



## Forage Analysis Ration Control

**Objective:** We identify the nutritional value of feed for an optimized ration calculation and feeding management control.

### Range of tests

**Raw nutrients including energy and uCP content**  
dry matter, crude ash, crude protein, crude fibre, crude fat, sugar, starch

**Fibre fraction + sieve analysis ( Penn State Separator)**  
aNDFom, ADFom, ADL, NFC, peNDF

**Corn-Silage-Procession-Score (CSPS/KPS)**

**crude protein fractionation (CNCPS) + RUP**  
A, B1, B2, B3, C, RUP

**Minerals + DCAB**

Calcium, phosphorus, sodium, magnesium, potassium, sulphur, copper, zinc, mangan, selenium, iron

**Rumen-stable starch (bypass)**

**Cornell system for grass silage, maize silage, hay and TMR**

**Amino acids**

**Microbiology**

**Faeces analysis**  
Dry matter, starch, fat

**Metabolic studies**

**Blood, urine**

## Contact



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## Feed analysis

accredited test laboratory  
D-PL-14632-01-00 according to  
DIN EN ISO/IEC 17025:2018

Status: 09/2024

# Feed analysis



## Malnutrition

- **Objective:** Cause study in case of unclear decreased performance or deterioration in health of single animals.
- Range of tests
- Mycotoxins (feed, urine)
- Yeasts and mould fungi
- Bacteria
- Clostridium perfringens and C. botulinum
- Alcohols
- Fermentation acids (incl. lactic acid)
- Water-soluble carbohydrates
- Biogenic amines
- Physically effective NDF (peNDF)
- Fatty acid patterns
- Fat degradation (fat parameters)
- Toasting (urease activity)
- Metabolic studies
- Blood and urine tests



## Feed consultation

High producing herds with a healthy metabolism guarantee a useful life of the cattle and thus the profitability of the milk production. This requires comprehensive and continuous efforts from the management. The columns feeding, milk yield and animal health need to be constantly adapted to the operational circumstances. Hence, a professional and neutral consultation is indispensable.

The LKS mbH experts combine in a special way competence in feed analysis and experience from on-site feed consultation.

### From this unique synthesis, we can offer the following:

- Herd control (barn inspection, milk recording report, metabolism test, feed analysis, BCS, rumen fill)
- Enhancement of animal health and performance
- Reduction of feed costs
- Advice on current products and developments
- Ration planning
- Feed production and silaging (improve quality of roughages)
- Herd management enhancement (grouping strategies)

## Special product control

**Objective:** Characteristics of degradation dynamics of different nutrients.

### Range of tests

#### Degradation measurement (for different passage rates)

- crude protein, RUP
- Starch, by pass starch
- Crude fat
- NDFom
- Dry matter, organic substance
- N-release (SRU)

#### Digestibility measurements

- Small intestinal digestibility of crude protein (in vitro)
- In vivo digestibility (energy, nutrients)

#### In vitro measurements

- Gas production (HFT)
- Gas production curves
- Utilizable Crude Protein (via modified HFT)
- Organic matter digestibility (OMD, d-value)
- NDFD (24 h, 30h, 72h, 120h, 240h)
- iNDF/uNDF