## **Evaluating Feed** Additives for Your **Dairy Herd**



By: Katie Wolf, Lauren Mayo, Derek Nolan, and Donna M. Amaral-Phillips, Ph.D.

Feed additives are ingredients that are added to rations in small quantities that may improve the health, reproductive performance or milk production of dairy cows. Some feed additives modify digestion of feeds in the rumen whereas others act on the overall metabolism of the dairy cow. However, there are some key factors to consider when looking into a particular feed additive.

- What role do they play in the diet: Look at where your ration would stand without them. Additives can be selected specifically to change rumen pH, improve fermentation by rumen bacteria, or modify the overall metabolism of the cow. Such seemingly small changes may or may not impact overall milk production, milk protein, and milk fat, in addition to overall herd health. Feed additives will increase the cost of any ration, thus they must be used wisely.
- Consider costs. There may be multiple additives that act in a similar way, such as increasing rumen pH, but which have significant cost differences. Similarly, consider how available the product is.
- Do the research. While keeping in mind what changes you would like to see in your herd, see what effects universities have found in research trials using different products. If something is being marketed as improving butterfat or milk production, take a look at the numbers behind it. Often in university trial and other controlled studies, the additive is compared to cows not receiving the particular additive. Study results should indicate that not only did the product significantly improve whatever aspect was being researched, but that the procedures are ones that could be implemented in your herd. For example, if a particular additive was shown to increase milk protein but required special feeding procedures that would significantly increase labor, the additional revenue from milk components may not be worth the time.
- Review with your nutritionist: Discuss everything with your herd's nutritionist to make sure any changes would work effectively with your cows.

Evaluate the results in your own herd. Production levels should be compared day by day and trends in relation to when additives were introduced. This comparison can give you an idea of how much improvement there may or may not have been. Similarly, compare numbers if an additive is removed to when it was being fed. Bottom line, if there is an increase in cost without increase in production or components to match, or if there are negative effects in your herd somehow, it's time to reevaluate or go back to basics.

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT





