

## **December 1 2024 ODF Dairy**

### **It's So Much More than a Preg Check**

The trend of using blood/milk testing for pregnancy diagnosis has seemed to come around again as it does every couple of years. The technology itself is decades old and has been commercially available for >10 years. Although it has become more refined in its accuracy and accessibility, it doesn't seem to catch on.

Two years ago, when our clinic purchased a new blood analyzer, we wanted to prioritize an analyzer that had the ability to perform pregnancy diagnosis via blood samples. We pride ourselves on continuing to offer new and evolving services- that has always been a goal of ours within the clinic. Just as importantly, if we can save our bodies from conducting some of the 100's of preg checks in a week- all the better! In an industry where we lose too many dairy vets to injury/wear and tear, it would be a welcome reprieve from the highly repetitive task that puts the most physical stress on our bodies.

But the offer of blood testing for pregnancy detection never caught on. At all.

I informally polled our farmers to ask why the interest wasn't there. The answer? It came down to cost, efficiency and profitability on the dairy.

Following are some of the examples that were provided to me by producers as to why they wouldn't be switching to pregnancy detection via blood sampling and why producers continue to believe that pregnancy detection by palpation will be the Gold Standard for the foreseeable future.

#### Cost

Currently, blood testing costs \$14-15 per test. This does not include costs associated with collecting and transporting the sample, whether collected by on-farm labour or vet clinic staff. If you look at your vet bill, you'll see that your palpations range from 3\$-8\$/check depending on herd size, whether you have lockups, speed of palpation, ability to find cows on vetlist!, etc.

Is there a future when these tests drop to a similar price point as vet conducted checks? Possible, but the costs of these tests have only dropped slightly in the last 10 years.

#### Efficiency

We live in a world where timely results matter. When a preg check is done by your vet, the answer is immediate. In turn, your reaction and plan for open cows is also immediate. No need to re-sort/lockup cows again; simply finish the herd health checks and come back to administer PGF, administer directly after the check, etc.

#### Profitability

By far the greatest benefit(s) in having pregnancy detection by palpation boils down to increasing your net income on the farm. Listed below are examples as to why vet checks will continue to drive profitability on your farm.

### **-Return to Service on Open Cows-**

Reproductively speaking, open cows are a drain on your bottom line. But not every open cow is the same. Is she mid-cycle? Dirty? Cystic? Not cycling? Lab tests provide no insight into the open cow. We are not conducting “preg checks” on your dairy, we are conducting “open checks.” The open cow provides a financial opportunity for your dairy.

A pregnant cow (while great news!) has a defined value within the herd. And provides no marginal opportunity to improve her financial standing. On the other hand, an open cow is a financial opportunity. Depending on her DIM, she is costing you 3-12\$CAD/day. A 2 day lag on pregnancy results without action on 5 open cows costs you 30-120\$. **But not every open cow is the same.** While conducting a preg check, we are also examining ovarian structures and uterine health. This dictates the plan to return your cow to service quickly and providing the best chance for her to become pregnant.

Palpations also provide valuable insight into your herd’s overall health. Increasing incidences of cystic, anovular, dirty cows are often the first signs of improper/changing nutrition, transition challenges, etc. Manure consistency is also discussed and can be another canary in the coalmine with respect to nutrition challenges. This valuable information cannot be pulled from a blood/milk test. Numerous times per week, my post herd health discussions revolve around what was learned from herd-level ovarian function and manure consistency. It’s invaluable information for the farm, nutritionist and vet alike and it's occurring simultaneously to your cows’ preg check!

### **-Twins-**

Ah yes, “twins”, a much-dreaded word spoken during herd health. Without going into the economics of keeping twin pregnancies or not- let’s assume we intend to keep all twin pregnancies. Although palpations don’t reveal all twinning events, *any known twinning event is an economic opportunity for the dairy.* It allows for proper transitional timing. Cows can be dried off 1 week earlier and moved into the closeup pen a week earlier in anticipation of freshening ~1 week sooner than expected. These cows can then be monitored more closely during calving as dystocia events are much more likely during twin calvings. The result is healthier, more productive transition cows, lower drug usage, less time spent in a sick pen and lower rates of stillborn calves. And at a time when beef-cross calves (even Holstein bull calves!) are so valuable, if you are armed with the knowledge and need to intervene during a dystocia, 1-2 live calves pay for weeks/months of subsequent herd checks. (where inevitably, you’ll diagnose more twins!)

### **-Decreased Usage of Pharmaceuticals-**

Knowing a cow is open and where she is in her cycle leads to much more targeted use of hormones and a vast reduction in overall usage.

### **-Find Pregnant Cows Faster-**

With improvements in ultrasound tech, a skilled practitioner can detect pregnancies in cows as early as 23 days bred and even earlier in heifers- 20% sooner than commercial lab tests.

### **-Previous Pregnancies-**

With increasing use of activity monitors, we see increased rates of “previous pregnancies” at herd health. I average 1 per week. Cows that are bred, show activity 3-4 weeks later and are then rebred. These cows then come on the vetlist to be checked for the 2<sup>nd</sup>+ breeding and we find that they are in fact pregnant to a previous breeding. Not only does this change her due/dry dates, it also should flag the cow to undergo timely rechecks to ensure she continues to carry the pregnancy that is now higher risk, after having been bred again after conceiving.

### **-Fetal Sexing-**

Self explanatory. For the dairies that do it- you’ve got your reasons but only an ultrasound can sex your fetus!

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### **Where Does Pregnancy Detection via Blood/Milk Fit?**

-Herds where geographic access to vets is restricted and call fees are very high. There are success stories where dairies alternate blood/milk tests and vet checks every 2 weeks.

-Herds with high conception rates in heifers. The economic drain of an open heifer is much less than that of a cow. Combined with accurate heat detection of rebreedings, there may be value for select herds.

- Rechecks of known pregnant animals.

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### **What Else is Gained from Herd Checks?**

If you factor in the economic value of the points listed above, it’s hard to see where blood/milk pregnancy detection is superior or even equal to the economic value of palpation. It simply isn’t. But for arguments sake, let’s say that your herd checks cost the same as blood/milk detection. That would mean your vets’ advisory info, observations, direction, tips/tricks, VPCR, etc. **comes at no extra cost to you.**

Another Perspective- to file your taxes, you could easily use forms/online software and file them correctly. But you most likely use an accountant to advise and you're willing to pay a premium for that service. In the same way, you need to be conducting preg checks one way or another and there's an inherent baseline cost (14-15\$ per test). Why not get your vet advice that comes with the preg check without having to pay a premium?

In the end, your herd vet is striving to increase your bottom line and bring economic success to your farm. If there was both a superior method of pregnancy detection and we could save ourselves from one of the leading reasons practitioners leave clinical practice- we would be providing it. Until milk/blood detection of pregnancy becomes much more affordable, insightful and at a lower days since breeding- the gold standard will continue to be pregnancy detection by palpation for the very foreseeable future.

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