

Epigenetics:

What the heck is this? Basically it's a term that describes a condition where the genes that an animal has are not turned on as predicted by genomics. It is recognized in humans where a child's genetics are expressed differently by the diet of the mother during pregnancy. There is a lot of studying going on, but the theory is that if a heifer is underfed as she grows, her calf may underperform even though she has superior genetics. Basically, environmental factors can turn genes on and off. Another argument for enhancing your heifers growth through great nutrition and housing.

BI July Specials:

Boehringer Ingelheim has a special running from June 15 through July 31 of 2018, unfortunately they didn't inform us of this until well into June and I had already done last month's newsletter.

This is actually a pretty good special. A list of details follows:

1. Purchase by July 31, 2018.
2. Cumulative purchase of \$750.00 during the time frame
3. Send in a special coupon (I hate this). We can help you with invoices and the form.
4. The most important component is the products that qualify are: **Bovikalc, J-Vac, Lockout, ToDAY, ToMORROW, PolyMast, Synchsure, Eprinex, and Express.**
5. They will send you a check.

Drug residue Issues:

As a whole, the meat and milk industry are doing better with residue issues. However, there are still animals showing up at slaughter with drug residues. The consumer won't purchase our products if they are concerned about any illegal residue. As the total number of residue

occurrences decreases the ceftiofur residues have been increasing. There are probably several reasons for this.

One reason is that there are many different ceftiofur formulations which sound almost the same. Excede, Excenel, and Naxcel all contain ceftiofur, but their withdrawals are significantly different because of where the drug is placed. FDA data shows that two thirds of ceftiofur residue issues are because the withdrawal period was not followed.

Another reason is that ceftiofur product usage has increased as other molecules like Nuflor have become illegal. The injectable ceftiofur products have no milk discard so their use has increased to decrease milk discard. Zoetis has been promoting this product heavily for the milk savings.

Also, ampicillin is in very limited supply, and until recently penicillin has also been in short supply. The shortage steers people towards Naxcel and Excenel.

There are only four antibiotic molecules available to the dairy industry and ceftiofur is the broadest spectrum. There will be no new molecules introduced, probably ever. We don't want to lose the use of ceftiofur so please be sure you keep good records, use proper doses, and observe withdrawal times.

Our sheep meeting was a success judging from the turn out!

**Thanks to our guest speaker
from UW extension, Todd Taylor**



New office:

Hopefully as you read this we are moving into the rest of our remodeled offices. The Waupun Veterinary Services door is just to the right as you enter into the front lobby of the building instead of to the left. We have rearranged our floor plan so our labs and offices are condensed instead of having to travel down the lobby hall between labs and office



Snail Mail and Email:

As the world changes more of you are embracing email which is quicker and more reliable than snail mail. Two checks we sent out in early May still haven't arrived at their destination. We run into issues with clients getting bills shortly before the 20th, the due date for the discount. We can't speed up the post office but we would be more than happy to email statements to any clients that would rather have them sent this way. We already email lab results for this reason and we are planning on using email as our primary medical records communication method in the near future.

ET Tips And Tricks:

During heat, the funnel -shaped structure of the uterus, called the infundibulum, captures the egg released (ovulated off) from the ovary. You can picture this as a softball glove surrounding a softball. When you palpate the uterus or ovaries at breeding, you may pull the infundibulum off the ovary. If the egg is released while the infundibulum is pulled off the ovary, the egg drifts off into the abdomen and the cow will not become pregnant (and you won't recover any embryos!). In subsequent heats, the infundibulum will reattach, but the current heat is ruined.

The take home message for breeding AI, and **especially for breeding donor cows** that are set up for embryo transfer, is only manipulate the cervix and not the uterus.

Exports up:

Of interest, 18.8 % of milk solids were exported from the United States in April of this year, a new all time record. Dairy farmers from the United States are feeding more of the world. Let's hope the trend continues. There will be no new molecules introduced, probably ever. We don't want to lose the use of ceftiofur so please be sure you keep good records, use proper doses, and observe withdrawal times.

Flies in hutches:

As it gets hot, flies congregate inside hutches because of the heat. Using sand instead of straw for the summer removes the breeding area for the flies. You might be feeding the calf a pass- through insect growth regulator like Clarifly® which stops the flies from hatching out of larva which grew in manure. However, you can still get maggots because water, spilled milk and urine will allow flies to breed. You can put insect control products directly on the calf, but a long lasting controlled release insecticide sprayed inside the hutch like Grenade® or Annihilator Polyzone®, these products are both excellent, long-lasting surface insecticides that kill the flies landing inside the hutch.