Tips about Udder health

Mai 2025:

Still three-teat?

A cow that became three-teat due to an udder infection during the previous lactation sometimes produces milk from all four teats after calving. Sometimes very well, often less milk and sometimes also of (too) poor quality. But if the milk is good, the cow could be milked as a four-teat again.
This sometimes occurs after a coli and very occasionally after a streptococcus uberis udder infection.

The robot will certainly continue to milk her as a three-teat if you do not adjust it in DelPro.
And then she will certainly remain a three-teat… Or will she get udder infection on that teat again…

It is always worth assessing this after calving.

And of course, we will follow up in the Cow Monitor afterwards to see whether it was a sensible choice!

April 2025:

Good for teat locks and healthy rumens.

It is still important that cows stay “on their legs” for at least 20 minutes to half an hour after they come out of the VMS before they lie down. This is very important for closing the teatlock muscles under the teats. And thus ensures considerably less risk of mastitis.

But it is also important for the rumen that they eat enough roughage and drink water before and after the concentrate feed in the milking robot or concentrate feed box, and therefore do

not lie down immediately.

Therefore, make sure that the cow has something to do after the robot visit. Offer her fresh and clean (heated?) water and often provide fresh food at the feed fence where she feels invited before she could go to a lying place.

And, of course, she also stays on her legs longer with healthy claws.

November 2021:

How should I react to a new or rising MDi or conductivity?

Despite all the knowledge, farmers often find it difficult to determine what to do when.

In cows that regularly have an MDi or conductivity that is too high, the only interesting question is whether you made the right decision at an earlier moment with this cow.

But what are the important steps in new cases? In that case, it is actually about estimating whether the cow can fight off the bacterial attack registered by DelPro itself or whether your support is needed.
So:

- Is it an incident, for example, after a heat, or a crazy event in the stable or robot.
- What is the condition of the cow, is she in good condition and fit, no other inflammations or disturbing bruises on the body, does she use all four legs well and evenly, rumen well filled and is she not (too deep) in the negative energy balance?
- Was it a big increase? With a decrease in production, on the relevant teat?
- Has she had an increase, perhaps a few weeks before?
- How is the hygiene in the barn, is she able to fight off

a bacterial attack herself?
- Is the company cell count high or very low?

If it is a really new case, it is often sufficient to check for good empty milking at the next milking, possibly with a few good rubbing with udder mint. Livestock farmers also sometimes give a bolus, everything to help the cow fight the invaders (bacteria / viruses) with its own resistance.

If the cow in question has more history or if you say that she needs extra support as a result of the above mentioned points, it must be tackled more thoroughly.
With healthy cows and timely intervention, we can increase amount of milk in tank but also increase lifespan and reduce antibiotic use.

September 2021:

Cows losing milk in layingboxes.

Some dairy farms are more or less bothered by milk outlayers. Then there is (a lot of) milk in the boxes, sometimes even from cows that were milked not so long ago.

What could be the possible causes of this?

Of course the milking technique, the correct puls-rest ratio with pulsations, correct vacuum, good liners and especially not too high milk flow by take-off moment.

It is also important that a cow does not come too late or too early after her previous milking.
When stressed in the milking parlor or milking robot, the cow often does not milk properly.
This can be caused, for example, by bad or slow attaching teats, attached too early or too late (oxytocin), leakage current, too tight in the box, feeding concentrate too short, a restless environment, small waiting area and “struggle” to

get to the robot or milking parlor, etc. , etc.

These things are often all tackled, but must be mentioned.

Leaking milk is also hereditary. In certain bulls and cow families with a high milking rate, losing milk when they are laying is more common.

Furthermore, a common cause is the box cover.

There are mattresses that get very warm from the cow lying on them. But also in summer when it is warmer, those mattresses are already warm by themselves and when the cow lies on it and is sensitive to lying out milk, this is considerably strengthened and milk loss can be a consequence.

Either hard or no box cover. If the cow lays a bit clumsy, she can also squeeze some milk from the udder in addition to lying out.

With teat top callus, teat points close less well. And teat lock muscles that do not close good enough and not fast enough are literally an open door for bacteria, in addition to letting milk out!

Add to that the fact that milk in the boxes gets dirty quickly and also likes to be visited by flies, and then you know that the risk of infections increases considerably!

Furthermore, it appears that of the minerals, especially a Calcium deficiency causes poorer closing of the sphincter muscle around the lock hole of the teat. With Calcium you should pay particular attention to the Calcium / Phosphate ratio 2 : 1 This ratio is necessary for good absorption. This ratio is also very important during the dry period, but it also deserves attention in (pregnant) young stock.

Zinc is also seen as an important mineral for this, but then you have often already sounded the alarm bells because of fertility problems, sluggish behavior and dull hair.

Also Magnesium is an important mineral for the (lock) muscles.

Shortages can arise, for example, because roughage is fed from monotonous crops that have been little fertilized, or old or unpalatable batches.

These minerals, including Calcium, can be added during feeding.

Less palatable rations or rumen acidosis can lead to low intakes.

It may also be that the need is sufficiently met, but because cows, for example, receive a lot of iron or manganese (via drinking water?) , it is not absorbed sufficiently and we still get into problems….

June 2021:

Drying off cows earlier?

There are more and more cows that give a lot of milk at the end of lactation.

But there are also cows that give too little per milking at the end of their lactation, or are milked incompletely more often then. Then it might be wise to dry them earlier because it presents a possible risk of an increase in conductivity and cell count.

If the cow does not get an increase in conductivity and somatic cell count at the end, those few liters that are not milked at the end of this lactation will be more than made up in the next lactation!

If they are dry for longer, they must have a ration with low energy, sufficient protein and a high structure content for at least the first month. They want to grow easy and the rumen

takes its rest. And it is precisely that rumen that should keep things very active.

Everything to make sure the next lactation is TOP!!

September 2019:

Drying off cows with a sealer?

Many cows are set dry with just a ‘teat-sealer’ treatment like Orbeseal.

Three things are incredibly important when it comes to using a sealer.

The obvious first tip is to work hygienically of course.

Second, make sure that you do not insert the sealer to high. The sealer should close the teat canal and not the udder. (That’s just bad for the udder.)

The third and final tip is that you need to make sure that you “don’t include burglars”.
So, when you dry-off a cow don’t only look at the cell count but also take the graph on the Cow-monitor in consideration. Set it to an overview of 365 days and you can review the results per quarter/teat. You can overview the last week or last month but also the entire lactation history and assess whether every quarter is clean enough to set the cow dry only with a sealer or have to use antibiotic.

April 2019:

Flies transfer bacteria: How do you keep the place clean?

Most causative agents of udder inflammation can be divided into cow-bound bacteria and environment-related bacteria.

Bacteria related to the environment, such as the common Uberis Streptococci, is often spread through beds that are unclean.
Or uncleaned areas, such as those near or under water troughs, cow brushes, fences, etc. This dirt is taken back into the cubicles. The cow will lie down in it and spread it further.

Or Milk equipment / cluster is not clean enough between milking's so could also play a role.

Cow-bound bacteria such as Staphylococci Aureus and Streptococci Agalaction spread from cow to cow or from milk to cow. So milk leakers, wet cubicles, and uncleaned milk utensils should be cleaned properly on the outside and the inside, since spreading could begin there.

But these cow-bound bacteria can also be passed on by flies!

And they are always in every puddle of milk….

Tackle fly control consequently in time. This is also very important for udder health.

September 2016:

Risks on high Somatic Cell counts.

We're in the time again of higher somatic cell counts. It is crucial that you know what the causes are. And are they cow-related or environment-related bacteria?

For example, an Aureus (cow-related bacteria) cow, which is very contagious and difficult to control, needs to have a very good reason why she is still walking around on your dairy with this milk price.
Aureus is difficult to treat well and very contagious! In the cow monitor it is quite easy to recognize because of its high peaks and lows in the graph.

Uberis is the most common environment-related bacteria. You can spot Uberis by noticing the cow has a high cell count but relatively little increase in the conductivity graph.

Environment-related bacteria are easily spread throughout the barn, boxes, manure and dirty milking equipment.

With the monthly milk test, you get a list of somatic cell numbers, split into heifers, 2nd calf and older cows but also columns for the first days after calving and later periods during lactation.
Again, a lot can be learned from this: are there many fresh cows with a high cell count the first month after calving? Was the place where they calved clean enough, did they eat and drink fast enough after calving? Haven't they been calved in good conditions? (to fat or thin, or … it's all possible)

Or if there are too many cows that peak with cells in lactation between 60-150 days?
This could come from too long period of negative energy balance which in turn would cause them to be to weakened to resist a bacteria-attack.

Or do heifers already have a high cell number? This is often CNS: a collection of cow bound and environment-related bacteria.
This may have to do with young cattle rearing, but also due to the fact that they live in in old stables which is no longer suitable as a clean and comfortable habitable environment due to neglect.
Also old drinking water systems which doesn't flow as quickly as it should is a paradise for bacteria and can cause CNS. As a result, they often have an infection even before the calving is incurred.

All dairies have bacteria. Which bacteria gets a chance on your dairy?

Mai 2016:

Better milking empty an problem udder / quarter

It occasionally happens that after an mastitis infection or another cause, a teat never fully recovers. Thus, resulting in it not coming back to normal production.
Also, it could be more difficult milking empty this udder quarter .

The default settings will sometimes cause the teat to be taken off earlier because the flow of milk is, even briefly, too low.
Such a quarter will be removed too soon, and will dry up.
Of course, this is not the idea.

The options you have now are: select on the Animal card (Configuration) the “Base take-off decision on lower flow” and maybe too “Extended pre-milking time” (she gets more time to let the milk flow).
Also, you have (by Cleaning) the possibility for teat cleaning to “Clean twice”, because that stimulates also often the milk flow.

But the most important thing is that you discover on time that this can happen!

July 2014:

Disinfect before milking:

VMS not only offers the possibility of disinfecting after milking but also to spray, disinfect before.
This is illegal in the Netherlands because people are afraid of getting too much iodine in milk.

Most of the Mastitis Pathogens can be divided into contagious (they go via the skin or milk, or flies(!) from cow to cow)

and contextual bacteria (in stalls, manure, straw, etc.).

Do you, for example, now en than have a cow with E-Coli Mastitis (contextually-related bacteria) then you should control or do the following;

- Clean resting boxes
- Clean barn, fresh, airy, etc.
- Clean and disinfect the VMS arm several times a day with a hand spray with disinfection
- Get “risky” cows to be sprayed, disinfected, before milking. Maybe in advance log in to your milking advisor if you are allowed to.

Disinfection before milking only works, or mainly does, with teat dips with sufficient and “fast” iodine like Pro-Active and Tri-Fender.

Bacteria are simply everywhere:

It’s an ongoing struggle to minimize their opportunities.

September 2013:

Preventing too many three tits

By robot milking cows become easier a 3 teats milkers after they are too often not completely milked. For example kicking the teat cup off or slowly milking.
When this happens oftener, the computer doesn’t recognize it as a problem. The computer just thinks this cow is not giving more milk, so the computer doesn’t give you a warning that the cow hasn’t been completely milked.
For that to happen, the cow must give less than 50% of the expected yield. If that doesn’t quite reach the expected 50% the computer won’t give a warning.

When you see that a cow has not been completely milked yet and

it is not named by the computer as incomplete, make sure that the cow is completely milked in your presence. Then you might be able to find the cause of it and you can make sure the computer learns again how much milk the cow should give.

Is kicking off the teat cups mostly the cause: see if you can change the teat cleaning, the type of teat dip (for softer teats), feed slower, pretreat more carefully or by increasing the time settings for “incomplete milking” (the cow then has a limp udder and hasn’t saved a lot of feed so she will be quicker irritated) or by simply turning that time setting off if the conductivity of the cow can have it.

Is the cow milking too slowly the cause, then go to the “Animal Card” > “VMS Settings” > “Configurations” and check the “Base take-off decision on lower flow”. You can also use the “Extended pre-milking time”. Mostly better works a “Clean Twice” Teat cleaning and use by “Feeding” the option of “consumption rate” to spread the concentrate over a longer time of her VMS visit. The cow will then be more inclined to give good milk.

Incompletely milked cows are also often cows with hoof problems, they aren’t milking very relaxed, not standing square and they are inclined to rub their painful hoof (mortellaro?) against the teat cup.

April 2013:

Drying off cows without antibiotics?

Drying off cows without antibiotics has a few large advantages:

- It saves money and it provides flexibility using less medicines or in a different way
- If you don’t treat the animal, you will not harm the

healthy udder / teats.
- The cow stays sensitive to penicillin so that she will be easy to treat if an udder inflammation occurs with the next lactation.

But:
It is and will always be very risky, to dry off a cow without antibiotics and that’s also the reason why it is important for you to have a clear image of which cows have a larger risk of having an udder inflammation. A cell amount of 100 doesn’t say much. Because that’s an average.
It can happen that 3 teats have 20 and for one teat, most of the time with very little amount milk, the somatic cell count is over 1000!

With the cow monitor and the graph behind it, you have a clear review about how the lactation of a cow in that area of production and the healthiness of the udder has turned out. It is so clear that you can choose the teat you want to evaluate. This is without a conductivity measurement or having something like that almost impossible!

If you see anything special, then a setting-dry period without antibiotica is extra dangerous!

Look for the “to-put-dry” cow on the cow monitor. Double-click so that you see a graph.
Choose “Yield, conductivity & blood graph” (down below) and then select 365 days.

On the graph at the right you see that the cow with the left back quarter, probably doesn’t have an udder inflammation but that it is subclinical and gives the least milk. Also the MDi, at the bottom, moves to much from the top to the bottom, like a wave and it stays like that.

If you see this graph pull up on your screen you will know what you have to do.

Of course it is very important to work hygienically, and always keep the dry cow in a clean and spacious area to spend her time being dry.

July 2012:

Three or four teats to milk

With robotic milking you see often big differences in production per quarter of a cow. Often there is an old mastitis where it comes from but there can be also another reason that the cow is (become) unequal .

Almost always, this milk is of poorer quality. But you do not always see this in the SCC because the amount of this quarter is so little to the other three. However, the robot often has more work to find the teat and the cow will find it less enjoyable to be milked. Especially when the production of such teat goes near or below 0.3 kg per milking, the robot will take off the teat cup and then re-hang. Sometimes several times.
This is what the cow does not like, she finished her food, emptied her udder, and wants to leave.

We see therefore often that, when farmer programs this cow as "three teat" , the cow likes the milking much more, and therefore likes to come to the VMS more often, and with ease produces with the three teats more milk as with four teats previously. In addition, the milking time also will considerably be shorter, more comfortable for the cow and time saving, also interesting for the farmer!

How to make a cow three teat?

If the other milk may go to the tank: Penicillin is excluded!

When you decide on time it is possible to dry the teat in the VMS PC and then the next day by hand milk/check the wrong

teat, then wait 2 days and repeat emptying, wait 3 days and empty. Do this until you are confident that the teat dries without complications.

Depending on the cause, there are cows who will be next year even back four teats.

Is a cow infected heavier or with cow related bacteria than the vet has an effective tool which makes the cow final three teat but also “burns out” the (sub) clinical mastitis.

July 2011:

How much healing chance by mastitis.

Because each milking brings data in the computer you can see quickly whether abnormalities are present in milk or that something on a cow changes. So you can be quicker in taking action.

This and following the developments in cow monitor and in the graph is pretty well possible to estimate if you have to treat the cow and how long?

Depending on speed of approach and following paragraphs, the cure rate for high SCC cows lays between 20 and 90%. (source UGCN)

These cows have a lesser chance of recovery:

- Lactation number > 3
- Lactation stage > 100 days
- Duration increased cell count > 2 weeks
- Height SCC > 300,000 c / mL
- More often treated? > 2x
- Rear Teat
- Resistance cow moderately / poorly
- Leaking teat / always dirty

- Type of bacteria? SAU, CNS
- Insensitivity antibiotic?

Try to estimate on time if cure is promising or has no chance.

Chanceless cows, even though it is cow Rebecca with lots of stories, can cost lot of time and money and meanwhile infect other cows in the herd ….!!!