## **MILK QUALITY**

Waupun Veterinary Services, LLC - Your Progressive Dairy Partner since 1958

### **Clinic Purchases New Testing Equipment**

The clinic recently purchased a new tool for testing milking equipment. VaDia is a small lightweight (85 grams) vacuum monitoring device that has 4 ports that can be strapped onto a teat cup.

Problems with the health of the udder can many times be related to the milking equipment, and often it is in combination with inadequate milking routines. Problems that often arise include teatend vacuum fluctuations due to poor quality liners, liner slips or insufficient vacuum capacity.

The VaDia collects vacuum readings autonomously which allows us to pay more attention to the milkers and the cows in the parlor while we are in the parlor. The VaDia can be used for checking teat end vacuum, checking pulsators, mouthpiece chamber vacuum, detecting overmilking, analyzing restrictions, slug analysis during cleaning, and helping in fitting liners. The data can be analyzed during milking (connects to our phones via Bluetooth) or after milking on our computers. With the purchase of the VaDia we can collect data with the VaDia and the VPR-200 and are now able to have two people testing different parlors at the same time.

For more information about quality milk testing, or to schedule an appointment with Dr. Mark Sosalla or Dr. Molly Rogus, please contact the clinic.





The VaDia is pictured above in blue strapped to the teat cup of a milking unit and at left it is in a green case. It collects vacuum readings.

#### National Dairy Quality Awards

The national Dairy Quality Awards will be announced in the January 25th, 2024, edition of Hoard's Dairyman.

There were 39 finalists in the nation. The award judges looked at many criteria when examining the applications. Besides SCC and SPC, the judges looked at specific details about each operation that included milking routine, cow comfort, udder health monitoring programs, treatment and prevention programs and adherence to drug use and record keeping regulations.

Although the winners will not be announced until January 25th, Waupun Vet is happy to say that of the 39 winners across the nation, four are Waupun Vet clients! We are hoping in the future more of our clients will qualify for the awards.

# Anti-inflammatory Treatments Show Promise for Enhanced Udder Health, Yield

This article is taken from the Udder Topics newsletter from the National Mastitis Council. During the 2023 National Mastitis Council Annual Meeting, Adrian Barragan, Penn State University

department of veterinary and biomedical sciences, University Park, Pa., addressed the topic of transition period inflammation and the impact on udder health and milk production.

"Although multiparous cows have a higher risk of developing mastitis, primiparous cows are at a higher risk of developing several other health events, such as dystocia, metritis and endometritis,"

Adrian Barragan

Anti-inflammatory treatment of dairy cows after calving has been extensively

researched, with a focus on pain management. In addition to improved cow comfort, several studies reported increased milk yield in anti-inflammatory treated cows. For example, Carpenter et al. (2016) found that multiparous cows that were treated with a three-day aspirin or meloxicam (two common non-steroidal anti-inflammatory drugs [NSAID]) administration protocol produced more milk and more milk protein, and lower somatic cell count (SCC) milk, compared with placebo cows. Similarly, Barragan's lab found that cows treated with two shorter (two days) aspirin protocols produced 3.61 pounds (1.64 kg) more milk per day (response only found in multiparous cows; Barragan et al., 2020b) or 4 pounds (1.82 kg) more milk per day (Barragan et al., 2020a), compared with control cows.

While research solidly supports antiinflammatory treatment for multiparous cows, post-partum anti-inflammatory treatment has no effect on primiparous cows' udder health or milk production. First-lactation cows experience higher systemic inflammation, stress and cortisol around calving, compared with multiparous cows (Barragan et al., 2020b). "Although multiparous cows have a higher risk of developing mastitis, primiparous cows are at a higher risk of developing several other health events, such as dystocia, metritis and endometritis." Barragan told the NMC audience that his research group is exploring a different anti-inflammatory treatment approach. The research team assessed the effects of administrating one

dose of oral aspirin boluses (125 g/day/cow) or oral meloxicam (1 mg/kg of body weight) at 14 days prior to expected calving date on milk yield, health events and fertility. Preliminary findings showed that primiparous cows treated with meloxicam tended to produce 9.9 pounds (4.5 kg) more milk per day for the first 100 days in

milk (DIM), compared with placebo cows. Primiparous cows treated with aspirin or meloxicam had 23.81 percent or 18.81 percent lower incidence of stillbirth rate, respectively, compared with placebo cows.



#### WVS Tests for Quality Milk

Dr. Mark Sosalla is pictured above during a recent milk quality visit. After he performs his tests on the milking equipment, clients receive a report on his findings.



Merry Christmas from the WVS doctors and staff! The clinic will be closed on Dec. 25 and Jan. 1, but our on-call vets will be available for emergencies.