

# Metabolic Health

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## Introduction

The Veterinary Herd Controlling System (VHC-System), introduced by MANSFELD et al. (2002), is a pyramidal, dynamic quality assurance system for dairy herds. It allows optimization of process-quality and product-related quality. Individual farm goals are pursued through farm specific strategies and target to performance comparison.

## Materials and Methods

By means of a search of international literature a quantity of direct (directly related to animal health) and indirect (related to factors affecting animal health) critical control points (CCP) and control points (CP) and their corresponding indicators was collected. The indicators are quantitative or semi quantitative criteria and allow evaluation of a herd or a group of animals and to set goals. Suitable CCPs and CPs were implemented in a flow chart system to be used by veterinarians as a tool for the status quo assessment as the first step as well as for regularly performed procedures.

## Results

In the control area, 'metabolic health' determination of 'incidences of metabolic disorders', 'body condi-

tion scoring', 'analysis of the milk records' and 'control of feeding calculation' were fixed as CCPs on the lowest level. If the corresponding indicators deviate from the normal range, the VHC-System provides further logical steps to identify reasons for variations and to countermand them. On the next level the factor 'feeding' has to be evaluated concerning energy, fiber and mineral supply. If there is an insufficient supply due to an inadequate feed intake, checks of the factors 'housing' (water supply, feeding area, grouping) and 'management' (feedstuff processing, feedstuff distribution) are necessary.

## Significance

The described quality assurance system, designed as a flow chart, represents an efficient tool to control 'metabolic health' on dairy farms. During the 2nd part of the project the components of the QAS will be implemented into the dairy production process. True effectiveness as an early warning QAS working as a Controlling System will be determined and an economical evaluation will be done.