Profit Seminars

By Russ Saville, Kurt Ruppel and Sue Greth

Income over feed cost, the "ultimate profit driver!"

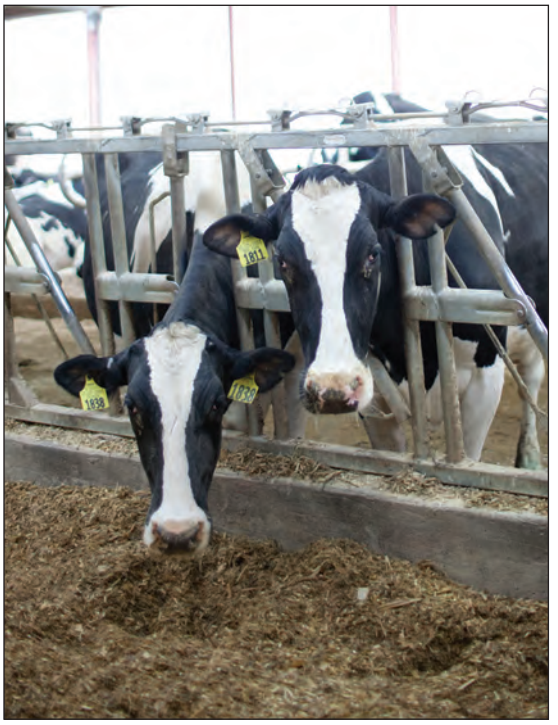
Income over feed cost (IOFC) can be as simple as the name implies. IOFC is calculated by subtracting feed cost from the actual milk income. What is left over is used to pay all other bills and hopefully remain as profit for the farm. Many industry catch-phrases talk about profit, such as feed efficiency, pounds of components and component efficiency. But IOFC truly is one of the simplest calculations and it goes to the heart of what drives a dairy farm's profit. Finding a simple and user friendly way to take the milk check and feed cost information and calculate IOFC helps Cargill consultants initiate discussions and make better decisions with clients.

IOFC helps drive fact-based decisions on the farm.

One of the ways IOFC is used is to simply calculate and track IOFC on a monthly basis. IOFC can be monitored with the current milk price and a fixed milk price. Basically, "How are we doing?"

The value of fat and protein change monthly in the milk check, so it is important to monitor the strategy to formulate grains. A spreadsheet prepared by Kurt Ruppel, called the Milk Revenue Calculator (MRC), focuses on the revenue generated from component production and prices. The MRC can be used to evaluate strategies to feed for more or less components versus the price per pound of component received.

For example, the value of protein is down 50% from a year ago, should investment in feed additives that drive milk protein also change? Could they be removed or decreased to save on feed costs? Protected amino acid sources are removed from the grain and save $0.20/cow/day in feed costs. How many protein pounds can be dropped in the milk check before IOFC is lowered? Adding or removing ingredients at the right time can help push a herd to its highest profit potential.



IOFC can also be used to calculate the farm's marginal milk and break-even income over feed. Basically, how much milk and what components are needed to cover feed cost and make margin?

It helps to calculate the best use of on-farm ingredients and purchased ingredients. For example, a farm might have transitioned to poorer quality forage, perhaps with low fiber digestibility. Continuing on a high forage feeding diet may not be the best way to drive IOFC. If the ration model projects a milk loss or the cows have already lost milk, the IOFC can be calculated if less forage is fed and more highly digestible grain sources are brought in. In this case, feeding less indigestible NDF from forages may drive IOFC higher.

On herds with milk weight and component information on individual cows, individual IOFC can be calculated. This can help identify cows, or groups of cows, that are underperforming compared to their herdmates. For example, in one software program personal milk check information and feed cost per pound of dry matter can be added to generate IOFC values for each cow. A list of animals that may need to be culled can be generated by sorting the herd from low IOFC to high IOFC. This feature can also be used to review production of do not breed cows and determine when they have a negative IOFC.

IOFC also helps identify many management practices or "bottlenecks" that may limit profitability on the farm. Some examples include:

- What is the best stocking rate for a freestall barn?
- If a low cow group is created to save on grain costs, how much milk loss or component change are needed to maintain IOFC and justify the change?
- If dry matter intake is increased what is needed to maintain or improve IOFC?

IOFC is an excellent proven financial tool used on dairy farms to drive profits. It can be used to make feeding decisions and herd management decisions. IOFC should be monitored frequently as the factors that make up the milk check revenue constantly change. Working as part of a dairy team and using IOFC calculations to stimulate conversation and answer the unknown helps a farm move forward with decisions based on facts instead of emotion. ❐

Russ Saville *(Russ_saville@cargill.com) is a Dairy Focus Consultant with Cargill Animal Nutrition.* ***Kurt Ruppel*** *(Kurt_Ruppel@cargill.com) is a Technology Leader with Cargill Animal Nutrition.* ***Sue Greth*** *(Sue_Greth@cargill.com) is a Dairy Specialist with Cargill Animal Nutrition.*