

Dairy News

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Another year has come to an end and we at Dairyland Veterinary Service would like to extend our best wishes for a happy holiday season for you and your families. We also would like to thank you for your continual business and support. We are looking forward to providing the best possible service for our clients in 2018!

Transition Cow Workshop

If you belong to PDPW then you know that they occasionally put on workshops for dairy farmers, nutritionist and veterinarians. On Dec 13th, they had one of these meetings in Appleton that I was able to attend. Here are some of the highlights:

Dr. Mike Van Amburgh made a case for a separate pre-fresh diet for heifers since they are still growing. If your heifers don't produce at least 80% of what your mature cows do, the reason may be that their diet doesn't reflect that they are still growing.

Research has shown that the nutritional needs for udder development of dry cows has an abrupt start at about 259 days in gestation. From that point to about 21 days post-partum, 65% of the udder's secretory capacity is made - and that requires a large increase in metabolizable protein (MP) in the diet. This is complicated by research that shows that the MP value of many feeds is not consistent with the library values that nutritionist use to formulate their rations.

Dr. Van Amburgh also showed data that adding rumen protected methionine (RPM) to the transition and lactating cow diets resulted in:

- o -greater percent protein from calving to 16 weeks post-partum
- o -greater percent fat from 8 to 16 weeks post-partum
- o -greater percent solids from 8 to 16 weeks post-partum
- o -reduction in pregnancy losses by half when fed a high RPM diet
- o -reduction in metritis and mastitis

These results will continue to be studied, but show that RPM supplementation is probably financially beneficial.

New information on the benefits of managing heat stress of transition cows was also discussed. Research has shown heat stress in dry cows reduces milk produced during the lactation and influences their unborn calves. Heat stress during the dry period imprinted on the calf and determined its fat metabolism for life. The calves had lower birth weights, lower survival after birth and lower weights to puberty. The in-utero heat stress also reduced their reproductive performance and milk production, but did not affect their mature body weight.

In addition, Dr. Van Amburgh discussed that the biggest problem in formulating transition rations was getting an accurate weight. His studies suggest that weight is usually estimated about 300# lighter than the cow actually weighs on a scale. Accurate weights are needed because some additives are put in the diet in small amounts. Accurate input of days carried calf is also needed because of the abrupt change in required MP for udder development.

At this same meeting, Dr. Heather White from the UWM discussed energy usage of transition cows. She has been conducting studies on ketosis and nutritional strategies to protect metabolic health during the transition period. Ammoniated condensed whey (Glucoboost) shows promise to increase milk yield as does rumen-protected choline (Reassure).

Overall, it was an interesting meeting with a lot of good discussion on transition cows. I would recommend to anyone that gets the opportunity to attend a PDPW meeting to do so.

- Dr. Bill Koffman

Assessing Pain and Pain Management

The International Association for the Study of Pain (IASP) describes pain “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.” In most animals it is instinctive to hide pain for various reasons, most importantly not to show weakness or lack of control. So how do we assess pain accurately in our domestic animals?

Severe pain is often demonstrated with teeth-grinding (bruxism) and/or vocalization. Inappetence and disinterest in their surroundings are also evidence of discomfort. Body posture such as lowered neck and head, ears back or altered position while lying down may indicate pain. Increased respiratory rate and tail flicking or switching are subtle signs. Facial expressions are also important to observe: lowered, limp ears, tense eyebrows, furrowed brow, flared nostrils and flickering eyes. Pain from late stage lameness is easier to assess but use of the Lameness Scoring system will identify the problem much earlier.

Once these signs are observed look for the underlying cause. As mentioned above, lameness is the most common cause in dairy cattle and horses. Injury to any body part must be ruled out. Gastro-intestinal issues such as colic in horses or displaced abomasum in cattle are common. These issues can then be eliminated with the proper care and medication, or euthanasia if necessary.

There is also pain associated with many of the common procedures we do. For example, needle injections are a normal aspect of life and need only proper technique and equipment. Hoof trimming is only temporary discomfort if any at all with a competent handler.

However, dehorning, castrations, minor surgeries or extensive footwork all require anesthetics and pain control. The Extra Label Drug Use order (ELDU) allows for the use of anesthetics in controlling and eliminating pain. The techniques for dehorning and castration are easily learned and add little time or expense to the procedure. Applying a nerve block to the foot is more complicated but can be learned. There is no excuse for doing these procedures without anesthetic. If you are not using pain management talk to your veterinarian for training. For long-term pain management we can prescribe medications with proper meat or milk withholding.

If we wish to maintain the public trust, we must do everything possible to eliminate undue suffering and pain in our domestic animals. – Dr. Phil Pearson

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