

The Crystal Creek® Dairy Nutrition Model Improves Your Bottom Line



By Brian Hoffelt, B.S.

As a Crystal Creek® Nutritionist, I am presented with a tremendous opportunity to help dairy producers become more profitable. The Crystal Creek® Dairy Nutrition Model is designed to increase producer profitability by using nutrition to enhance rumen

function. Improving your cow's rumen function leads to a variety of benefits i.e., more efficient use of home grown forages, decreased reliance on purchased supplements like grain and protein sources and improved animal health.

When a producer approaches Crystal Creek® to see how our nutrition model can be applied to their herd, we begin with an initial herd assessment. During our initial herd assessment, our nutritionists gather information about the herd and spend time listening to the producer so we can clearly understand their goals and management strategies. Next, we discuss the goals each producer has for their operation and ways we can work to achieve them. Each herd is different and will have a unique and comprehensive plan designed to fit the specific needs of their farm.

After completing our initial assessment and once our nutritionists have a clear and accurate understanding of what that producer's goals and management strategies are, each farm is then given the following:

1. **Current Ration Evaluation:** A comprehensive review of the current ration to identify both its strengths and areas of potential improvements.
2. **Step One Ration:** A first step ration will look different for each farm. The Step One ration is the first of many steps we use to take a herd from their current feeding strategy to the plan decided upon during the initial assessment. We provide a step by step approach to moving a herd towards the producer's goal while at the same time improving rumen function and efficiency.
3. **Goal Ration:** A goal ration shows where we eventually would like to end up with the ration. This goal ration is achieved when the application of the Crystal Creek® Dairy Nutrition Model is fully applied and is working to achieve the goals outlined by the producer during the initial assessment phase.

4. **Cost Analysis:** At Crystal Creek® we are dedicated to improving our producer's overall profitability. Part of our nutrition service includes monitoring and tracking how our nutrition model impacts your bottom-line and we use this as a benchmark to evaluate progress with your herd. We focus both on Total Ration Cost (what does it cost to feed your cows grown and purchased feeds) and Out- Of- Pocket Cost (what is the impact going to be on your checkbook).

I recently had the opportunity to sit down with a producer from Northeast Wisconsin to develop his initial herd analysis. The herd analysis proved that there was opportunity for improvement in the areas of profitability and rumen function. I discussed the current ration and highlighted areas of concern and areas of improvement while also listening to the producer's goals for the herd. Next, I created the Step One ration that began the process of using small adjustments to increase rumen function and work towards the goals the producer outlined in our initial assessment. These Step One ration adjustments on their own will bring the producer closer to his goals of increased herd health and more profitable production levels through a sustainable ration. When it came time to do the cost analysis, we found we were able to save this producer \$215.35 /cow/year. That amounts to an annual total savings of \$10,767.50 based only off the changes from the Step One ration. See Figure 1 on page 5 which breaks down the cost analysis of this producer's Current Ration and the Step One Ration.

The improved profitability described above and shown in Figure 1 is based on the cost savings associated with ration changes only. It does not take into account any improvements in transitions into lactation, animal health, reproduction, foot health and other key factors that impact overall profitability on a dairy.

The first step in the process is simple. Collect your current ration information and send it to one of our Crystal Creek® Nutritionists. Clients that purchase our Crystal Creek® minerals are provided ration balancing and livestock nutrition counseling free of charge. Our minerals are a valuable tool in your ration and are formulated only with the highest quality ingredients. Dan Leiterman's article, titled "Interpreting The Value Of A Livestock Mineral" on page 6 of this newsletter profiles the features and benefits of the Crystal Creek® line of dairy minerals. Our Crystal Creek® team of dairy nutritionists are excited to work with you to design a customized nutrition plan for your farm.

Figure 1

TOTAL FEED COST						
Ingredient	\$/Ton	\$/lb	Current Feeding Rate	Current Feed Cost	Step 1 Feeding Rate	Step 1 Cost
Clover Balage	150	0.075	51.55	\$3.87	53.00	\$3.98
Corn Silage	50	0.025	35.00	\$0.88	43.00	\$1.08
Ground Corn	320	0.16	8.20	\$1.31	7.78	\$1.24
Distillers Grain	359	0.1795	1.20	\$0.22		
Hi Bypass Exceller Meal	614	0.307	1.86	\$0.57	2.31	\$0.71
Canola Meal	479	0.2395	5.72	\$1.37		
Calcium Carbonate	192	0.096	0.73	\$0.07		
Molasses & Fat	350	0.175	0.23	\$0.04		
Salt	212	0.106	0.18	\$0.02	0.18	\$0.02
Sodium Bicarbonate	570	0.285	0.15	\$0.04		
Urea	960	0.48	0.06	\$0.03	0.12	\$0.06
Current VTM Pack	3300	1.65	0.06	\$0.10		
Magnesium Oxide	840	0.42	0.05	\$0.02		
Vitamin E	2600	1.3	0.01	\$0.01		
Zinc ZN 4	3300	1.65	0.02	\$0.03		
Current VTM Pack 2	1120	0.56	0.04	\$0.02		
Soybean Meal	590	0.295			2.80	\$0.83
CC 2:1 Mineral	1456	0.728			0.55	\$0.40
Total Feed Cost				\$8.60		\$8.32
<p>Total Feed Cost Difference Step 1: \$8.60 - \$8.32 = \$0.28/head/day \$0.28/hd/day x 50 cows = \$14.00/day \$14.00 Saved Per Day x 365 Days = \$5110.00 Saved Per Year</p>						
OUT-OF-POCKET FEED COST						
Ingredient	\$/Ton	\$/lb	Current Feeding Rate	Current Feed Cost	Step 1 Feeding Rate	Step 1 Cost
Ground Corn	320	0.16	8.20	\$1.31	7.78	\$1.24
Distillers Grain	359	0.1795	1.20	\$0.22		
Hi Bypass Exceller Meal	614	0.307	1.86	\$0.57	2.31	\$0.71
Canola Meal	479	0.2395	5.72	\$1.37		
Calcium Carbonate	192	0.096	0.73	\$0.07		
Molasses & Fat	350	0.175	0.23	\$0.04		
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Zinc ZN 4	3300	1.65	0.02	\$0.03		
Current VTM Pack 2	1120	0.56	0.04	\$0.02		
Soybean Meal	590	0.295			2.80	\$0.83
CC 2:1 Mineral	1456	0.728			0.55	\$0.40
Out-of-Pocket Feed Cost Total				\$3.85		\$3.26
<p>Out of Pocket Difference in Feed Cost Step 1: \$3.85 - \$3.26 = \$0.59/hd/day \$0.59/hd/day x 50 cows = \$29.50/day \$29.50/day x 365 days = \$10767.50 Saved Per Year \$10767.50/50 cows = \$215.35 Increased Profit / Cow/ Year</p>						