



Q Check

**Supporting German dairy farmers: Establishing a monitoring system
based on health key indicators extracted from existing control systems**

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Backgrounds



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Farm's self-monitoring
§ 11 para 8, animal
protection law



3/15

„Establishment of a
national animal welfare-
monitoring“



6/17

„Germany should
become pioneer in
animal welfare“



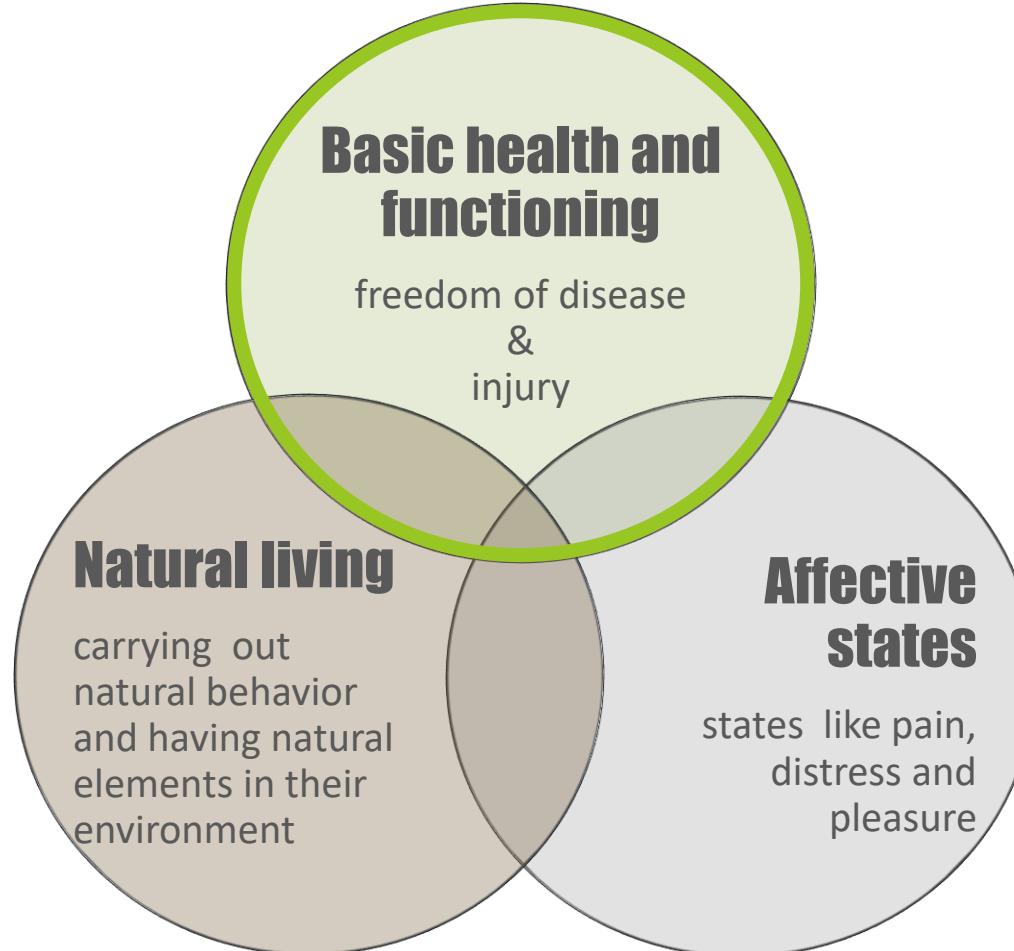
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„ Animal welfare
receives a special
preference“



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Animal welfare - a complex topic



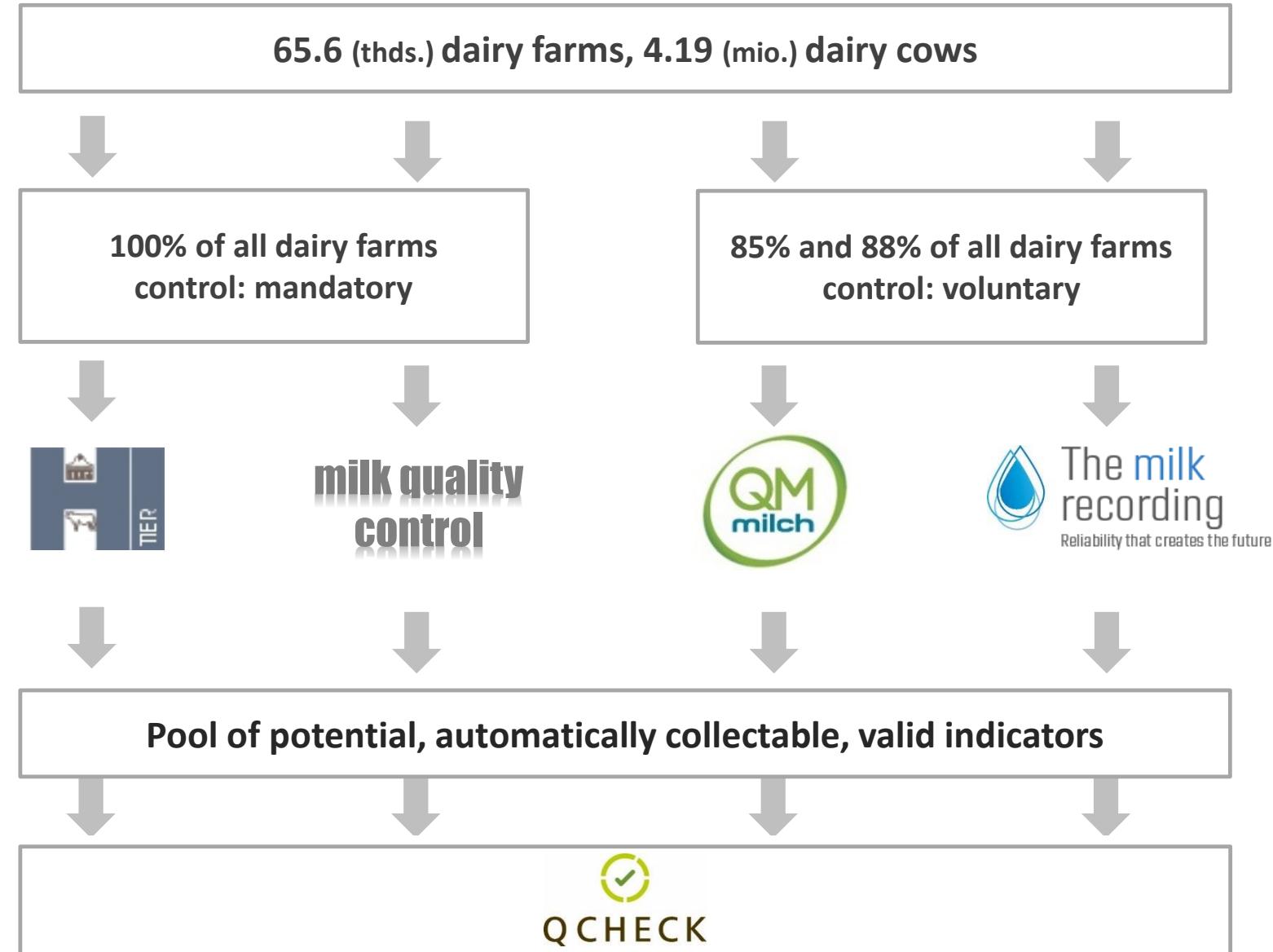
Animal welfare is a multi-dimensional concept that comprises animal health, animal behaviour and emotional state.

(Fraser et al., 1997; Fraser, 2008)

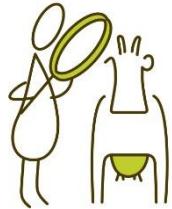


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German dairy sector



Aims



- I. Support herd management
- II. Development of farm's self monitoring report
 - As a service and assistance for the practice, in order to comply with the legal regulation and documentation in the context of the farm's self monitoring



- III. Draft of national monitoring
 - With anonymous data
 - Contribution to objectification of animal welfare debate
 - Proactive answer to the request of the government



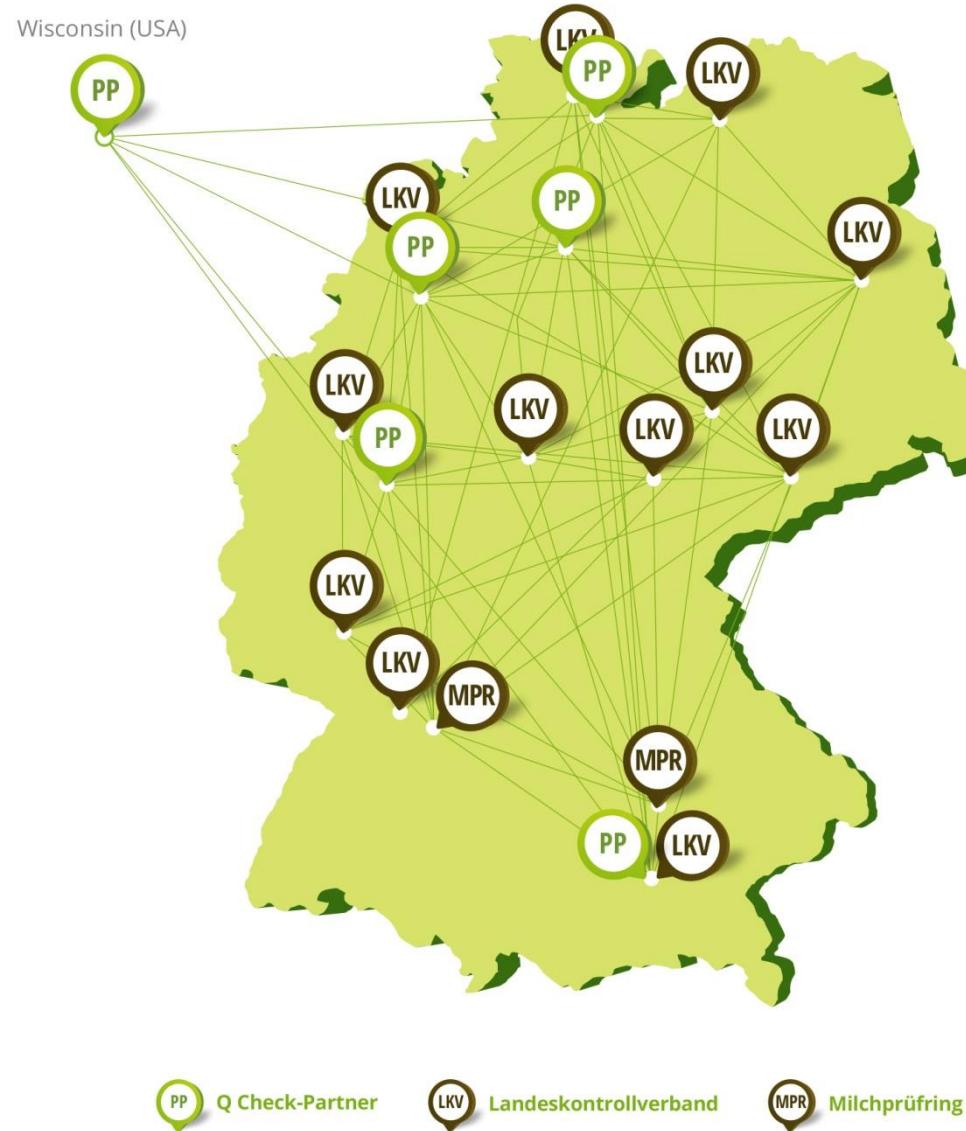
- IV. Early detection of ketotic "at risk" cows through the implementation of new analytical methods in milk recording



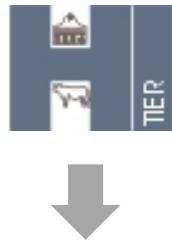
Partners



Network



Choice of indicators



milk quality
control

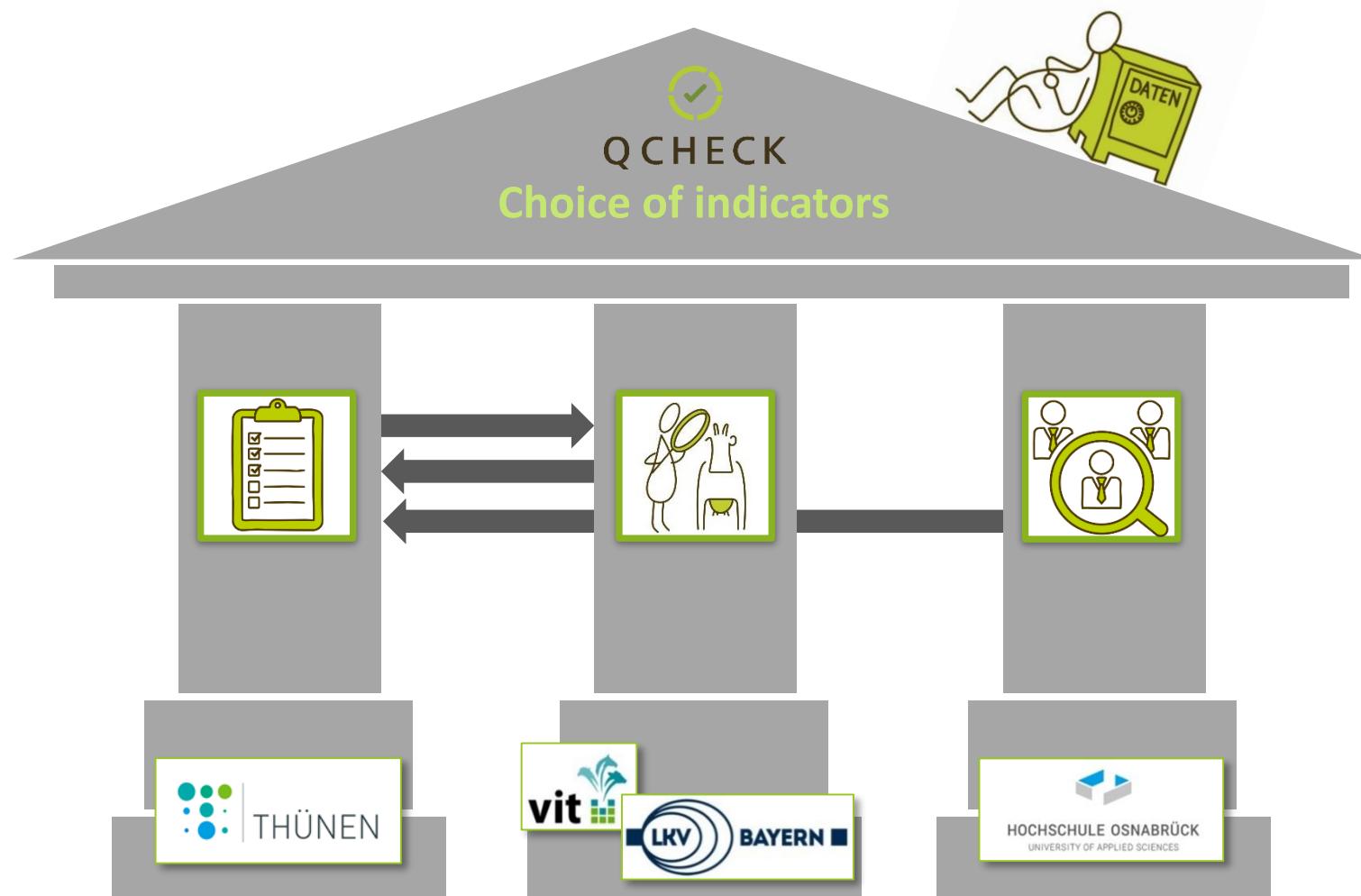


The milk
recording
Reliability that creates the future



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Three-pillar principle



Issues



Suitability of indicators
from basic systems
target & alarm values



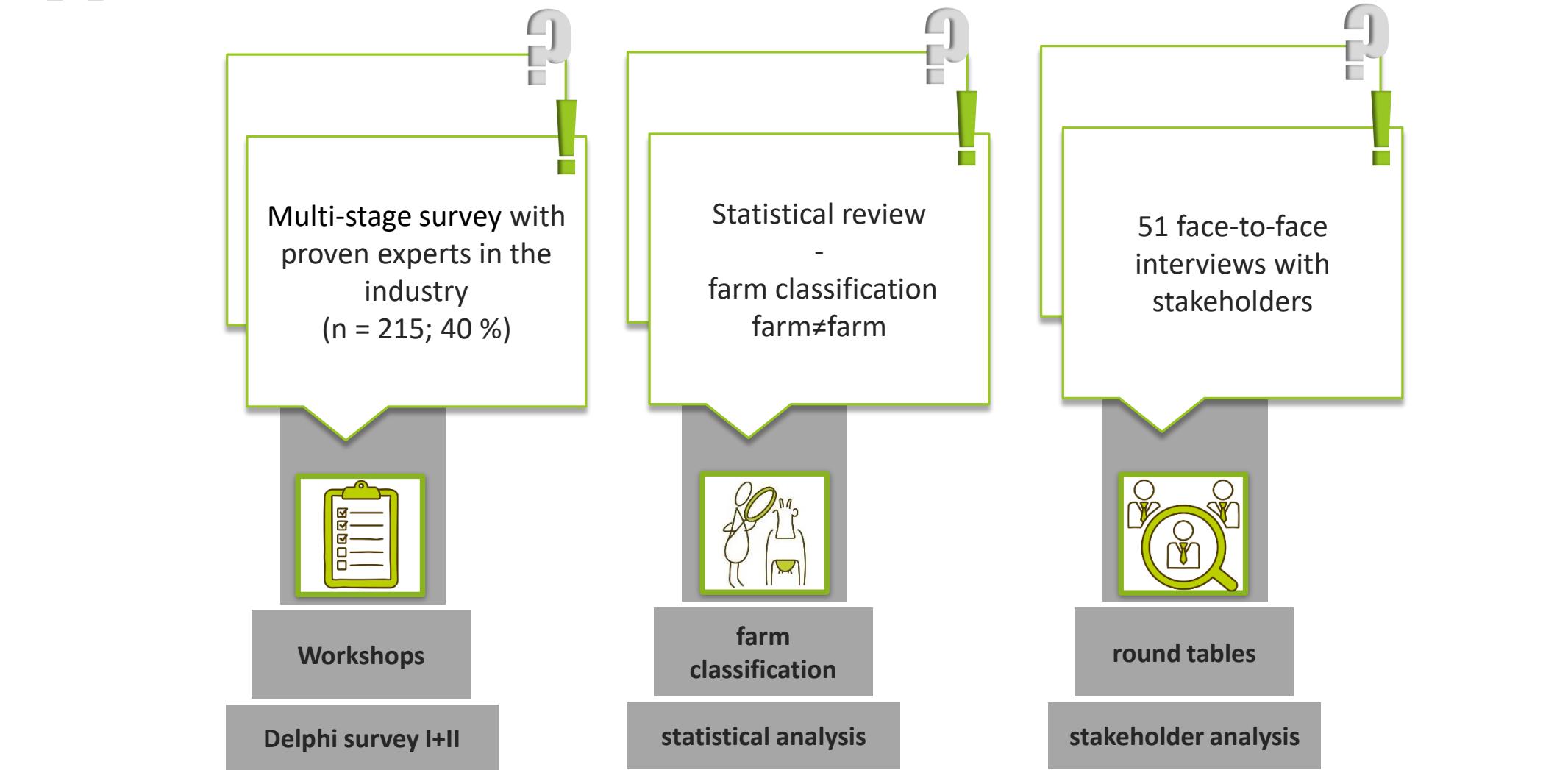
Verification of life
reality on mass data



Importance and
relevance of animal
welfare beyond the
facts



Approach

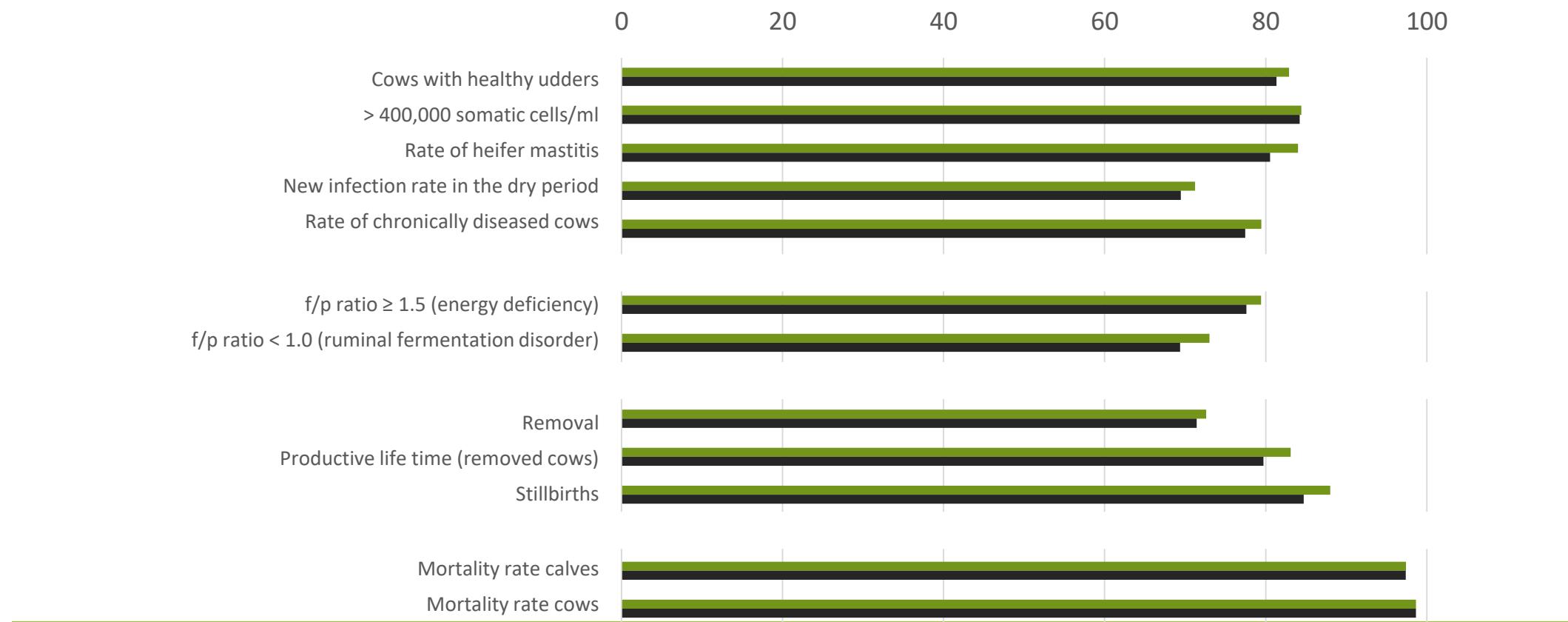


Delphi survey partial results

Suitability of "automated" indicator (proportion approval of all answers [%])

■ Delphi I+II

■ only Delphi I



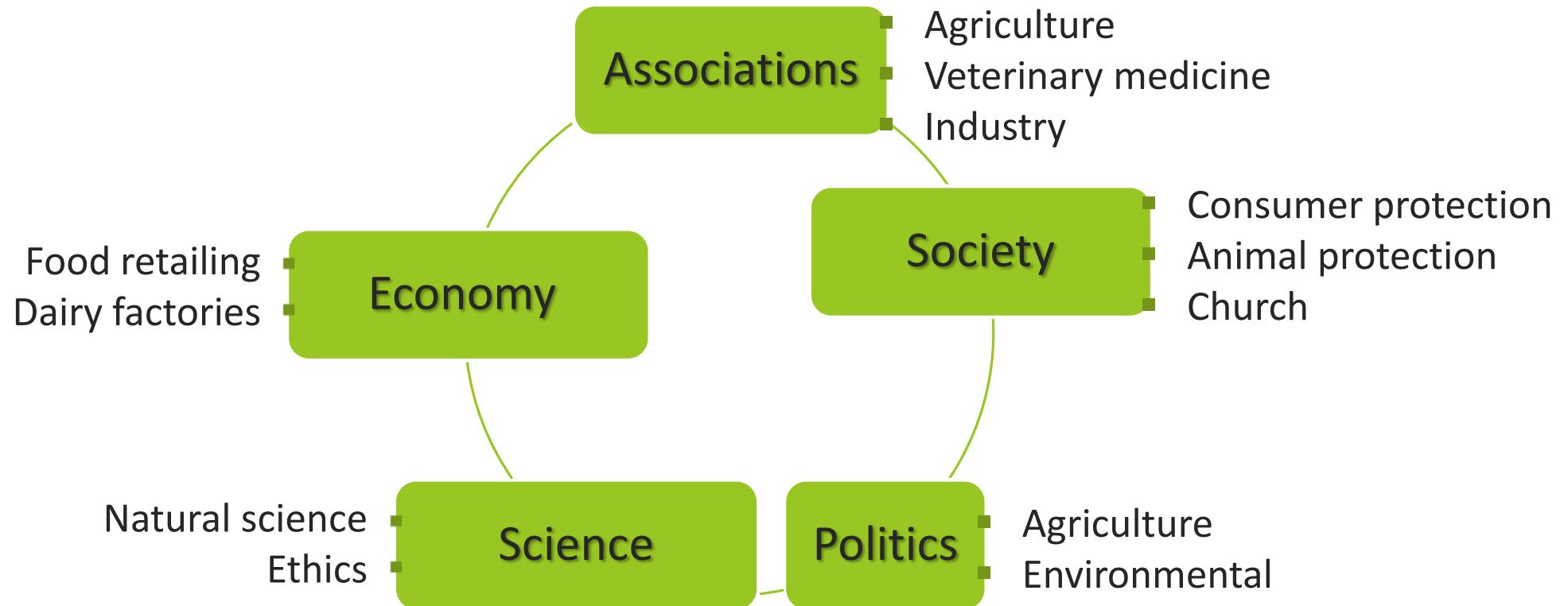
THÜNEN

S. March & J. Brinkmann



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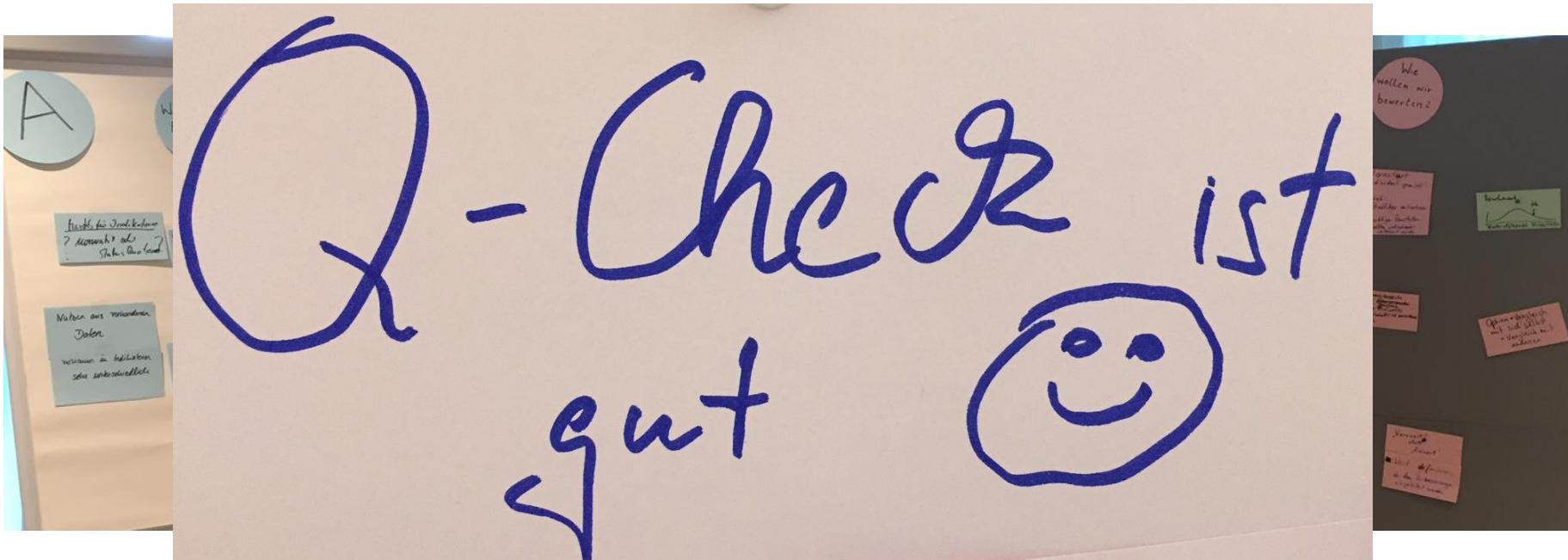
Stakeholder survey



Round tables & workshops for increased insight and understanding



Silence is silver, talk is golden



Ketosis-tool

Aim

- Expansion of milk control with early warning imbalances in early lactation

 J. Dairy Sci. 101:7311–7321
<https://doi.org/10.3168/jds.2017-13582>
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Identifying poor metabolic adaptation during early lactation in dairy cows using cluster analysis

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lactation, ketosis, negative energy balance



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Prediction model optimization using full model selection with regression trees demonstrated with FTIR data from bovine milk

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- Improved monitoring for predictive herd management

Coming soon

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EMPFÄNGER
Betrieb VVVO-Nr. C. QMuster
Betriebsschlüssel 01 123 456 7890
Quartalsbericht 53113 2-2019

EINBEZOGENE INFORMATIONEN

	Datum	Anzahl Tiere/ Kontrolle
Milch kontrolle	05.04.2019 02.05.2019 01.06.2019	n 3
Milch- güte prüfung	April 2019: 3, 10, 17, 24, Mai 2019: 7, 14, 21, 28 Juni 2019: 7, 14, 21, 28	13
HI-Tier	01.04- 30.06.2019	
QM-Au- dit	28.07.2018	1

§



REPORT

Neuinfektionsrate TP Heilungsrate TP Ketosestatus FC Kälbermortalität Kuhmortalität

Set of indicators + Valuation

Benchmark

Month Quarter Year

*im Vergleich zum vorigen Quartal



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Many thanks for your attention!

www.q-check.org

With support from



by decision of the
German Bundestag

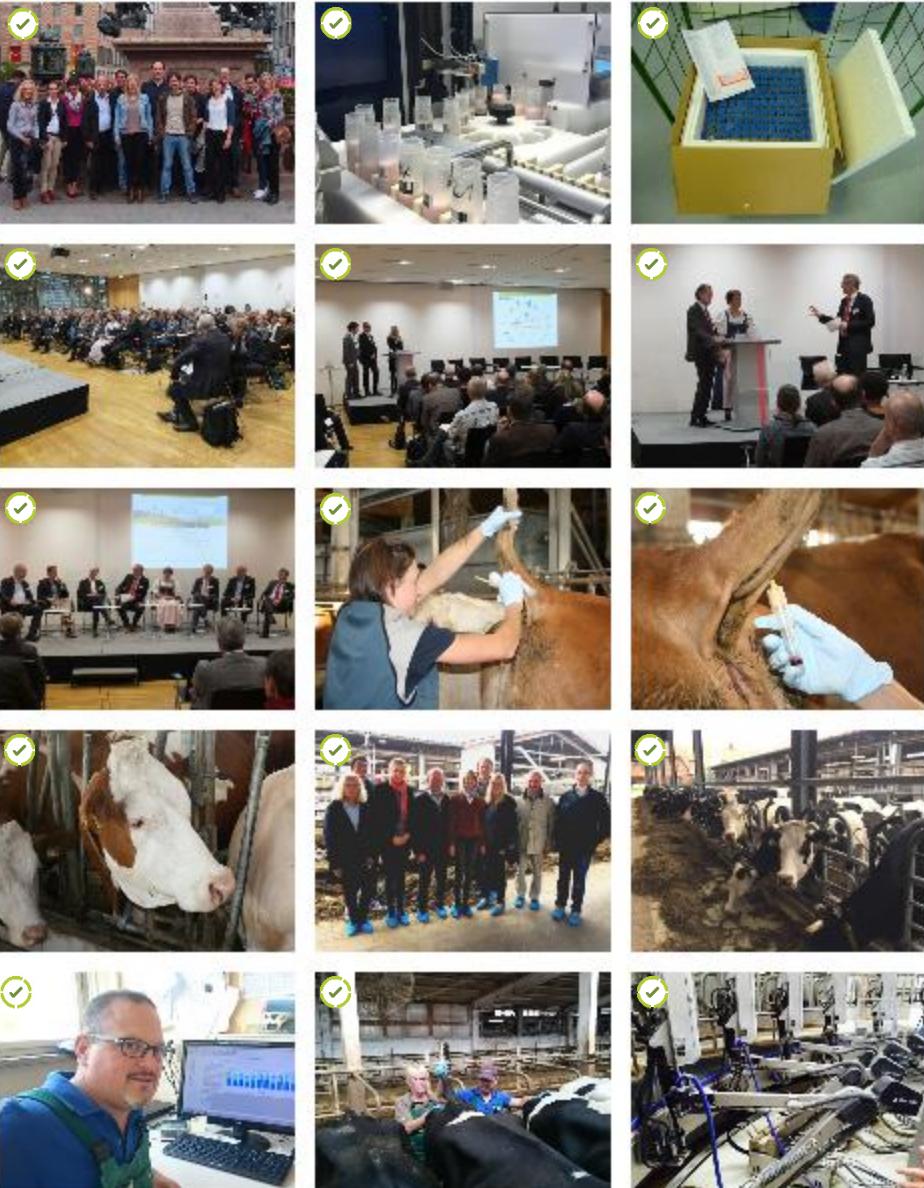


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