Aspirin Use in Fresh Cows By Caroline Arrowsmith, intern at the Center for Dairy Excellence and animal science student at The Pennsylvania State University

Coming from a small dairy farm, fresh cow management is not a major daily task. However, last summer during my time as an on-farm intern at Pine Tree Dairy in Marshallville, OH, I learned the true importance of closely managing your fresh cows. Properly caring for your fresh cows sets them up for successful and profitable lactations. On the other hand, diminishing the importance of fresh cow care can lead to milk loss, increased incidence of disease, and possibly culling.

Each morning at Pine Tree, I had the opportunity to work with the herd managers to look over the fresh cow group and make treatment decisions. These mornings are where I discovered the benefits of using aspirin. We would often give aspirin boluses when administering other treatments, and even on its own when a cow seemed a little off. For example, we might administer the aspirin if a cow had a bit of a tough calving or maybe she just wasn't as keen to enter the parlor as she was during past milkings. After a few doses of aspirin, the cows would usually turn around and were set on course to have a healthy and productive lactation.

My anecdotal experience is supported by research by Dr. Adrian Barragan of Penn State University. In his Journal of Dairy Science article, Dr. Barragan notes that the transition period is one of the greatest challenges that a cow faces. The inflammation and stress they encounter can lead to both metabolic and infectious diseases, in turn causing decreased milk production. In Dr. Barragan's article he shares past research that may support using anti-inflammatory drugs to decrease pain and inflammation. One study administered sodium salicylate in drinking water, and while the results were promising, it was hard to ensure accurate dosage. Another successful study administered lysine acetylsalicylate in an injection for five days. Yet another study used acetylsalicylic acid (aspirin) in bolus form, administering the treatment every 12 hours for two days. However, as many farmers who have tried these techniques will know, they can be quite laborious and time consuming. Dr. Barragan's research sought to understand if aspirin boluses administered every 24 hours for two days could have a similar, and less labor-intensive effect, than treatments from past studies.

The study compared the performance of fresh cows that received the aspirin treatment with that of untreated cows. Upon completion, it was found that one of the greatest differences was found in their milk production. Those treated with aspirin produced as average of about 3.6 more pounds in the first 60 days of milk than those that went untreated. Additionally, they had less metabolic stress in the 14 days post calving with fewer occurrences of metritis as well.

We followed a somewhat similar protocol last summer, averaging about 24 hours between treatments and often lasting for two to three days. Administering the aspirin every 24 hours rather than every 12 hours was a very effective way to help cut down on labor needs for fresh cow treatment, while still successfully improving the cows' condition.

During this time of labor shortages, being able to reduce your labor needs, even in small ways, is key for long-term success. With the relatively low cost of aspirin boluses coupled alongside the

current milk price, aspirin may be a good choice to help boost your profitability from your fresh cows. If you're asking yourself if this applies to you, it may be beneficial to evaluate what your biggest fresh cow problems are. If they are related to inflammation, or maybe you just feel like your cows are dragging as they enter their lactation, aspirin may be the answer. Additionally, it is always helpful to consult with your veterinarian in order to decide whether or not to implement new health protocols.