



# From science to practice – improved udder health with the German project



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German Association for Performance and Quality Testing (DLQ)

# Milk recording in Germany

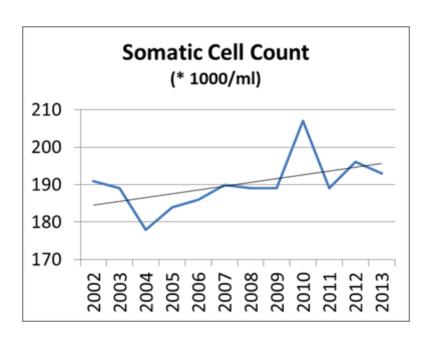


#### 2003:

- ■3.6 million cows
- ■76,600 dairy farms
- 47 cows/herd
- ■7,355 kg milk

#### 2013:

- ■3.6 million cows milk recorded (4.2 million in total)
- •53,000 dairy farms (80.000 in total)
- 69 cows/herd
- ■8,221 kg milk/cow/year



# Dairy farming in Germany



#### 2013:

- ■Productive life span: 36.6 months too short
- ■21-25% of cows reach fourth lactation too few
- ■Udder diseases: second most common reason for culling (14.3%) too high

#### 2007:

■Clinical mastitis: every second cow affected once per lactation – too many





# milchQplus: national programme



- DLQ: We need an overall strategy to improve udder health
  - sustainably
  - on a national level



- May 2012 December 2015
- Budget: 1.4 million Euros
- Funding:
  - public funding (Federal Ministry of Food and Agriculture)
  - DLQ member organisations

With support from



by decision of the German Bundestag

# Project partners & network





German Association for Performance and Quality Testing (DLQ), Bonn



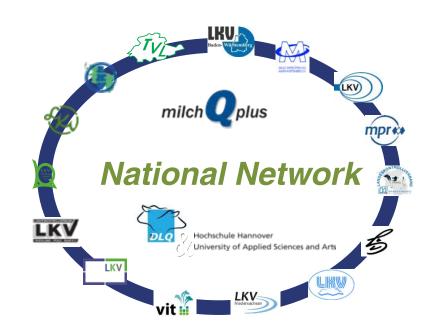
Microbiology Group, University of Applied Sciences and Arts, Hannover

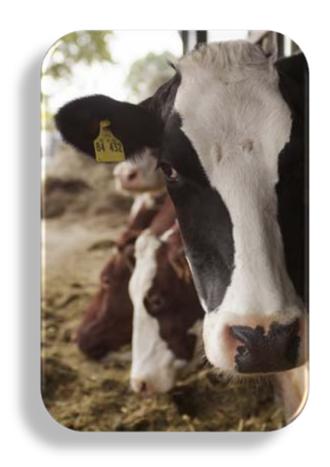


12 milk recording organisations2 associations for raw milk testing1 IT solutions for animal production



53,000 dairy farms







Aims & Contents

# Mastitis: Multifactorial Disease





Reduce complexity by a well structured approach!

Search for farm specific udder health bottleneck(s)!

# **Three Main Objectives**



# **Objective 2**

Identifying dairy cattle with incurable chronic mastitis by DSCC

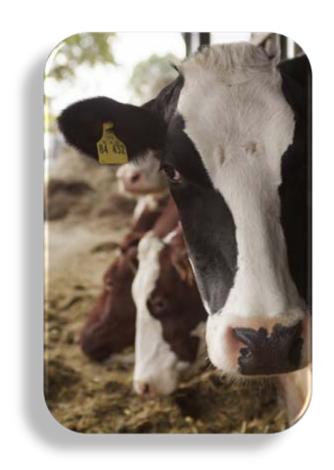


# **Objective 1**

Establishing key figures for udder health using Dairy
Herd Improvement (DHI)
data

# **Objective 3**

Improving communication between stakeholder





Objective1: Key Figures



# Key figures for udder health



#### **Aims**

- Continuous monitoring of udder health at herd level
- ♥ Early warning system
- Prevention instead of treatment
- Objectively measurable figures instead of gut feeling
- Control of measures
- Goal setting
- Part of **strategic optimisation** of udder health

### Approach

- All key figures calculated from SCC results of the individual cows at the monthly herd test
- Supplied monthly on paper and/or online as part of the established herd test report
- ♦ 53.000 farms = 86% of German dairy cows





#### Lactation

- (1)Proportion of cows with healthy udders
- (2) Rate of chronically diseased cows with poor cure prospects
- (3) Rate of newly diseased animals during lactation

# Dry period

- (4) New infection rate in the dry period
- (5)Cure rate in the dry period
- (6)Rate of heifer mastitis

# (2) Proportion of chronically diseased animals with poor cure prospects



### **Definition**

Proportion of animals with > 700,000 somatic cells/ml each in the last three milk recordings of all currently lactating animals.



Herd Test 1 > 700,000 somatic cells/ph Herd Test 2 ≤ 700,000 s.c./ml Herd Test 3

# Benchmarking

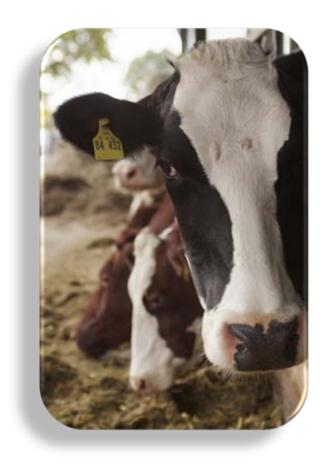


# Benchmarking figures

- Calculated from top 25% farms
- For each key figure
- On a regional basis
- •Updated at least monthly

#### Aim

- Comparison to see
  - Where do I stand?
  - What do top farms achieve?
- → Motivation to improve udder health on own farm





# Objective 3: Improved Communication





- Communication between stakeholders on farm
  - Key to bring udder health forward
- Interviews across Germany with
  - Farmers
  - Veterinarians
  - Consultants

What motivates farmers?

What are the risk factors for udder health?

- Workshops for consultants and milk recording personnel
  - Technical expertise (key figures)
  - General communication skills



# Thank you!





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