What Major Ration Changes Occurred in 2009?

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The last 2 years have brought unprecedented financial pressures to the dairy farm. High cost of inputs and sudden downturns in international and domestic milk markets resulted in negative cash flows on many dairy farms of \$3 to 7/cwt of milk shipped. Factors associated with the downturn include the global economic meltdown in 2008 that affected buying power of many countries, the relatively weak dollar that resulted in large exports of corn and soybeans and their co-products, the expanded use of corn and soybeans for biofuels, and weather patterns in key crop production areas of the world.

The price received for milk is determined by the Federal Milk Marketing Order policy established by USDA. These Federal orders, currently 9, set a monthly minimum price that is paid to dairy producers in the geographical area covered by the Order. The pricing plan is based on 4 classes of milk: Class 1 is fluid products; Class II includes ice cream, yogurts and sour cream; Class III is cheese and whey; and Class 4 is butter and powder. Formulas are used to calculate a Class III price and Class IV price based on the value of cheese, whey, powders and butter purchased from the Chicago Mercantile Exchange (CME). Class I and Class II prices are derived by formulas from elements determined by Class III and Class IV calculations. The original intent of the classified pricing plan was that the market place would determine the price paid to producers. Benefits of the plan, according to USDA, are:

- a. To assure dairy farmers a reasonable minimum price,
- b. To assure consumers an adequate supply, and
- c. To help prevent wild fluctuations in price in times of heavy and light production.

The monthly all-milk price within an order is based on the previous months' prices of Class III and Class IV products from CME.

Class III, Class IV, and the all-milk prices as calculated by USDA are shown in Figure 1. From the highs in mid 2008, Class III, Class IV and all-milk prices decreased by 54, 43, and 41%, respectively, 7 to 11 months later. Many businesses exit the marketplace under similar market conditions.

Dairy farm numbers declined 3.8% in 2009 according to USDA estimates. Three programs, Cooperatives Working Together (CWT), Milk Income Loss Contract (MILC), and the Dairy Economic Loss Assistance Payment (DELAP) helped reduce the financial burden of low milk prices in 2009. The CWT eliminated approximately 800 dairy farms and over 200,000 cows from the national herd. The MILC payment began in February, 2009 and ended in December 2009. The DELAP was a special appropriations bill that brought \$290 million of direct aid to dairy producers.

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Feed Costs

Corn and soybean meal are major sources of nutrients for all classes of livestock (Figure 2). Prices for these commodities for the past 3 years are shown in Figure 3. Prices for both surged beginning in late 2007. Soybean meal price retreated late in 2008 from mid-year highs, but 2009 prices remained well above \$300/ton for most of 2009. Corn prices remained above \$140/ton (\$3.92/bu) for 2008 and 7 months of 2009. In 2009, dairy producers experienced unprecedented losses due to low milk prices and high feed costs.

I had the good fortune to ride with some key nutritionists in the western United States in my position with Elanco Animal Health (Greenfield, IN). On many farm visits, I saw the importance of the "soft skills" of the consulting nutritionist. Many dairy producers sought information not related to feeding and nutrition of the dairy herd but a listening ear, empathy, and an explanation of causation of price downturns. Probably all of the current nutritionist contemporaries had similar experiences in the past 12 to 18 months.

For this paper, I was asked to survey consultants seeking information on how nutritionists and producers worked through the past 12 to 18 months of low milk and high feed costs.

Four questions were asked:

1. How did you adjust feeding programs to meet nutrient demands of the cow and requests for feed cost control of the producers? Some dairy producers wanted the lowest cost complete grain mix or supplement, while milk yield drove the decision of others with all levels between the extremes. Consultants used optimizers in ration balancing programs more often and evaluated current and shadow pricing for choosing ingredients. Soybean meal remained the lowest cost source of rumen degradable

- protein. Use of urea was restricted by setting an upper limit on inclusion rate. Replacing corn with by-products, e.g. hominy, soy hulls and citrus (south) was the most common response. Use of whole cottonseed was very limited. By-pass fat and rumen-protected amino acids were removed from rations in many cases. Inclusion rate of minerals was reduced. Buffers and Rumensin® were additives most likely remaining in rations.
- 2. What did you do to expand your services for your clients? More frequent communication (visits or phone) was the most common cited tool for expansion of service. Continued scrutiny of rations for cost savings, conducting more what-ifs, and evaluating low-producing cows as cull candidates were employed by most consultants. Sorghum was planted following the second cutting of small grains for silage or balage.
- 3. What were 2 or 3 things that were "untouchables" with some of your clients? A pregnant cow remained the most valuable animal on the farm. Steps to get the cow pregnant and stay pregnant were not compromised. Strata-G® (Virtus Nutrition, LLC, Corcoran, CA) and Megalac-R® (Church and Dwight Co., Inc., Princeton, NJ) were fed by clients who had fed these previously. Most consultants were unwilling to cut essentials, e.g. trace minerals and vitamins, especially vitamin E, to save a few cents. The value of buffers and Rumensin® was accepted.
- 4. What were a couple of key learning points for you and your clients? Some consultants emphasized that even at low milk prices, attempts at cost cutting on inputs had a negative effect on income over feed costs. Feed efficiency became a more important consideration. We now watch prices of ingredients more closely than before. Looking at ways to reduce orts

and feed them to heifers. The value of high quality forages as a measure to reduce ration cost was more evident than ever. Ingredients that were eliminated or reduced without affecting health or production were not added back to the ration.

Summary

Dairy producers have never experienced the combination of low milk price and high feed cost that have plagued the industry in the past 24 months. Much equity built over several years disappeared, leaving many operations in or on the brink of bankruptcy. Nutrition consultants have been challenged during these times to control costs and to serve as a "listening ear". This latter skill was not taught in my graduate program but is certainly one we all must develop. Hearings are beginning on the 2012 Farm Bill and dairy certainly needs to be heard. Many groups are now forming that will attempt to shape dairy policy for the coming years. I urge consulting nutritionists to become conversant in the issues and encourage producers to become involved in the process.



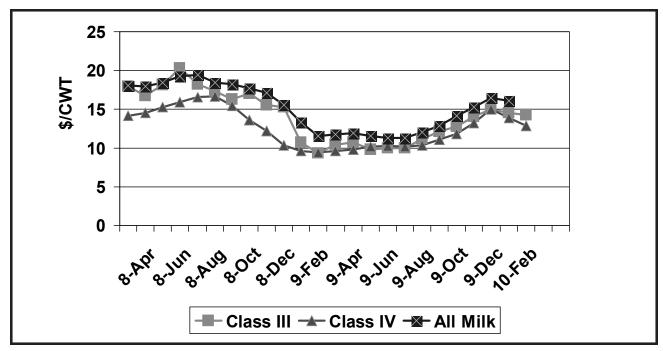


Figure 1. Prices for Class III, Class IV and all milk from April 2008 to March 2010.

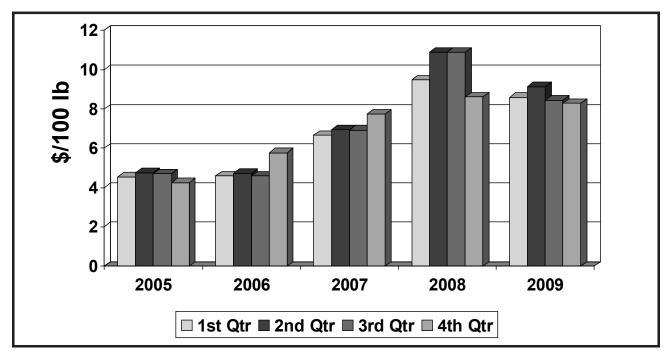


Figure 2. Cost of 16% protein corn-soybean meal mix: 2005 to 2009.

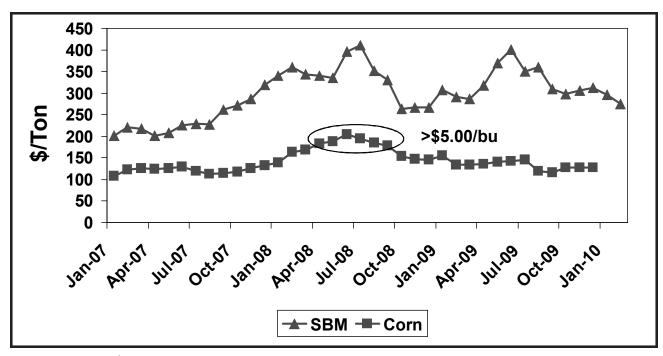


Figure 3. Price (\$/ton) of soybean meal (SBM) and corn: 2007 to current.