



From the Dr's desk.....Dr. Michelle Borek



Milk Fat Suppression—it is not just acidosis.

This past month I traveled to the great state of Nebraska for the 42nd annual American Association of Bovine Practitioners meeting for all the latest and greatest research going on in the cattle world. I thought I would share some new information on Butterfat suppression: What causes the sudden drops in milk fat?

Basically the rumen bacteria's environment is key to correctly breaking down feed into the proper fatty acids. Milkfat density (MFD) requires a dietary supply of poly-unsaturated fatty acids and altered rumen fermentation. High levels of poly-unsaturated fatty acids have toxic effects on rumen bacteria. The rumen is protected by high forage diets. Cows consuming diets that contain corn silage as the only or major forage source are MORE susceptible to MFD when unsaturated fats are present. Partial substitution of corn silage with another forage such as *alfalfa* may alleviate the negative effect. The majority of fat in the rumen is bound or in triglyceride form. In order for the mammary gland to take up the fat, it must go through two processes that take time in which forage helps the process. Thus passage rate affects bacterial time to perform the proper steps to break down these fats. High starch with low NDF diets leaves the cow with a lower ability to handle these unsaturated fatty acids. Acidosis is not a pre-requisite for MFD to occur. However, low rumen pH, too much grain, small forage particle size, antimicrobials, and a large amount of unsaturated fatty acids cause a shift in rumen microbe type, thus pre-disposing to MFD. Management impacts also affect MFD. Stocking density, feed bunk space, feeding frequency, mixing, sorting and slug feeding are all manageable factors that we stress for overall cow health that again are associated with MFD. Other factors that may contribute to MFD include elevated mold/yeast counts in feeds, altered corn silage fermentation profiles, and mycotoxins in forages or high moisture corn. It is a long list, but keep these factors in mind when sorting out a drop in your milk fat or when trying to improve your milk fat percentage. Luckily one of the presenters just hired onto MSU's extension office, Dr. Adam Locke. So if you have concerns we have a knowledgeable source just a phone call away.

How important is milkfat right now? 500 cows averaging 80lbs/day with a difference from 3.8% MF to 3.4% MF is ~ \$0.50/ cwt or approximately \$73,000/year! It is a BIG deal especially with milk prices the way they are. There is of course a breakeven point when you can gain pounds of milk but a drop in MF.

Any new suggestions for training schools are welcomed. We currently have milker training, calving, and calf care seminars for workers. Keep these in mind when new employees join your team and want to perform up to par!

It seems fall has crept upon us again...and sometimes that means the mice move in as well! If you would be interested in a spayed/neutered cat that is vaccinated for rabies give us a call and we can fix you up...the best part its **free!** Can't beat that price at all. These cats are perfect for the barn, or as a pet whatever you choose. If interested give us a call.



As you can tell from Dr. Michelle's article we continue as a clinic to be committed to continuing education. That includes your privacy too. This month our staff will be taking a course on handling credit cards and any personal information we may have on file. New laws going into affect November 1st are designed to protect your identity. We have always and continue to value our clients and want to be sure we are up to date.

Have a safe and productive harvest.....Helen