

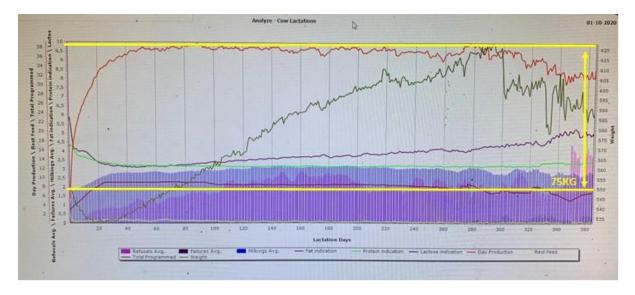


The 2nd lactation heifer- myth or reality?

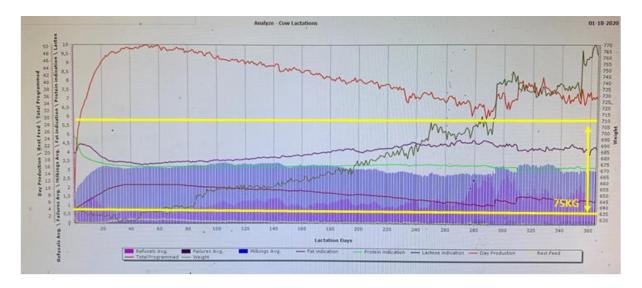
When is a heifer not a heifer... at the end of her first lactation? But then we talk about mature weights at 3rd lactation. Is there really no thought about how much pressure that puts on a second lactation animal? Is this an oversight or not really an issue?

A world with robots in it has brought us so many more tools for viewing cow health and performance and one thing it does is highlight the fact that a 2nd lactation cow is in my opinion really is a second lactation heifer and needs viewing as such. What do I mean by that, well if we think about it, we currently expect any second calver to produce milk roughly in line with our 3rd lactation cattle and get back in calf, probably as well as a heifer really. However in amongst all of this we take no account for the fact that she is still growing.

If we look at some specific data we can see what I'm referring to. On this particular farm 1st lactation heifers come into the herd at an average of 550kg and by the end of their lactation at 300+ days they are 635kg.



They are calving in on average for 2nd lactation at 625kg and ending that lactation at around 700kg. This represents a weight difference of 75kg between the start and end of 1st lactation which funny enough, is the same difference in weight from the start to the end too of 2nd lactation.



The key difference here is that we allow energy for growth in 1st lactation, but not in the 2nd.

Most farms allow for something like a 0.3kg per day growth in first lactation by expecting less litres from the base diet for those animals. This means that a 75kg differential is covered in around 250 days, which makes sense as she is probably not able to gain much weight if any on the road to her peak yield which is likely to be between 45-55 days on most farms. None of that help though is awarded to 2nd lactation heifers, who are going through exactly the same growth pressure.

Experience says that this is in reality often a big problem. When you think about it, we amplify that 2^{nd} lactation pressure as she can often be coming out of the sanctuary of a heifer group to do battle and establish herself in the pecking order of the mature cow group. So how can we alleviate that pressure on her without trying to form a separate 2^{nd} lactation group?

Ideas to achieve 2nd lactation success?

- Make sure that animals transition as a group into the lactation group, rather than entering as a single animal?
- 61cm (2') per animal feed trough space is the gold standard and makes a huge difference to her potential survival?
- Overstocking should be avoided unless you are achieving the above point and deep bedded/ sand/ super comfortable cubicles etc?
- Potentially create a different feed curve for 2nd lactation animals (maybe particularly for immature animals) that allows for growth or at least lead feeds until 90-100 days giving an animal time to at least recover from peak with a little extra help?
- Any very immature 2nd lactation animals should possibly drop back into the heifer group post calving to reduce group stress factors?

Solutions don't need to be onerous, just respectful of the mountain that we expect a second lactation animal to climb. If we feed allowing for energy for weight gain would we see as flat a lactation curve as we do on the 1st lactation heifer group?