Feed Intake
Part of a series of 7 articles about CowSignals® to improve health production and welfare of your cows

THIS IS A SERIES OF 7 ARTICLES ABOUT COWSIGNALS® TO IMPROVE HEALTH PRODUCTION AND WELFARE OF YOUR COWS. CONTENT 7 ARTICLES: FEED, WATER, LIGHT, AIR, REST, SPACE AND HEALTH.

THIS TIME THE ARTICLE ABOUT FEED INTAKE.

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The CowSignals Diamond: what is the weakest spot in your dairy?

Does the cow get the 6 freedoms of the pasture, also offered in the barn?
In the middle number seven: Health.
Do you see curved backs, empty rumens, wounds or infection?

Look, Think, Act, do something to make your cows and yourself happy!
COW BOTHERED BY NECK RAIL, EATING IN DIAGонаL POSITION, NECK INJURY AND EMPTY RUMEN

FEED INTAKE

If you don’t eat, you will die a doctor told me. If your cow doesn’t eat she will get sick first. If you don’t want sick cows anymore, than start changing! Small improvements will make a big difference in feed intake. We have relative cheap solutions for high cost problems. A lack of good tasty fresh feed will diminish the resistance of a cow. She will get skinny, she gets wounds and she will get sick.

As a CowSignals® trainer I visited hundreds of well managed farms in 45 countries. We learned a lot from dairy farmers. And we learned even more from cows, because they always tell the truth with their body language. Cows never lie.

BACK TO THE BASICS:

Feed Water Light Air Space and Rest. If you give enough of those “6 freedoms of the pasture” your cows will be healthy.

Time management for cows: 6 - 14 - 2 -2

How does a cow uses her 24 hours? Healthy cows eat 10-12 times a day for 30-45 minutes. Total eating time is 6 hours.
Cows like to rest for 14 hours of which around 10 hours are spent ruminating. Not more than 2 hours milking time is wanted. And then there are 2 hours left for social behaviour.

Give the cow the freedom to fill in her own agenda. Cows are very busy! Cows only sleep 20 minutes per day. Do your best to make their lives easy. They deserve it, and they will pay you back in milk.
COWSIGNALS: DID YOUR COWS EAT ENOUGH TODAY?

How many cows have a danger triangle on your farm? Daily check the feed intake of your cows. Especially of your fresh cows and close up cows. Do it by looking at the left flank of the cow, behind the last rib, under the backbone. Do you see a hollow triangle? Then you know this cow did not eat enough today and probably will be sick already.  
Is she chewing 55-70 times on every cud? Less than 55, in combination with empty rumens and thin shit means a lack of roughage in the diet. To check you also push into the rumen to score the resistance. Fluffy is bad news. Dense is good.  
Rumen fill, Belly fill and Body condition score tells you about what happened with the cow today, last week and last month. Belly fill you score standing behind the back of the cow. Look if the rumen is visible on the left side. If not, the cow did not eat enough last week. To check feed intake the last month you score the Body Condition Score by picking up some skin in between the pin bone and the tail. If it is a deep hole with only skin, she did not get enough feed last month. If there is some fat under the skin this would be perfect. If there is a lot of fat under the skin, she ate too much.  
Are your cows coats smooth, shiny and clean?  
Listen carefully for thin manure, slipping cows, coughing cows.  
Use your nose: what do you smell?  
Do you see fast breathing? 30 times per minute is normal. 60 is heat stress or pain or fever.  
Check standing cows in the beds, check for curved backs (lameness).  
Always ask yourself and all your advisors the WHY question. Why? The answers will make you wiser.  
Read more about CowSignals in our book CowSignals and organize a workshop on your farm.

HOW TO ACHIEVE 24 KG DRY MATTER INTAKE PER DAIRY COW PER DAY OR MORE?

Good advice is always simple:  
Make sure that all the cows can always eat. Make it easy for them to reach the feed.  
Water light and air are the cheapest feed... so give as much of this as possible. More and cleaner water gives more feed intake. More space is more feed intake. In a research in free stalls in the US they found that farms with 70 cm feed space per cow have twice as many cows pregnant after 150 days as in farms with 35 cm feed space per cow...70% pregnant or 35% pregnant? You can choose what you prefer. A cow is a herd animal. What does that mean? Well, they like to eat with all of them at the same time, so you need space on the feeding table. 1 feeding place per cow. Just like the pasture.  
And cows are flight animals; they like to have an escape route to avoid fights with "big mama" or with the milker. So space in the barn is important. Make enough passages to the feeding table, like 3 passages/cross overs of 4 metres wide for 60-80 cows.  
Build or adapt your barn to one feeding place per cow and one resting place per cow and your life will be easy. Every extra hour resting is one litre more milk.
ACCESS

Claw health is essential. Lame cows don’t eat enough. They eat only 4 times a day instead of 10-12 times. You can see their empty rumens. After grooving floors we see a better feed intake and better heat signs. Cows walk more often to the feeding table. Floor should be grippy and preferably soft. So grooving concrete preferably with diamond blade cutting every 4 mm a 2 x2 mm groove on slats, or put rubber in. Or start sand beds. The spilled sand will make the floor rough and suitable for walking. Access into the feeding table to easily reach the feed is also to be improved on many dairies. Many farms the cows are bothered while eating due to bad design at toprail, bottom or front shoulder joint. Most common is the irritating neck rail which is too low and too close to the cow. Just move it 25 cm forward and your cows will eat more.

FEED BEFORE THE EVENING MILKING

The biggest lie farmers tell me is: my cows can always eat. They think it is true, but if you look more careful you will find many hours were the cows cannot reach the feed. I think on 80% of the farms the cows have not much to eat between 3 am and 9 am. The importance of accessibility of feed is highly underestimated. 24 hours feed available or 22 hours and 2 hours milking. Some farmers solve the problem by feeding before the evening milking and do a late night push of the feed. So they have more feed storage at night. During the day they have a better control. Others go for 2 x per day fresh feeding at milking time. Always push feed after you collected the cows for milking also has a good effect on feed intake, milking speed and udder health. They go quickly through the parlour to reach the new feed and stand voluntary eating for 30-40 minutes. In the mean time the teat ends close. The more leftover feed you move from your fresh cows, the more they eat. Better farmers take away 5-10% leftover feed from their fresh cows (or first 100 days in milk group), to the older young stock. I often find hot meals for the dry cows in summer. This is really bad. If the close up doesn’t get an excellent quality feed, you are in trouble.

A COW IS NOT A PIG

More structure/ fibre in the feed means healthier cows and less disease. If I listen to the shit score in a barn, I often hear fresh cows with diarrhoea. A cow with diarrhoea is sick, she has less resistance against other disease as well. Most farms feed the cows not enough roughage and too much concentrate to get more milk. This is wrong. A cow is not a pig. A healthy cow will give more milk in the long term. So what we see on the best managed farms in the world, the fresh cow group gets extra good quality firm alfalfa hay with a good scratch factor. Other farms with TMR feeding and all the cows in one group feed up to 1.2 kilo’s of 5 cm long chopped straw in the mix. I often advise farmers to do the roughage test, always after opening a new silage pit: add 200 grams extra straw or grass seed hay in the mix every week, and check the total volume of milk. Some farms did this for 5 weeks and were still going up in milk. There are many successful feeding systems. Always discuss the feeding programme regularly with your feed advisor. Also calculate a good dry cow and young stock ration up till 15
months of age or until one month after she became pregnant. There is a lot to earn there. If you see many hollows in the feed pile /bunk/face it means that cows are sorting. Mainly they lick out the concentrate or straights. Try better mixing or make the mix a bit more wet so the good parts will stick better to the roughage. Up to 40 or 42% dry matter is dry enough.

If you don’t want to have too much difference in the ration between cows you better have one feeding place per cow. This gives them an equal chance to select the best out on the first feeding.

This information has been provided by our colleagues at CowSignals. It has not been subject to Vetstream’s peer review process. We hope you find it useful.