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## Blanket Dry Cow Therapy: Another New Wrinkle in Our Assumptions Prepared by Dr. Steve Wadsworth

The dairy industry is under more critical scrutiny than ever before in nearly every sector of our management: animal care, manure management, GMO utilization, water quality, Hispanic labor and antibiotic usage. As members of the dairy business, we all must confront these hot-button issues in thoughtful and deliberate ways and avoid the easy path of cynicism and anger!

The online cattle veterinary discussion group, AABP-L, recently had a lively discussion with many veterinarians participating. The topic was dry cow treatment, DCT. In this discussion, the decades-long accepted management practice of Blanket Dry Cow Therapy, BDCT, was challenged in an articulate and respectful discussion.

The traditional thinking has been to treat every quarter of every cow at dry off with an approved tube of dry cow antibiotic. This approach has been aimed at reducing infections that had been acquired during the previous lactation as well as protecting the udder from new infections during the early post-dry-off period. Dry cow treatment has been one of the pillars of successful mastitis management for more than 40 years. This strategy has usually not used any SCC or culture information but just assumed it was a good idea for every farm and every cow.

This conventional thinking is being challenged. Is it medically or economically justifiable to give 100% of cows antibiotics every year to cover a small percentage of cows who might actually need it? Can we continue to shoulder the risk of antibiotic residues in bull calves fed colostrum from dry treated cows? Are we using BDCT as a crutch for better management? Are we creating a resistant bacterial population by such routine antibiotic usage? Are we negatively affecting the gut flora of calves when their first meal of colostrum has a low level of antibiotics in it? If we are using poor technique in dry cow treatment (no alcohol scrub of teat ends, for example) maybe we are causing more harm than good? Can we protect dry cows from new infections using internal teat sealants like Orbeseal? Some herds use BDCT and still have unacceptably high SCC so is it even working?

So an alternative approach to BDCT is selective dry cow treatment (SDCT) which involves using herd data to choose which cows are going to be treated with dry cow tubes. Information about a cow's previous mastitis treatment history, her SCC data from her past lactation, California Mastitis Test (CMT) results at dry off and culture results can be used to select cows in a more discerning process.

Recent but limited research has been published using culture of a composite milk sample and teat sealants achieving equal udder health to BDCT and reducing drug use by 21% (Cameron et al, JDS 2014). A recent pilot study at the University of Minnesota found a

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48% reduction of drug use and no difference in infection levels with SDCT compared to BDCT.

Selective dry cow therapy is not for every farm for sure. Farms with low herd SCC, clean dry cow facilities, DHIA data, good treatment records and a willingness to monitor results would be well suited to consider SDCT. But it may be a strategy for some farms to implement to reduce antibiotic usage, eliminate residue risk in newborn calves, save money and labor while still maintaining good udder health. Before you decide to modify your dry cow program, be sure to discuss this with your herd health vet to insure you have the tools in place to make appropriate decisions for your specific situation.

Years ago when I first started dairy practice, it was routine to carry oxytetracycline and uterine pipettes during herd checks. Any cow with a post-calving discharge was infused with antibiotics. We infused thousands of cows. We have changed our thinking and rarely infuse cows today. Perhaps this is a learning model for us with dry cow therapy as we face the future of increased scrutiny from the consuming public.

