

# Feeding COWS

**As the dairy cow's genetic potential is increasing, feeds and feeding strategies are becoming more and more important. It is well known that the amount of milk produced is highly influenced by the amount and quality of the feed given to the cow.**

It is also possible to influence the milk composition through the feeding. As the cow normally experiences a shortage of nutrients in early lactation, it is important to feed her a well balanced diet in order to maximise the dry matter intake. An unbalanced diet increases the risk of metabolic disturbances and weight loss, which have a negative effect on the milk yield. Healthy cows will also make the transition from dry to peak easier.

The cow's largest compartment is the rumen. Together with the reticulum, it has a total volume of approximately 150 to 200 litres. In these two compartments, there are billions of micro-organisms. They help the cow to digest and utilise the nutrients in the feed. To reach a good feed utilisation, the micro-organisms have to have optimal conditions.

## Different feedstuffs

### Conserved forage/hay

Making hay is a drying process in which the moisture content is reduced to below 15%. Mature crops are easier to make into hay than immature crops and losses are lower, but they are also of lower feeding value.

Making hay is a very weather sensitive process. Some farmers use drying fans, which means that they bring the crop in from the field with a higher moisture content of approximately 40%. This reduces field losses and makes the process less weather sensitive.

### Silage

Making silage is a fermentation process in which micro-organisms use the available sugar to form lactic acids. In most developed countries, the total quantity of forage preserved as silage has increased steadily since the early 1950s.

The advantages of harvesting forage as silage rather than hay include:

- Less dependence on weather conditions
- More nutrients are preserved, primarily due to reduced feed loss
- Increased mechanisation of harvesting, storing and feeding
- A wider selection of crops used to be harvested as silage
- Silage is better suited as an ingredient in a TMR.

A successful silage programme requires consideration of a wide variety of factors, from agronomic management to harvest, storage and feeding.

## Feeding cows

Milk production depends on the amount and quality of feed. An unbalanced diet causes metabolic disturbances and weight loss.

**Hay:** Drying process; weather sensitive; drying fans reduces losses; mature crops: easier to use; losses are lower, feeding value is lower.

**Silage:** Fermentation process; more nutritious; not so weather sensitive; reduced loss; use machinery for harvesting, storing, feeding; wider selection of crops used; better ingredient in feed mixtures; requires planning and management.

**IMPORTANT! Stop oxidation:** Prevent fresh air getting into the cut crop: compress and cover with plastic sheeting.

### Voer van koeie

Melkproduksie hang van die hoeveelheid en kwaliteit van die voer af. 'n Ongebalanseerde dieet veroorsaak metaboliese verstourings en gewigsverlies.

**Hooi:** droogproses; hang van die weer af; droogwaaiers verminder verliese; volwasse gewasse is makliker om te gebruik; verliese is minder, voedingswaarde is laer.

**Kuilvoer:** fermentasieproses; meer voedsaam; nie so afhanklik van die weer nie; verminderde verlies; gebruik masjinerie om te oes, stoor, voer; 'n wyer verskeidenheid gewasse word gebruik; beter bestanddeel in voermengsels; verg beplanning en bestuur.

#### **BELANGRIK! Voorkom**

**oksidasie:** Sorg dat vars lug nie in die gesnyde gewasse kom nie: pers saam en maak met plastiekseile toe.



Storing hay

## Ukudlisa izinkomo

Ukukhiqizwa kobisi kuxhomeka esilinganisweni nezinga lokudla. Ukudla okungabhalansile kubangela ukuphazamiseka kwezinqubo ezakhayo emzimbeni nokwehla kwesisindo.

**Utshani:** Inqubo yokukomisa; kuphazanyiswa ukushintsha kwesimo sezulu; ophephela bokomisa banciphisa ukulahlekelwa; izivuno esezivuthiwe: kulula ukuzisebenzisa, ukulahlekelwa kuphansi, inani lokuzidlisa liphansi.

**Ifoda egqunywe (silage):** Inqubo yokukwenza kube yimbiliso; kunomsoco owengeziwe; akuphazanyiswa ukushintsha kwesimo sezulu; ukulahlekelwa okuncane; ivunwa, igcinwe futhi inikezwe ngemishini; kusetshenziswa eyizitshalo ezinhlobonhlobo; inezakhi ezingcono ezixutshwa nokudla; idinga ukuhlela nokuphatha okuhle.

**OKUBALULEKILE! Kuvimba ukungena kwe-oksijini:** Kuvimbela ukuba umoya omusha ungangeni esitshalweni esivuniwe: kucindezele futhi ukumboze ngepulasitiki.

## Ukondla iinkomo

Ukuveliswa kobisi kuxhomekeke kubungakanani nomgangatho wefula. Isondlo esingafezekanga sibangela uphazamiseko lwenguqulo yokutya emzimbeni nokwehla egazini.



**Isikhotha/ifula:** inkqubo yokomisa; sibuthathaka kwimozulu; iifeni zokomisa zinciphisa ilahleko; isivuno esivuthiweyo: kulula ukusisebenzisa, ilahleko isezantsi, ixabiso lokondla lisezantsi.

**Ifula lesisele (silage):** Inkqubo yokuvundisa; linesondlo kakhulu; alikho buthathaka kakhulu kwimozulu; ilahleko enciphileyo; sebenzisa oomatshini ukwenzela ukuvuna, ukugcina, ukutyisa; izityalo ekukhethwa kuzo ezininzi ziyasetyenziswa; sisithako esingcono kwimixube yefula; ifuna ucwangciso nolawulo.

**OKUBALULEKILEYO! Yeka ukunika ioksijini:** Thintela umoya ukuba ufike kwisivuno esisikiweyo: cinezela kwaye wogqume ngeplastiki.

## Ho fepa dikgomo

Tlhahiso ya lebeso e itshetlehlele ho palo le boleng ba phepo. Phepo e sa lekwangwang hantle e baka tshitiso ya ho fetolwa ha dijo mmoho le tahleho ya boima.

**Furu:** Tshebetso ya ho omisa; e tshabana le boemo ba lehodimo; difene tsa ho omisa di fokotsa tahleho; dimela tse kgolo: ho bonolo ho di sebedisa, tahlehelu e tlase, boleng ba phepo bo tlase.

**Jwang le dimela tse tala:** Tshebetso tsa ho lomosa; phepo e ntle e ngata; ha e tshabe boemo ba lehodimo; fokotsa tahleho; sebedisa metjhini bakeng sa ho kotula, ho boloka, ho fepa; ho sebediswa kgetho e batsi ya dimela; motswako o betere metswakong ya ho fepa; ho hloka thero le taolo.

**SA BOHLOKWA! Thibela ho kopana le oksejene:** Thibela moya o foreshe hore o se ke wa kena semeleng se ponngweng: Hatella mme o kwahele ka polasetiki. 