Virginia Cooperative Extension Virginia Tech • Virginia State University

DAIRY PIPELINE

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ing has a positive impact on growth. However, given the current economic conditions, what are the benefits to offset these higher feed costs? You Tube First, a higher liquid feed-

ing rate during the first four weeks of life improves feed efficiency as a lower proportion of nutrients are devoted to body growth. This makes each pound of gain cost less. Second, many studies

have shown that higher milk or milk replacer feeding rates are associated with higher milk production during the first lactation. This is encouraging but when milk prices are low, we want to see positive economic returns sooner rather than later. A third advantage appears to be an improved immune response to feeding more milk or milk replacer during the preweaning period. This can result in lower treatment cost, less labor to treat sick calves, lower culling rates and possibly an additional milk response from healthier cows.

Workers at Texas Tech University compared the response of calves fed either a low plane of nutrition (1 lb. of milk solids) or a high plane of nutrition (1.8 lb. the first week and 2.4 lb. through 54 days of age) to a Bovine Herpesvirus and Mannheimia challenge at 81 and 84 days of age. (As a reference 1 lb. of milk solids

"... research and experience by dairy producers has shown that the practice of feeding calves more milk or milk replacer before weaning has a positive impact on growth."

equals about a gallon of milk and 2.4 lb. of milk solids is more than 2 gallons). All calves were weaned at 70 days of age. Calves fed the low plane of nutrition had lower blood glucose and mobi-

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lized more body fat during the challenge which indicated a more severe response to these respiratory challenges. In another study on a commercial calf ranch, sale barn calves in which more than 75% were colostrum deprived, were fed either 1 lb, of milk solids from a 20:20 milk replacer or 1.8 to 2.4 lb. of milk solids from a 28:20 milk replacer. Calves were weaned at 57 days. Although the calves fed more liberally had more bloat and looser manure there were no differences in health treatments. More liberally fed calves gained 1.2 lb. / day dur-

ing the first 25 days vs. .2 lb. / day for the calves fed the 20:20 milk replacer. These advantages in body weight gain persisted throughout the study. The more liberally fed calves had higher feed efficiency (1.7 vs. 5.8 feed: gain ratio) for the first 25 days of life and over the term of the study (2.2 vs. 3.3 feed: gain). This later study demonstrated that higher feeding rates don't predispose calves to more digestive disease.

More liberal feeding programs for calves based upon intakes of higher protein milk replacers or whole milk result in great body weight gains, improved feed efficiency, better health and improved first lactation milk yield when included in a well-designed feeding program for the postweaned dairy heifer.

> -R. E. James. Extension Dairy Scientist, Dairy Nutrition (540) 231-4770 | jamesre@vt.edu



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Upcoming Events

See VTDairy for details.

September 22, 2015 Milk Marketing/MPP Workshop w/ Gonzalo Ferreira & Jim Pease Harrisonburg

September 23-26

Franklin County Agricultural Fair Pet & Livestock Show

September 25, 2015 State Fair Jr. Dairymen's Contest

September 27-30, 2015 National 4-H Dairy Conf.

Sept. 29-Oct. 3, 2015 World Dairy Expo

October 17, 2015 Virginia Tech Showcase Sale

not.

October 28, 2015 **Reproduction Workshop**

November 11, 2015 **Dairy Management** Workshop-Harrisonburg

November 2015 & January 2016

Holistic Management & Risk Assessment Workshops for Dairy Farmers in the Southern Region (Workshops 1 & 2)

Workshop 1

Nov. 4, 2015—Amelia Co. Nov. 6, 2015—Franklin Co. Nov. 11, 2015—Rockingham Nov. 13, 2015-Smyth Co. Workshop 2

Jan. 20, 2016—Amelia Co. Jan. 22, 2016—Franklin Co. Jan. 27, 2016—Rockingham Jan. 29, 2016—Smyth Co.

March 8-11, 2016 Area Dairy Conferences

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.

HERE TODAY, GONE TOMORROW: HANDLING THE BIG CHALLENGES A dairy farmer must be ready for the un-Loss of a parlor ٠ expected. Every day farmers are chal-Loss of animal housing lenged by variable milk and feed prices, Loss of animals ٠

forage production and all of the details

picture can sometime gets lost in the

uncontrollable and unexpected. Could

associated with herd management. With

so many daily details to attend to, the big

shuffle. It's necessary to think about the

you handle an event so large that it might

change the way you do business? What

than normal temperatures, drought, tor-

rential rain and flooding, or any natural

disaster? Even something as simple as

serious fire. Could you handle the next

not during or after. There may be ad-

vance warning that gives you the time

mice eating electrical wiring can lead to a

steps? Prepare BEFORE disaster strikes,

necessary to prepare. Then again, maybe

fire and in June a Michigan farm was de-

need, people from all over came to help

gather up cows to move them to a safe

area. What if you lost your entire parlor

to fire or tornado, do you have a plan in

place to make sure animals can continue

to be milked? Along with the daily grind

of running a farm, every farmer needs to

Unexpected loss of a family member

or employee-delegation tree-who is

Fire and rescue plan-for each area

With each plan you must identify how

you can continue to survive if you experi-

have plans in place for catastrophic

events. Some of the most important

plans should be:

next in charge

on your farm

ence the following:

Flooding

Tornado

٠

٠

stroyed by a tornado. During their time of

Recently, a Wisconsin farm suffered a

if our area were to suffer from hotter

- Loss of Equipment ٠
- Loss of feed
- Loss of housing for family and employees

When assembling all the primary and secondary plans, one important component is future impact. Any one unexpected

event can have a detrimental impact on animal health ultimately affecting milk production.

Is your farm ready for the unexpected emotionally, physically and financially? Consider establishing a farm advisory team to help prepare. Even today with low milk prices, a farm advisory team that

"Even today with low milk prices, a farm advisory team that meets tour times a year or every month can help you prepare for daily changes...and the unexpected."

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meets periodically can help the farm prepare for daily changes...and the unexpected.

A farm advisory team made up of the key farm family members, employees, veterinarian, accountant or loan officer, nutritionist, and a local extension agent can help improve your business today and be invaluable when misfortune pays a call.

> -Cynthia Martel Extension Agent, Franklin County, (540) 483-5161 | cmartel@vt.edu

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

R.E. James,

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2015

Extension is a joint program of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and state and local governments.

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