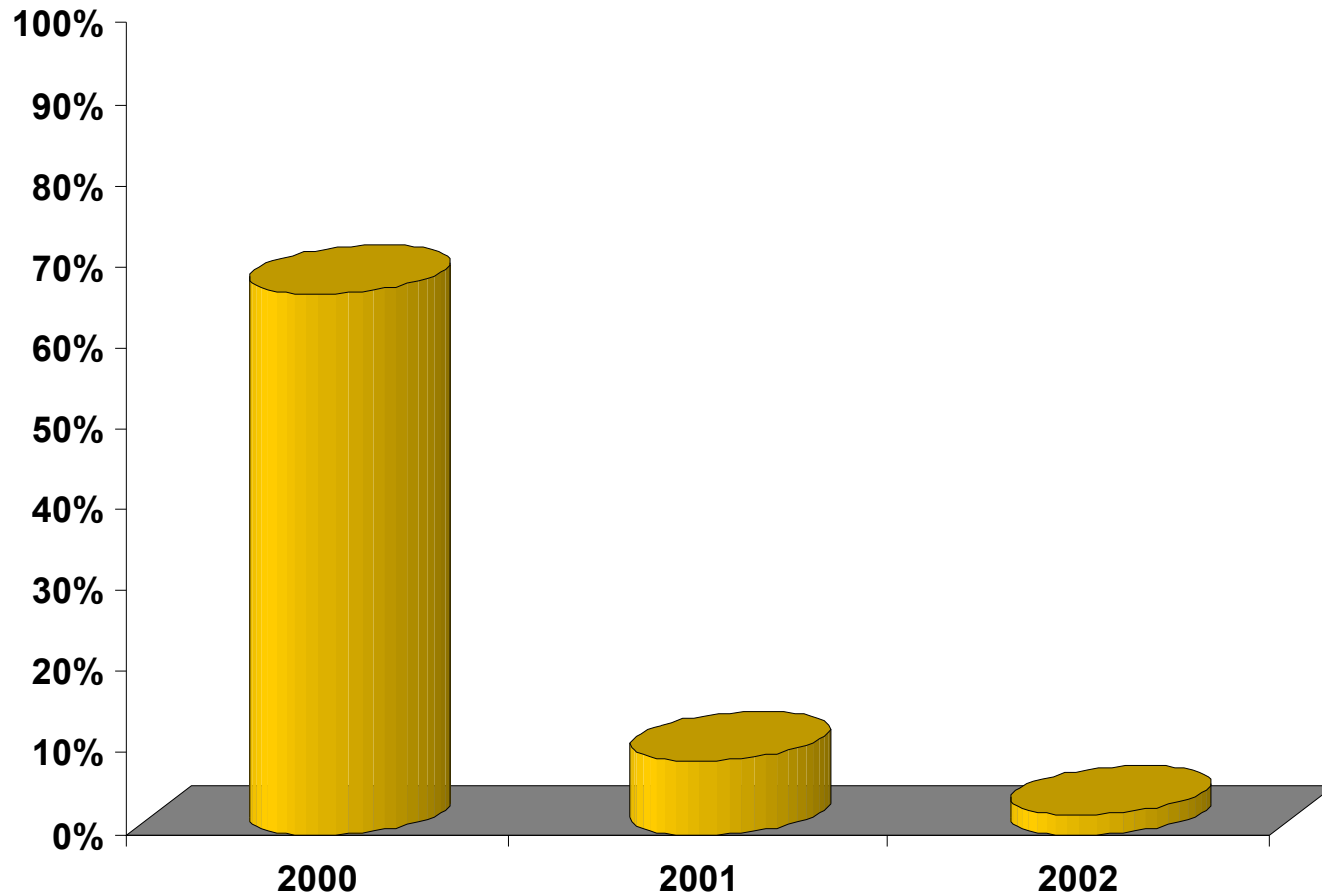


mod. nach Notz et al., 2001

FiBL Frick

# Antibiotics Minimizing in Udder Health

## Antibiotic therapies\*



\*dry off and lactation treatment

mod. nach Notz et al., 2001



**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**

# Pro-Q



- **n= 300 farms / 3year**
  - **Analyse of mastitis risk factors**
  - **Preventive veterinary medicine**
  - **primarily complementary (homeopathic and physical) mastitis treatment**
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- **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



# Pro-Q Analysis of mastitis situation



	clinical examination	quarter based bacteriology	quarter based SCC	milk recording data
start	X	X	X	
after 1 <sup>st</sup> project year	X	X	X	
monthly				X
dry off (if SCC<100 or CMT pos.)	X	X	X	
calving (if SCC<100 or CMT pos.)	X	X	X	
mastitis	X	X	X	
mastitis + 30d	X	X	X	

# Pro-Q - Prevention management



- **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
- antibiotics only in specific individual cases of mastitis

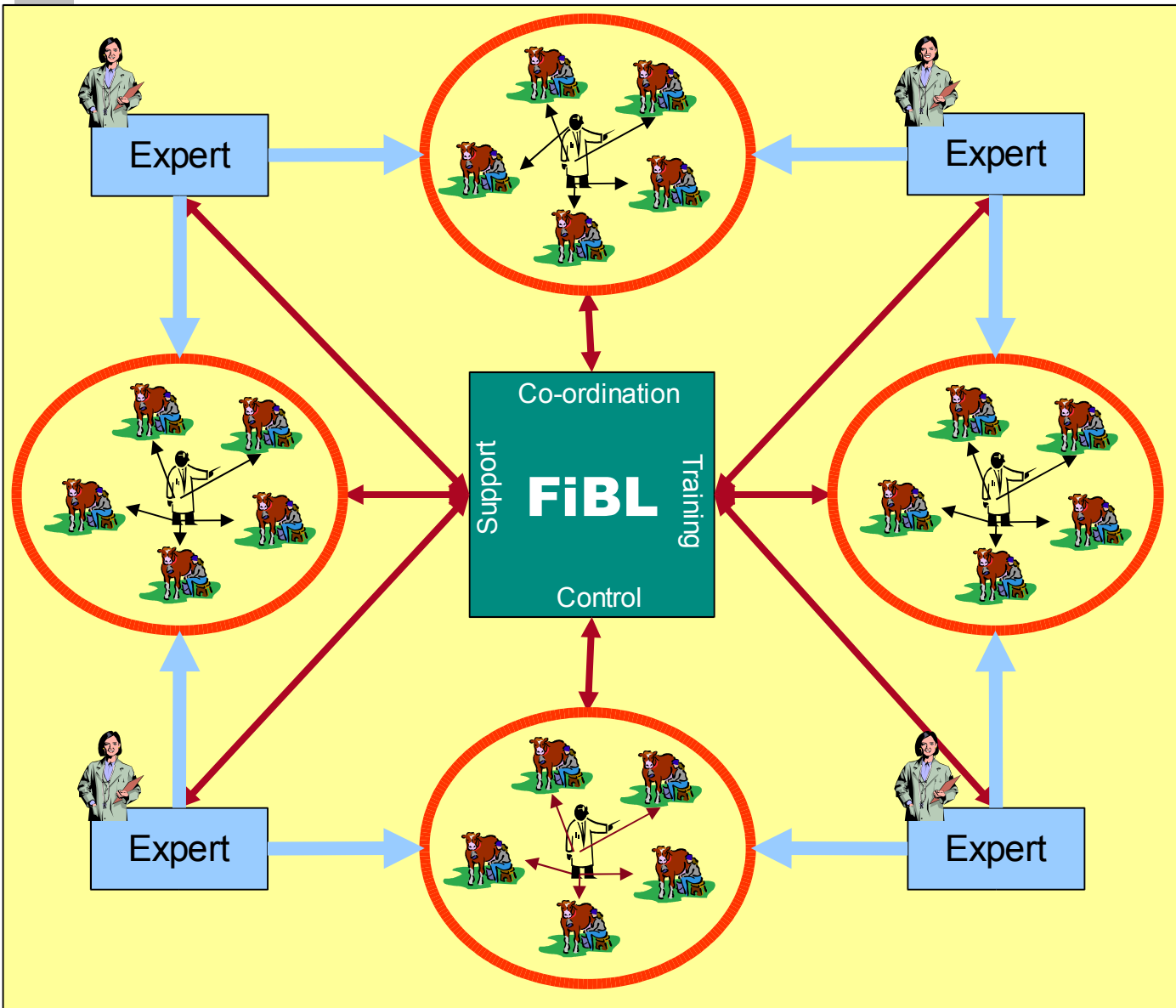


# Pro-Q summary and overall aims

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- 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



Pro-Q  
Quality milk