

Don't Kill your Cash Cow while Trying to Cut Feed Costs

By: Jeffrey Bewley, Ph.D.

Unchartered territory

That phrase definitely describes the current dairy industry situation. Although 2008 milk prices are lower than 2007, all 2008 milk price forecasts remain at levels that would have historically been considered quite high. Unfortunately, dairy producers cannot fully take advantage of these high milk prices because of increased input costs. Corn, soybean, hay, cottonseed, and diesel prices have all reached record (or near record) high levels during the last few months. This shift in input prices has motivated many dairy producers to cut feed costs. Without a doubt, all dairy producers should be evaluating their rations to make sure they are feeding best cost rations. Notice that I used the term "best cost" rather than "least cost." The two terms do not necessarily mean the same thing. From an economic perspective, the objective in feeding dairy cows should be to get the most "bang for your buck" by finding a balance between milk yield and feed costs.

Income over feed costs (IOFC) is a good indicator of nutritional economic efficiency. It's easily calculated by subtracting daily per cow feed costs from daily per cow milk income. For example, if the average cow in your herd is producing 70 pounds of milk daily and consuming \$6 of feed with a \$15/cwt milk price, IOFC would be \$4.50 per cow per day ($70 \text{ lbs} \times \$0.15/\text{lb} - \$6 = \4.50). Nutritionally, a dairy producer's goal should be to maximize IOFC rather than either maximizing milk yield or minimizing feed costs.

Examples

Let's take a look at what happens to IOFC as milk prices, feed costs, and milk yields change (Figures 1-3). First, let's point out the obvious. At all three milk prices (\$10, \$15, and \$20), as feed costs increase IOFC decreases. Something that might not be quite as obvious is the fact that no matter what milk price is, IOFC increases steadily as milk production increases from 50 to 100 pounds. Similarly, even when feed costs are high, IOFC also increases steadily as milk production increases from 50 to 100 pounds. For a dairy with average daily milk production of 80 pounds with a \$20/cwt. milk price and a high feed cost of \$8 per cow per day, IOFC is still respectable at \$8. In contrast, with average daily milk production at 50 pounds under the same conditions, IOFC drops to \$2. If milk price drops to \$14 per/cwt. for this lower production herd and feed costs remain high, the dairy can't even cover feed costs with IOFC at -\$1.

More milk

The take home message is that, generally speaking, it makes sense to get more milk out of cows regardless of current milk or feed prices. Of course, IOFC does not consider all the costs of producing milk. Thus, IOFC is not a perfect indicator of either profitability or cash flow. However, the increased IOFC associated with increased milk production takes into account most of the costs of increasing production. Once all the costs of maintaining the cow, facilities, labor, etc. are paid for, the primary measurable cost of increased milk production is

the cost of the feed required to support the new production level. Increasing production will improve farm profit potential because margins are elevated at higher production levels given that fixed costs have already been paid.

Cash cow

The cash cow on a dairy farm is milk production. As dairy producers rebalance rations to ease the pain of high feed prices, some may be tempted to cut ration costs without regard to the effects on milk production. But, you don't want to kill your cash cow while trying to cut feed costs. It's possible to do more harm than good when cutting feed costs. Let's take a look at four different scenarios given today's extreme conditions (Table 1). Scenario 1 represents current conditions for an example dairy farm. In scenario 2, ration costs are reduced; however, this comes at a high cost as milk yield drops due to an inferior ration. In fact, the annual whole-herd IOFC for this ration is \$38,325 less than for the current scenario. Scenarios 3 and 4 represent the best options for this dairy. In scenario 3, the nutritionist works with the producer to reduce ration costs without affecting production resulting in an increased annual whole-herd IOFC of \$27,375. In scenario 4, the cost of the new ration actually increases but this increase is accompanied by increased milk production also resulting in an increased annual whole-herd IOFC of \$27,375. IOFC can be increased through reducing feed costs or increasing milk production even in today's economic climate. Dairy producers should be cautious when reducing feed costs by ensuring that such reductions will not lead to reduced milk production.

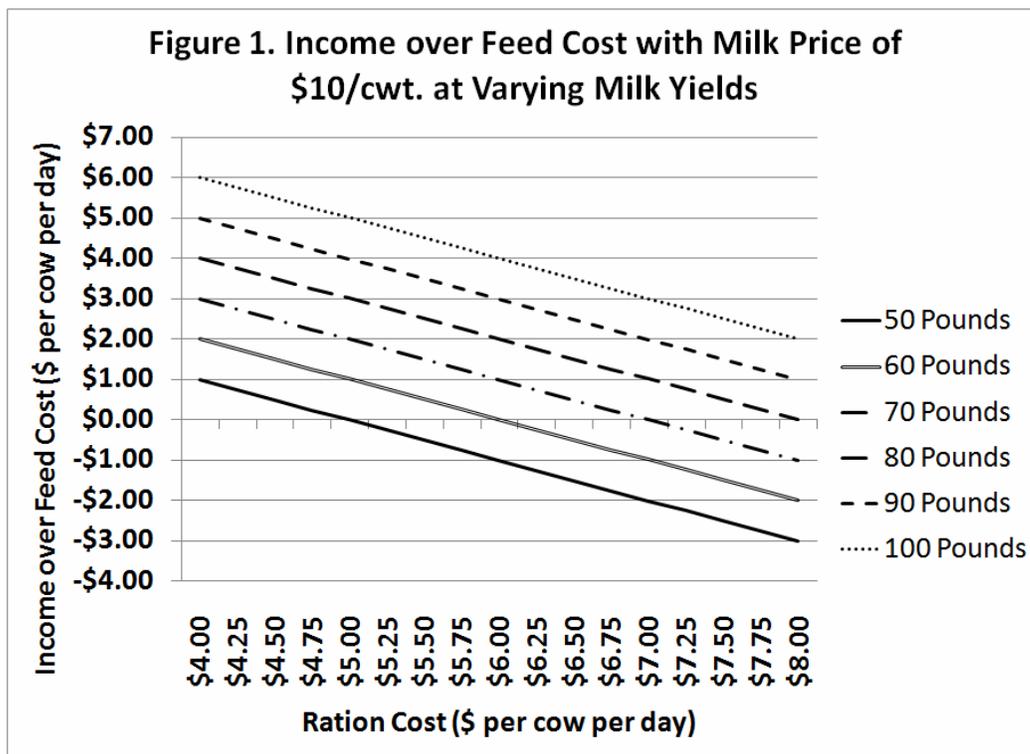


Figure 2. Income over Feed Cost with Milk Price of \$15/cwt. at Varying Milk Yields

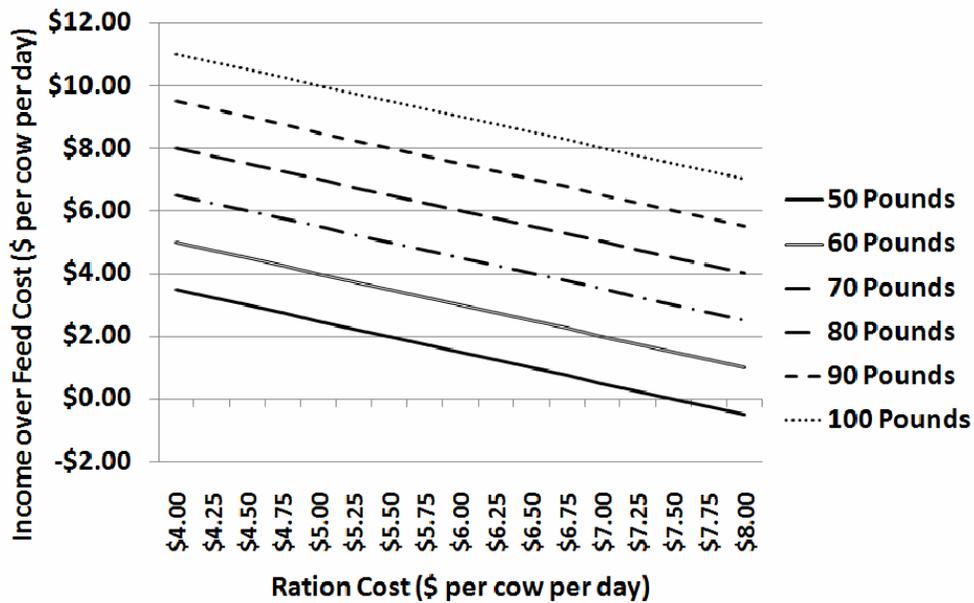


Figure 3. Income over Feed Cost with Milk Price of \$20/cwt. at Varying Milk Yields

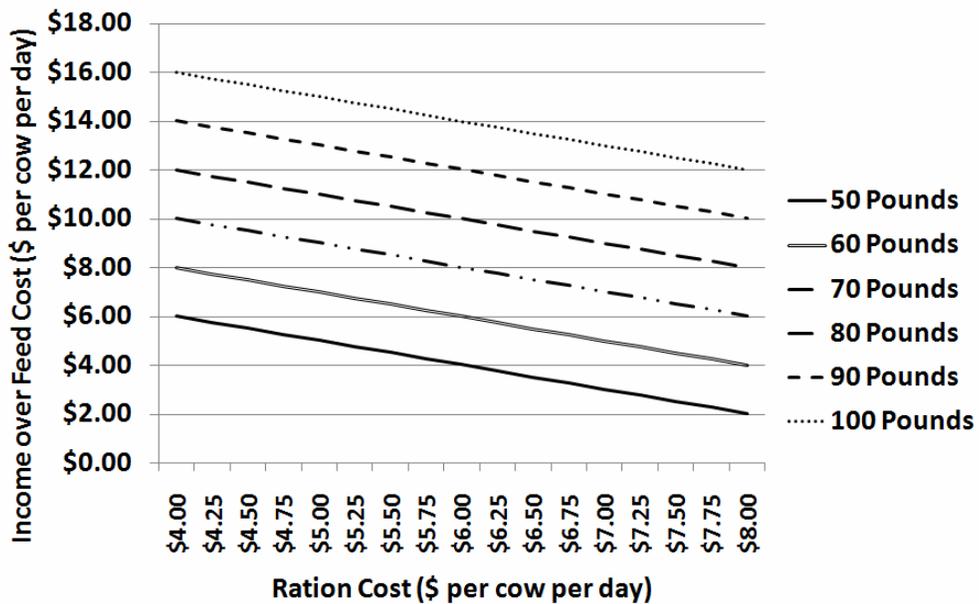


Table 1: Ration Scenarios

	1. Current Ration	2. Reduced Cost/Reduced Production	3. Reduced Cost/Same Production	4. Increased Cost/Increased Production
Ration Costs (per cow per day)	\$8.00	\$7.50	\$7.50	\$8.50
Milk Price (\$/cwt)	\$20.00	\$20.00	\$20.00	\$20.00
Milk Yield	70	64	70	75
Income over Feed Cost	\$6.00	\$5.30	\$6.50	\$6.50
# Cows	150	150	150	150
Total Herd IOFC (Daily)	\$900.00	\$795.00	\$975.00	\$975.00
Total Herd IOFC (Annually)	\$328,500.00	\$290,175.00	\$355,875.00	\$355,875.00
Change in Annual IOFC compared to Current Ration	\$0.00	-\$38,325.00	\$27,375.00	\$27,375.00