

# Tips on keeping the cows healthy

*January 2025:*

## Replacement percentage.

On farms we encounter replacement percentages of 50% to less than 20%. This concerns heifers that are needed for annual replacement in the herd.

During presentations I often show the list below. How, in my estimation, does the living environment influence this economically very interesting figure.

Suppose you have 100 dairy cows,  
how big do I estimate the influence on the replacement percentage to be ? :

1. A good selection / straw pen after VMS:  
2 – 5 cows
2. Comfortable cubicles with nice bedding:  
5 – 10 cows
3. Claw care prior to drying off:  
5 – 10 cows
4. Safe, dry, walking paths with good grip:  
2 – 5 cows
5. Dry cows and heavily pregnant heifers  
having plenty of room to move:  
2 – 5 cows
6. Extra structure and condition maintenance for dry cows:  
5 – 10 cows
7. 2-Minute-Check at each round of the barn:  
5 – 10 cows
8. ....

The better the conditions are in order, the lower the rearing costs you have, the easier the cows walk and produce and the more space you have to select in the bottom of the herd.

Fertility does not appear in such an overview, but resistance does ...!

### ***March 2024:***

#### **Tame cows or minerals?**

When cows are very tame and keep licking your overalls, you have to be careful that this tame behavior is not confused with a sign of mineral deficiency.

Then the cows will not only lick your overalls but also everything else.

Even drinking urine or “eating” ground is then possible.

How is the mineral supply?

Sometimes the cows get enough, but utilization turns out to be disappointing.

This may be related to the use of groundwater: too much iron or manganese are examples of why other minerals such as copper and selenium are not used enough.

Land, meadow, location: close to (highway) road: sulphur; etc.

Or the cows can still select feed at the feeding fence so that the first cows always get more than enough and the last do not.

Even structure is important here again because of the rumen activity.

This also gives more cow activity and therefore more intake.

### ***September 2023:***

## **Teach heifers for calving barn system and routes?**

Especially with controlled cow traffic, it can be useful to get the heifers before calving used to the routes, habits and rations in the barn with dairy cattle.

But if, for example, they are already fed in the milking robot, they will be even more frightened by the robot arm after calving, with the result that they are more reluctant to visit the robot during the first few days.

So learning the routes and any selection gates is enough.

Take them out of the dairy group at least two weeks before calving, then they should be able to prepare for calving in peace, preferably in a straw pen / calving area, and not have to worry about bossy cows in the dairy group.

## ***September 2022:***

### **Checking recently calved cows.**

This website has often been tipped off about paying attention to fresh cows.

In addition to regularly doing the 2-Minute Check, it is also good to sort daily in the Status list by DIL (Days In Lactation). Then the newly calved cows at the top. You can immediately see whether the expected milk yield was -far- above 100% at the last milking.

When you open the animal card by double-clicking the top cow and open the "Milking" tab, choose "Yields" and then "Blood and Conductivity" (At least for the last 7 days + today), you will immediately see when was her last milking, how often she is coming to the VMS already and whether all teats are milked properly, how the conductivity is going and whether the blood values ☐are dropping nicely.

With the green arrow (next to printpreview, printer and page setup) you can go to the next cow that you have sorted by DIL.

### ***August 2021:***

#### **Not too long in separation area.**

It's great if you have an extra section where cows are kept and controlled, such as a straw or sand pen for example. Especially if the cows can be easily guided to and from the robot from here. Or to the hoof trimming box.

Yet we often see too many cows that stay too long in this area. It's really for care cows!

Usually the cows that stay in this (straw) pen are only milked twice a day. It also often happens that the water supply and roughage supply are less generous than in the rest of the barn. Then, for example, they can drink what is necessary but they have to drink a lot, they can eat what is necessary to live but not what they can eat extra.

This is exactly what a cow needs to get healthy, for example to make a good start to the new lactation or to recover.

After all, a cow is a herd animal.

### ***December 2020:***

#### **Do not let dry cows eat the wrong ration.% fr**

Make sure that the dry cows at the feeding fence cannot eat the feed of the lactating cows.

Compared to the lactating cows, the dry cows need a ration with less energy but with enough protein, and a lot structure plus the for them necessary minerals, vitamins, and exercise!

That is a different ration than that of the lactating cows.

So stop feeding about two eating places earlier in the vicinity of the dry cows.

The fattest cows are already ready when you come near with the feed for the lactating cows.

Make sure that they cannot eat the richer ration, which is good for the lactating cows!

***June 2020:***

### **Stress from heat and breath control**

Checking the rumination is known to most livestock farmers, but do you also check “Breath control”?

Under normal conditions, at rest and lack of high temperatures, the cow breathes about 40 times per minute. This can be counted on the left side of the cow.

When a cow is too hot, making it difficult to lose its heat, or is bothered for other reasons, breaths count per minute can increase.

At over 60 breaths a minute it is no longer fun for the cow, then she stays up longer since standing up causes more heat loss than lying down. She could also hang above the water trough. Above 80 breaths per minute she is experiencing serious heat stress.

Remember that a cow’s “pleasant outside temperature” is about 8 degrees lower than ours. In addition to that, a cow that gives a lot of milk is hard at work. So, she can get warm quickly!

And warm weather, especially in combination with higher humidity, can also result in 5 – 12% less (rough) feed intake. And she can suffer from that for longer than the heat lasts. That is why having a cool place for the cow in the summer, is vital. For both longer production and showing heats; and

therefore, for fertility!

By counting the breaths every now and then, preferably from high-yielders, you will see earlier whether the ventilation or cooling are sufficient and whether there is sufficient fresh air in the house!

### ***Augustus 2019:***

#### **Dry cows at a distance.**

If your farm allows for it, it is much better when you place dry cows at a distance from the VMS station or milking parlor. It would have to be far enough that they do not hear or see any pulsations, concentrate falling or other cows moving around the AMS. Also, it is recommended that the cows have no sight of the VMS.

But place them where you can see them often! (Are they healthy? Is their rumen filling ok? etc.)

### ***September 2018:***

#### **When inseminating?**

Early insemination has pros and cons: Fresh, fit, cows are at an advantage with a milking robot, these cows are milked oftener, and therefore give more milk. On the other hand, every calving also gives health risks for the cow. So if your company has a lactation graph with a long peak, or over many days, then a short calving interval is less interesting than when your cows are peaking after 40 days (for example) and then quickly decrease in production.

Look at your business cows lactation curve on how many days your cows have the highest production and how long their peak

production lasts.

Look at the Herd graph (the one with all those dots).

After 50 DIL the cows are marked red, is there a good excuse not to inseminate this cow?

***June 2018:***

**Cow Whisperer.**

In many places I am called the Cow Whisperer.

Although it is an honor in itself, it's also nonsense of course. What is true though, is that I can usually get the cow to go where I want her to go.

I am not familiar with using a stick or screaming.

What does help is: Try to think like the cow. Because the cow in the new situation has to get out of her comfort zone to go somewhere she doesn't actually want to go. Like the first time she has to go to a milking robot. This also goes for moving to a new stall, new group, straw/ calving box, claw care box, etc.

This is why the cow looks around for possibilities to escape back to her safe environment.

This is also deeply rooted in her instinct.

Hitting a cow (hand or stick or shocks) causes the cow to think about where it was hit (on her back or ass), instead of paying attention to where she needs to go.

Instead of finding out where she can go, she flees to where she needs to go.

That doesn't bring back the best memories ..

Fences, preferably ones that move, make very clear to understand for the cow: It is impossible to go to the left and

also impossible to the right!

By standing behind the cow and holding her tail firmly, she'll know she can't go back either.

Then I usually wait until the cow does see where she can, and has to, go. At that moment this is followed by a friendly but urgent push which is often sufficient. Working like this looks like it takes a bit more time, but it takes away a lot of stress from the cow and from you, the farmer.

And after all doesn't take more time (or power) at all.

The cow also will have better memories of her first visit and you'll understand what that's worth! The farmer will observe his/her cows experiencing the new situation in a peaceful manner which is healthier for the cow, but also for the farmer!

So also here: "If the cow could make her own choice, (between stick or fences) she knew what to do!"

### ***March 2017:***

#### **Feeding cows from 100 days before setting them dry**

The biggest feeding mistakes are made in the transition period or at the end of lactation.

Truthfully, the last 100 days before drying off, to ensure the cow obtains the correct feed, it is more important to correlate her ration to body condition and activity levels than to how much milk she is producing. A farmer has a better view of her condition than a computer..

Also the first experiences with the new Body Condition Score (BCS) camera show that it pays off to adjust certain measures and so correcting the feed amount in this period.



Gather information from cows who are ca. 100 days before setting dry, or 130-230 days after the last insemination (if you did not do or register pregnancy tests), about the cow's condition, production, feed ration and VMS visits.

Does she need more condition (energy feed) or has she already too much? More protein or less concentrate ? More....?, or less....?

It can be useful to make yourself a list that shows the production, feed ration and within how many days she's to be set dry in one list.

I get my copy from the list "Feeds Consumption" (Right mouse click) and paste it to "My Lists". Then, with "Show/Hide Designer" you can choose in the category "Cow Calendar" the column "Days until Dry" and you can add "Number of Milking's" from the category "Milking", by dragging it (Left mouse hold and drag) to your list.

The newest versions of DelPro even makes it possible to color these cows, e.g. less than 100 days before drying off, so that they stand out!

If these cows are visible, you'll increase their longevity!

### ***October 2016:***

#### **Longlivity: Maximum or Optimum?**

A cows longevity is a crucial aspect to operating income. A cow needs 1.5 lactations to cover the purchase and rearing costs. So, getting many lactations is important.

But actually it is not about whether a cow gets old and how many lactations she makes, but it is about how many kg of milk, rather how many kg of fat and protein she delivered in the tank during her productive life with the lowest (veterinary – feed). -) costs. (LDY: Lifetime Daily Yield)

A couple of things are important to know:

- Heifers that calve at 23-24 months produce 15000 liters more in their lifetime than heifers that calve at 27-30 months;
- Using consequently DelPro's 2-Minute-Check, information concerning cows with abnormalities are detected earlier: timely intervention makes a difference in longevity;
- Giving a cow after calving the right amount of a certain feed assists her through the transition period and also helps thereafter going through the period with negative energy balance. Additionally, making sure these two periods the appropriate amount and speed is crucial in these periods;
- Precisely estimating if a treatment has a big chance or a little chance of success for the cow.
- Or can/will she transmit infectious diseases? That could make a difference in the longevity of the cows stable mates;
- Etc.

*But:*

If a cow has calved ca. 4 times already, then ask yourself: must I have her inseminated again?

Or is there a bigger chance that the next lactation is better for the vet, hoof trimmer and cattle dealer than it is for my wallet?

**February 2016:**

### **Recognizing subclinical acidosis**

In the September 2016 edition of Veeteelt (Dutch magazine for dairy farmers), Dutch-Canadian Prof. Kees Plazier denotes that 20% of cows have to deal with subclinical acidosis in the first 3 months of lactation. Clinical acidosis is visible,

subclinical is not. What you might notice is that the cow is not as active, does not produce what is expected, does not get in the heat, etc. And after a few weeks, because of the release of toxins, the cow often gets laminitis.

Possible causes:

- Non proportional ratio between concentrate and roughage.

For example: feeding too many concentrate-like products (starch or sugary = tastier);

- Or: your ration is rightly calculated but the cows don't eat it in the right proportion
- It is too easy for cow to sort out these products;
- Increasing concentrate too fast after calving;
- The cow is already in a moderate condition, has hoof problems or other conditions which is resulting in the cow coming less often to the feeding lane;
- At first after feeding there is an abundance of tasty food, but only there for part of the day.
- At the end of the day there is for some hours much less till only the remaining rests
- Too little structure in roughage => to little rumen activity
- These causes gives too much fluctuation in rumen pH value, and that gives big chance to (sub)clinical acidosis.

With the help of the VMS you can easily sort out the subclinical cows.

Why in the 20-60 days after calving less milk then ca. 90% from expected milkyield?

Why else would a cow not come to the VMS at least 3 times a day ?

So look, for example, in the list MILKINGINFO at MILKING PERFORMANCE, whether these cows come to the VMS 3 times a day and are active enough! In the list VMS MILKINGS>COW STATISTICS shows if the cow has been refused enough.

Check the cows that stand out here on manure and condition (combining data DelPro with eyes of the farmer) Then you know exactly how riskfull this cow for subclinical acidosis is!

***April 2014:***

**How long should a cow be put dry?**

That depends on her condition, how much room she has or if she really needs to recover, etc.

So you make a choice somewhere between 40 – 80 days.

In fact, a cow should not recover or repair (too fat or too lean) from the previous lactation, but to prepare for the next lactation.

So, even more important, the cow has already to be treated towards a good condition long before she goes dry and the hooves are taken good care of.

The share of roughage/structure towards the end of a lactation is much more important than the amount of energy to be prepared the best to do the next lactation well and give more and longer milk.

So make an “attention list” of the cows which are allowed to be put dry over 100 days. Take a look how they are doing, what’s their condition: should I change the ration, the concentration portions, or even Milk permission?

And which cows can be put dry next month: hoof trimming?

When put dry: how did it go this year with the production and conductivity, control is possible per teat, and the cell number? Which ones must I put dry with antibiotic or can the cow dry up without? (See Tip April 2013)

## ***December 2013:***

### **As quick as possible after calving to the VMS**

It is important that not only heifers but also older cows are milked as soon as possible after they have given birth.

The heifers feel as if they're in trance after giving birth and will believe that they should be milked and all around belongs to it as well. Furthermore, the hormones will work quicker (which are needed for milk let-down and recovery from the calving, e.g. to let the uterus to shrink faster).

It doesn't seem to be pleasant but it's actually very healthy. And the production is stimulated to start up. If it's possible, these cows should be milked 3 times a day for the first few days.

The longer the heifer, but also the older cow, is not milked the harder the gets udder, the more painful and the more difficult milking empty the next time milking.

It's not always possible milking often but very important.

It's also very important for udder edema etc..

You can compare it yourself to procrastinating about going to the dentist. If you keep procrastinating, it will be even more painful and you won't want to go to the dentist. If you're on time and you don't experience any pain than you will go also earlier the next time.

The cow will also get a reward in the form of some concentrate.

This is why it is also very important having an easy overview to see where the fresh cows are in de herd!

## ***August 2013:***

## **Check activity fresh cows**

Very important for a good start and lactation after calving is the healthiness of the cows, especially the first days after. For a good start and a good lactation, just the fitness of the cows is very important, especially the first days after calving.

A lot happens with the cow, she has just calved so she's weaker, ration changes, group changes, which reorders the hierarchy in the herd. If she is going to give a lot of milk, her need for energy is higher.

In robotic milking the cow is milked more often, which can cause the milk yield to increase extra. This makes this period extra exciting.

To keep a close eye on the cows activity, there are dairymen who put a fluorescent colored halter around the cows neck for the first 10 days. You can then easily see where the cow is and if she is active enough, goes to the feeding barrier frequently, etcetera.

If you follow the cow activity closely, then choices that are made around topics such as concentrate or treatments, can be made much earlier.

In this period, the use of painkillers sometimes can cause a cow, especially a heifer, to go to the feeding barrier more often which makes her reach and pass the "dead center point" quicker, so that she can leave it behind her faster.

## ***June 2013:***

### **Healthy Hoofs:**

Hoof disorders are still one of on the largest expenses of a dairy. When milking a cow with a milking robot this is even more obvious because a cow must then independently think how

many times she'll have to go to the VMS and how often she goes to the feeding fence and drinking trough. Limiting because off claws will cost a lot of milk and lifespan!

Add to that fact that a crippled cow will never stand still in the VMS which makes it harder to align and will have to spend more of her time in the VMS. The farmer as well as the cow aren't happy with that!

### *Important measures:*

- Hooftrimming: cows in different lactation stadiums, before dry-off time and at mid lactation. This should ensure that the cow walks as balanced as possible and to minimize cracks and crevices around the claws, because bacteria like *Mortellaro* e.g. love it! (See Tipp okt. 2011)
- Places to lay: adequate rest so that the fat pad between flesh and hoof muscle is spared and the cow therefore will walk more resilient, more comfortable and thus longer. This is important for the blood circulation (read: purge) of course, special for the legs and the udder or injuries.
- A cow needs to lay down, relaxed, on average 12-14 hours per day.
- Foot bath: would be greatly recommended if you have the possibilities of offering this on a regular base to your animals
- Smooth exercise lanes or large passing options: because of white lane defects
- Exercise lanes dry and "clean": having a scraper system in place that does not transfer bacteria back and forth from the milking cows to heifers/calves
- Rubber on the floor: especially with dry cows, for example in a single-row barn where they have to turn short, these cows often weigh 100kg more. and at places cows walk much or turn short.
- Ration, 2/3 of the total dry matter: contains

structure-holding forage, very important short after calving. A nice smelling portion hay works miracles. Of course, the cows further in lactation and dry cows an even larger part of the textured ration

- Be careful with the protein and “fast energy”: such as grain products because of laminitis. This is shown after about 4 to 6 weeks after the feeding error has been made.

### ***October 2011:***

#### **Good strategy claw trimming.**

To eat much roughage a cow needs to come often to the feed area.

To give much milk a cow must often come to the robot.

In order to realize all that is needed very healthy claws.

That cannot be achieved by only trimming a cow when she is lame but you need to have a preventive trimming program.

This means you trim all the cows before the dry period and check after ≈ 120 days in lactation. And in such a way that claws not only heal but also grow stronger.

After parturition cows have a heavy time: recover from calving and giving much milk. And therefore they should be able to eat and walk much. Those cows you really have to minimize trimming because trimming always gives thinner and fragile claws.

With healthy claws makes a cow on one day easily 2 or 3 more visits to the feeding fence, which means 10 to 20% more roughage, and she does an extra visit to the robot!

And that is good for more milk and also for a shorter negative energy balance!

And that translates into more disease resistance and a longer



life!

Thus earns a monthly round hoofcare program for (nearly) dry cows and cows that are in mid lactation herself easily.

Farms I've visited I often left an example of how preventive hoof care needs to be done.