

DAIRY PIPELINE

Department of Dairy Science

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Phone: (540) 231-4432/Fax: (540) 231-5014



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“Use this opportunity to review treatment protocols with your veterinarian and ensure compliance with the new withdrawal times.”

ARE YOU MAXIMIZING INCOME OVER FEED COSTS?

It is well known that feed represents the largest expense to dairy businesses. Therefore, it stands to reason that controlling feed expenses is critical to profitable operation. The two most common feed efficiency indicators are income over feed cost and feed cost per cwt.

Income over feed cost (IOFC) is arguably the most important measure of the economic efficiency of feeding your dairy herd. The variables of this equation are feed costs, milk production and milk price. Simply put, you subtract the feed cost per cow per day from the milk income per cow per day. Using a benchmark of \$13.50/cwt of milk, an IOFC of \$6 or higher is a reasonable goal.

Feed cost per cwt is a measure more commonly used. A dairyman is more likely to know this figure as it generally shows up on his ration sheet. Monitoring feed cost per cwt provides a standardized figure to compare the effectiveness of feed cost control. A feed cost per cwt of less than \$5 is considered good.

So which measure should you use? Minimizing feed costs does not necessarily maximize profits. Many of us have pondered the question “Am I swapping nickels?” with respect to chasing production by increasing feed levels. The answer, of course, is “It depends”. The goal is to

	Herd A	Herd B
Daily milk production	85 lbs	75 lbs
Feed cost/cow/day	\$4.15	\$3.25
Feed cost/cwt milk	\$4.88	\$4.33
Income over feed cost	\$7.33	\$6.88
Gross milk price	\$13.50	\$13.50
Gain in profit from maximizing IOFC	\$0.45	\$0.00

feed higher levels of feed only to the point that it continues to generate additional income. Above is an example from Penn State illustrating the difference between maximizing IOFC and minimizing feed cost per cwt.

Although herd B has a lower feed cost/cwt milk, the owners are realizing \$0.45 less IOFC/cow/day than herd A. On a 100 cow dairy that would be a gain of \$16,425 over 1 year's time.

I will admit that I am as complacent as anyone when it comes to regular monitoring of feed cost efficiency. It is fairly easy to stick with the current ration when milk production and feed costs are stable. The only way to **know** if you are maximizing income over feed costs is to monitor it regularly.

—John Welsh
Extension Agent, Rockingham County
(540) 564-3080; jwelsh@vt.edu

NEW LACTATING DAIRY COW APPROVAL FOR EXCEDE® AND CHANGES IN PRE-SLAUGHTER WITHDRAWAL FOR ALL CEFTIOFUR CONTAINING PRODUCTS

A new formulation of ceftiofur has been approved for use in lactating dairy cows. The new formulation of ceftiofur is called Excede®. Excede® is unique for lactating dairy cows because it provides 5 to 7 days of therapeutic blood levels for the common BRDC (Bovine respiratory disease complex) pathogens. These pathogens are Mannheimia hemolytica, Pasteurella multocida, and Histophilus somni. The route of administration for Excede® is at the base of the ear (see figure 1). The route of administration is important for both therapeutic blood levels and pre-slaughter withdrawal time. The milk withdrawal time for Excede® is 0 days just like Naxel® and Excenel®.

High levels of ceftiofur at the site of injection required changes in allowable kidney levels and

changes to pre-slaughter withdrawal times for all ceftiofur containing products. Table 1 (page 2) shows the old and new pre-slaughter withdrawal times for all ceftiofur products approved for lactating dairy cows. Excede® is a prescription product that must be purchased from a veterinarian, and used within the context of a valid veterinarian-client-patient relationship.

Use this opportunity to review treatment protocols with your veterinarian and ensure compliance with the new withdrawal times. Injection of ceftiofur at any



Figure 1
Courtesy of Pfizer Animal Health

Upcoming Activities

Dairy Grazing Tours--July 27-28. Contact Tina Horn (540) 245-5750, Augusta, or John Welsh (540) 564-3080, Rockingham County Extension Offices for details

State Jersey Field Day, July 29 at Waverly Farm, Clearbrook, 10 a.m.

2006 Virginia PDCA Dairy Days August 2-5, Rockingham County Fairgrounds

If you are a person with a disability and require any auxiliary aids, services or other accommodations for any Extension event, please discuss your accommodation needs with the Extension staff at your local Extension office at least 1 week prior to the event.

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site other than the base of the ear results in extremely long pre-slaughter withdrawal times. The middle of the ear route of administration

approved for beef cattle and young dairy heifers should not be used in lactating dairy cows because of the volume of drug to be administered.

Complications were seen in dairy cows when the middle of ear route of administration was used.

—John Currin

Extension Dairy Veterinarian
(540) 231-5838; jcurrin@vt.edu

Brand	Previous Slaughter Withdrawal Period	Current Slaughter Withdrawal Period
Excede®	0	13 days
Excenel® RTU	2 days	3 days
Naxcel®	0	4 days
Spectramast® DC	3 days	16 days
Spectramast® LC	0	2 days

Table 1

Disclaimer: Commercial products are named in this publication for information purposes only. Virginia Cooperative Extension does not endorse these products and does not intend discrimination against other products which also may be suitable.

FIVE SIMPLE TIPS TO REDUCE THE NEGATIVE IMPACTS OF HOT WEATHER ON DAIRY CATTLE.

Each year it's not unusual to see production drop 10 -15 lb. per cow. Waiting until hot weather subsides is not an effective management strategy as milk production lost is never regained once things get cooler. Here are five tips to alleviate summer heat stress.

1. Pay special attention to close up cows. Feed bunks must be covered to prevent spoilage from summer sun and soaking from thunderstorms. Fluctuation of intake prior to calving has very undesirable effects on successful transition to the milking herd and peak milk yield. Shade clothes can provide economical temporary solutions.
2. Provide cow cooling with 36 – 48" fans 20' apart and 8' off the ground angled at 15 to 25° downward. Above the feed lanes place soaker nozzles (10 psi, 180° spray) 8 ft. above the cows and immediately below the fans. Sprinklers run on a timer that soaks cows for 2 – 3 minutes at 15 minute intervals.
3. The holding pen is the hottest place on the farm! Consider reducing group size to reduce time spent in the holding pen along with ample fans to move hot air away from cows.
4. Clean water. What's the water trough look like for your milking and dry cows???? During the summer waterers should be cleaned at least every other day to prevent accumulation of algae and spoiled feed. Wiping the

surfaces with a dilute bleach solution prevents algae growth for several days. Provide at least two waterers per group with a water supply of at least 5 gallons/minute. Consider adding more water trough space near the holding pen during the summer months.

5. Ration modifications are needed to increase energy supply and decrease heat load on the cow.

— Add supplemental fat. Whole oil seeds such as cottonseed and whole soybeans can be added to the ration to increase fat to up to 5% of the ration dry matter. Additional fat (up to a limit of 6 to 6.5% fat in the ration dry matter) should come from rumen inert fats which would not have an adverse impact on rumen fermentation.

— Don't overfeed protein. Many of the new ration formulation programs will permit your nutritionist to balance rations based upon amino acid supply to the intestine. With the right combination of feed ingredients, ration crude protein can be reduced to 16% or less for high producing cows.

— Increase potassium, sodium and magnesium to 1.5%, .45% and .35% of the ration dry matter for lactating cows.

—Bob James

Extension Dairy Scientist, Dairy Nutrition
(540) 231-4770; jamesre@vt.edu

For more information on Dairy Extension or to learn about current programs, visit us at VT Dairy—Home of the Dairy Extension Program on the web at: www.vtdairy.dasc.vt.edu.

Bennet G. Cassell

Bennet G. Cassell
Dairy Extension Coordinator and Extension Dairy Scientist,
Genetics & Management

www.ext.vt.edu