

# The Goal: Pregnant Cows

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The goal on any dairy should be to get cows pregnant. The metric we need to evaluate to determine if we are reaching this goal is the 21-day pregnancy rate (PR). All too often, dairy producers concentrate on conception rate (CR) and fail to recognize the economic value of pregnancy rate.

So, what are the differences? CR can be mathematically expressed as the number of cows confirmed pregnant divided by the total number of cows inseminated. So, if we breed 100 cows and 35 are pregnant, our CR is 35 percent. Pretty simple.

Pregnancy rate is expressed as the number of cows confirmed pregnant divided by the number of cows eligible to be inseminated in a 21-day period. It is the efficiency by which we get cows inseminated and confirmed pregnant. If we confirm 25 pregnancies and there were 100 cows eligible to be bred in a 21-day period (for this calculation we do not care how many we actually did breed), then our PR is 25 percent.

Of course, we want to optimize the conception rate. However, if our goal was to maximize conception rate, then we would only breed cows that were in an absolutely obvious standing heat and forget about any synchronization programs. We need to get cows inseminated. That is the bottom line.

The key concept we must concentrate on is decreasing the interval between inseminations. We need to identify open cows in a timely manner and get them rebred. Obviously, excellent heat detection is one very important aspect to attain this. Regular herd health pregnancy/open exams and a consistent resynchronization program are the others.

When utilizing synchronization programs, it is important to keep the cow's natural estrus cycle in mind. I still find many programs that are not combining examination for pregnancy and resynchronization at the most biologically opportune time. We need to work with Mother Nature, not against her.

Through all of these decisions, we must remain conscious of the significant impact reproduction has on the economics of the dairy. By increasing pregnancy rate, we:

- Increase milk production (Increase the time a cow is in the higher production portion of her lactation curve.) This holds true even with the use of bST.
- Increase herd replacement opportunities. Every dairy has cows that should be replaced.
- Increase lactation number. Second-lactation cows produce more milk than first-lactation cows, as do thirds over seconds.
- Increase the number of calves born per year. Although the near-term economic impact of this is small, eventually these heifers can replace suboptimal cows or be sold as springers (assuming the dairy can raise heifers better or less expensive than they can purchase them).

Dairy-specific goal-setting can be useful in the evaluation of your reproductive program. Obviously, these values may vary depending on your management style. The following are some useful reproductive goals which apply to most dairy herds:

- Recent pregnancy rate is greater than 20 percent.
- 50 percent of the herd is confirmed pregnant at any given time.
- First service percent pregnant is greater than 30 percent.
- Average days to first breeding is ½ estrous cycle (about 10 days) greater than your voluntary waiting period (VWP). (In a herd with a VWP of 60 days, the average days to first breeding should be 70 days).
- Heat detection rate is greater than 50 percent. Research shows that most high-producing cows are in heat for about seven hours and will show three to 12 standing events during that period. This only gives us a very small window to detect heat and breed. Work with your dairy team to develop a simple, but effective, protocol to optimize the reproductive performance of your herd.

## Dairy Comp Herd Management Software

### Vet Visits Made Easy

Many dairy producers use a regularly scheduled visit by their veterinarian to monitor their herd's health and reproductive status. Dairy Comp can save the dairyman time in preparing for the vet visit and recording the information that results from that visit. Plus, with all the herd event information entered in Dairy Comp, the vet list that is generated will include all cows that need the vet's attention.

Dairy Comp gives the dairyman an easy and simple way to create their vet list. First, there several parameters that can filter which cows need to be on the vet list. These parameters are set by the producer and can be easily altered to reflect changes in management. The vet list can include cows for pregnancy diagnosis, fresh cow checkups, cows showing no heats, or problem breeder cows as defined by the dairyman. The vet list report is then selected off the menu, and can be sorted as desired. A vet list for heifers can also be generated in the same way.

Entering the vet visit results into the program is simple and quick. The dairyman can enter the vet visit results as well as a vet remark for each cow.

The vet remarks can be pre-defined by the dairyman to make data entry much less cumbersome. The result and remark will automatically appear in a cow's record and can even be added to subsequent vet lists so the information is readily available for review at a future vet visit.

Generating lists and recording data in Dairy Comp is actually quite easy. It does take some effort early on to become familiar with recording data in a software, but in the long run, it is a time saver.

### Monitoring Reproduction

Reproductive performance is an important factor in the future profitability of all dairy farms. Therefore, a huge part of dairy herd management revolves around getting cows pregnant as soon as possible after the waiting period. To achieve this goal, herd managers need to effectively monitor and measure the reproductive performance of the herd.

The BREDSUM module of Dairy Comp is an effective tool that monitors and analyzes reproductive performance of a dairy herd. BREDSUM can provide a dairy manager with pregnancy rates, heat detection rates and conception rates to help them measure the effectiveness of the dairy's reproduction program.

With a click of a mouse, a producer can see the herd's overall Pregnancy Rate for the last twelve months, as well as a Pregnancy Rate broken out into 3-week intervals. This is useful to identify trends in reproductive performance over the last year and can allow the producer to monitor changes in the reproductive program. Your veterinarian can assist with the interpretation of your herd's Pregnancy Rate and come up with goals specific to your herd.

Users can also look at conception rates for individual technicians and analysis can be done for cows bred based on an observed standing heat, cows bred based on an ovsynch program or cows implanted with an embryo. This analysis provides answers as to the effectiveness of programs used to get cows bred.

Dairy Comp can be a great tool to help monitor reproduction in your herd. It allows for informed, timely management decisions. Installing a herd management software at the farm is an investment in both dollars and time, but having the ability to easily retrieve and analyse data for improved herd performance will pay off.

CanWest DHI

# CATALYST

JANUARY 2013

## Pregnancy Milk Test Now Available

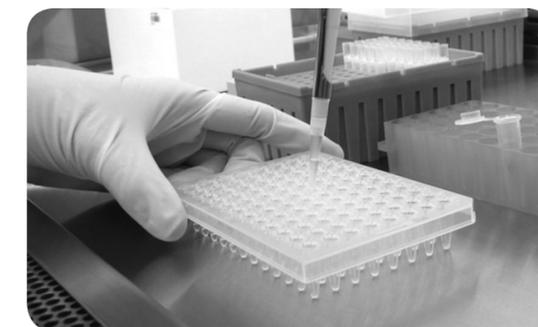
A convenient, reliable and cost-effective pregnancy test can now be done using the routine DHI sample.

Dairy producers have long known that improving Pregnancy Rates and reducing Days Open can have a significant economic impact. For that reason, finding those open cows and returning them to service quickly is a key component of successful reproductive programs. The new milk test from DHI now provides another tool to help find those open cows.

The test is based on simple ELISA technology detecting the level of pregnancy associated glycoproteins (PAGs). PAGs are produced when a cow is pregnant and rise in concentration in blood and milk as the gestation progresses. This technology is similar to what is being used in commercially available blood pregnancy tests. Blood based tests for pregnancy specific proteins have been available to producers for several years. The milk test just takes it to the next step.

**The new milk test from DHI provides another tool to help find open cows.**

In addition to being validated by the manufacturer (IDEXX Laboratories, Inc.), the test kit performed very well in a Canadian study. The study of nearly 700 animals was led by Dr. Stephen LeBlanc of the University of Guelph and targeted cows 60 days+ post breeding with the use of routinely collected metered DHI samples.



ReCheck 60 is a simple, reliable and cost-effective ELISA test.

Richard Cantin, Manager of Customer Service for DHI indicates that convenience will be a key selling point of this new test. "Sample collection is already done as part of our regular service which means that there is no need to handle cows. It doesn't get any easier than that." He adds, "on the other hand, DHI test intervals do not fit well with the need for routine early diagnosis, so the test is better suited for 60+ days in gestation, making it an ideal test for pregnancy reconfirmation, as a supplement to early diagnosis by the herd veterinarian." For that reason, DHI is marketing the test under the name 'ReCheck 60', which describes well how the test can best be used.

Producers have the ability to test selected cows, or enroll on a Recheck and/or Dry Off option



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where on each test day, cows that meet a herd specific criteria for days since last breeding, will automatically be pregnancy milk tested. "The testing choices are very flexible and it's up to each producer and their veterinarian to decide which testing options will best meet their needs" says Cantin.

**"I like this new service from DHI. As a recheck, I see a nice fit for our herd."**

*Ben Loewith, Summitholm Holsteins*

Reproduction continues to be the #1 reason cows leave the herd so anything that can be done to improve the situation will no doubt be welcomed. Dairy producer Ben Loewith of Summitholm Holsteins in Lynden, Ontario sees some benefits to this new testing option. "Reproduction and longevity is a priority for us, so we want to find those open cows as soon as we can so we can rebreed them. I like this new service from DHI. It's another tool and as a recheck I see a nice fit for our herd."

Results are reported in three categories: Pregnant, Recheck Open and Recheck Inconclusive, with a recommendation that all Recheck Open and Recheck Inconclusive cows be monitored for signs of heat and/or presented to the herd veterinarian for confirmation, prior to taking any action.

A copy of the test results will automatically be sent to the herd veterinarian and DHI encourages producers to work closely with their veterinarian to develop a reproductive management program that fits their herd, and to determine the appropriate pregnancy milk testing plan and test results interpretation.

Cantin concludes, 'eventually all open cows get identified. Either very quickly or unfortunately sometimes only after several weeks, and the odd time in the dry pen. The milk test is another tool that can help find some of those cows sooner, rather than later.'

ReCheck 60 service is available to all CanWest DHI producers starting in early 2013. For more information, talk to your veterinarian or your DHI representative.

# ReCheck<sup>60</sup>

Pregnancy Confirmation Milk Test

## IT'S ACCURATE!

The test kit has been validated by the manufacturer at 35 days+ post breeding, with high sensitivity and specificity. In a Canadian study, targeting cows 60 days+ post breeding, the milk test kit using routine DHI samples performed very well with similar results.

## IT'S EASY AND COST-EFFECTIVE!

ReCheck 60 is based on simple, cost-effective ELISA technology. Sample collection is already done as part of regular DHI service, so there is no need to handle cows.

The test is best suited for 60+ days in gestation, making it an ideal test for rechecks, as a supplement to early diagnosis by the herd veterinarian, and for dry off checks.

## IT PAYS!

As a **Recheck:**

- Reduce days Open and save dollars per day
- Rebreed cows before they are **too late** in lactation, which means fewer culls and lower replacement costs

As a **Dry Off check:**

- Save dry cow treatment costs
- Save feed costs during dry period (\$3 to \$5 per day)
- Milk the cow for a period of time and generate significant milk revenue, or sell her without delay
- Have the peace of mind that cows have been reconfirmed pregnant prior to moving to the dry area

## IT'S FLEXIBLE!

Producers have the ability to either:

- Test **selected cows** or
- Enroll on an automatic **Recheck** and/or **Dry-Off option**, whereby on each test day, cows that meet a herd specific criteria for days since last breeding will be pregnancy tested.

## Chairman's Comments



As I talk to dairy farmers, reproduction seems to be a constant focus and an area many of us would like to improve upon. Day-to-day reproduction, whether it be heat detection,

breeding cows, herd health visits, trouble shooting issues, etc. takes considerable time and is a major priority of what we do from a herd management perspective.

I've heard many times from producers that getting cows pregnant in a timely fashion is the most important thing they can do, and from there, good milk production and overall herd performance will fall into place. It has been well documented that reproductive performance has a significant impact on profitability, so no wonder it is such a focus for our farms.

Often heifer reproductive programs take a back seat. Unfortunately that ends up costing many of us and our industry overall. With the average age at 1st calving in the 26-28 months range, improvements are possible. DHI and other data clearly show that calving at 24 months does not impact negatively on 1st lactation or lifetime production. We have seen very little improvements in this area in the last 10-15 years, which is to me an incredible missed opportunity.

On the cow side, I think our genetics industry has done a good job of putting focus and emphasis on fertility and reproduction. At CanWest DHI, we've worked hard at promoting concepts and measures of reproductive efficiency as well as providing tools to help producers. Pregnancy Rate has become the gold standard in measuring reproductive performance. With the help of vet schools, veterinarians and industry partners, DHI has been instrumental in bringing the concept of Pregnancy Rate to Canada. Another important step was to make Dairy Comp available to the industry with a solid infrastructure of sales and support and that has been achieved successfully.

We are now providing another tool – a pregnancy milk test called ReCheck 60. Each farm situation is different and the fit for this new test will be different for different farms. I encourage you to consider how this new service from DHI could be valuable on your farm. We know that finding open cows and quickly returning them to service pays off. For many of us, this new test can help us do just that.

Best of luck with your 2013 reproductive program.

Ed Friesen

*Ed Friesen is a dairy producer from Kleefeld, Manitoba*

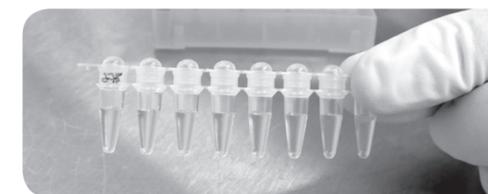
## Last Chance to Participate in Ontario Johne's Program

The funding portion of the Ontario Johne's program is ending in 2013. In counties that have already been provided a chance to participate, producers that have not, are being provided one last chance to do so by doing a Johne's herd test in February or March 2013. Testing costs will be reimbursed provided that program requirements are met.

Also, herds that have already participated are eligible to sign up to participate a second time in April or May, should funding still be available. This is on a first come, first serve basis with sign-up opening January 2.

For more details and complete program requirements, visit [www.johnes.ca](http://www.johnes.ca) or call (226) 979-1664.

## Disease and Reproduction



It has been demonstrated that the presence of disease, even at sub-clinical levels can have a significant impact on a herd's reproductive success. Neospora and BVD are always top of mind when we consider the impact on reproduction, but other production limiting diseases can also have a negative effect. Milk testing services available from DHI for BVD, contagious Mastitis, Johne's and Leukosis can be a useful way to help monitor disease and maintain a healthy herd.

## Herd Event Log Book

The Herd Event Log Book is now again available to all dairy producers. If you would like to receive a Log Book, please talk to your Field Staff or call us at 1-800-549-4373.

## 2013 ONTARIO HERD MANAGEMENT CONFERENCE

Presented by CanWest DHI

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**JANUARY 16**

Memorial Hall, Tavistock

**JANUARY 17**

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**Dealing with heat stress**

**The protocols of managing a high-producing herd**

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Pre-register by phone at (519) 824-2320.

Please note that a \$20.00 fee will be charged for 'no-shows'.

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# HAPPY NEW YEAR!

## CANWEST DHI WISHES YOU AND YOUR FAMILY A SAFE AND PROSPEROUS 2013.