

# Virginia Cooperative Extension

A partnership of Virginia Tech and Virginia State University

 VirginiaTech

College of Agriculture  
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Virginia State University

## DAIRY PIPELINE

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### FEELING A LITTLE GASSED ABOUT ETHANOL?

In an era of high commodity grain prices and the corresponding poor dairy margins, it is not hard to find a dairy producer a little irate about ethanol! Created in 2005, the Renewable Fuel Standard (RFS) dictates the minimum volume of renewable fuels that must be blended with gasoline consumed domestically each year. The RFS most recently made the news when governors from several states, including the Commonwealth of Virginia, requested that the Environmental Protection Agency (EPA) consider a waiver of the RFS. Both Virginia's dairy and poultry industries lobbied on behalf of the waiver noting that this year's drought in the Corn Belt coupled with the ethanol mandate created corn prices that were crippling to the livestock and poultry industries.

In November, EPA issued a regulatory announcement stating that "*EPA recognizes that this year's drought has created significant hardships in many sectors of the economy, particularly for livestock producers*". This same document states that for a waiver to be issued, the Administrator of the EPA would have to determine that implementation of the Renewable Fuel Standard would severely harm the economy or environment of a State, region, or the United States. This creates the difficult task of determining which factor, the drought or the ethanol mandate most contributed to the high value of corn. The EPA concluded that waiving the RFS would have "*little, if any, impact on ethanol demand or energy prices over the time period analyzed*".

After reading the last quote, one might conclude that the folks at the EPA don't get it! I mean after all, in the era of record federal budget deficits and expanding energy supplies, why does it make sense to continue to subsidize the ethanol industry and at the same time inflate the value of

purchased feeds? While it seems conclusive that the RFS was instrumental in developing today's ethanol industry, it also appears that we have created an industry that is on the brink of self-sufficiency. While I hate to agree with the EPA, a recent analysis by the Federal Reserve Bank (FRB) of Kansas City tends to support their notion that waiving the RFS mandate would do little to decrease the demand for ethanol.

In an article titled [Markets, Not Mandates, Shape Ethanol Production](#), the FRB concluded that ***"it is markets, not mandates, that will ultimately determine the scale of ethanol production and its use of scarce corn"***. As evidence, the FRB report notes that in 2011 the Renewable Fuel standard mandated 12.6 billion gallons of ethanol be blended with gasoline. The ethanol industry surpassed the requirement, producing 13.9 billion gallons and exporting the 1 billion gallon surplus. The report's authors note that while ***"RFS mandates are thought to be driving ethanol demand, they have been largely irrelevant since 2010"***. To bolster their argument the study looked at the ratio of corn price to the value of a barrel of oil. With the exception of 2008/2009, ratios have been favorable for persistent if not expanded growth in ethanol production. With recent crude oil values of about \$115 per barrel, the authors noted that it would take a sustained corn price of \$8.90 per bushel to cause significant contraction of ethanol production.

I suppose this is just another chapter in the food vs. fuel debate. In an effort to ameliorate the general public's desire for cheap and renewable energy, we have inflated the value of the food on their plates.

—John Welsh  
Extension Agent & Unit Coordinator,  
Rockingham County  
(540) 564-3080 | [jwelsh@vt.edu](mailto:jwelsh@vt.edu)

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## Upcoming Activities

**Jan 17-19, Virginia Farm Show**, Augusta Expo Land, Fishersville

**Virginia Forage and Grassland Council (VFGC) and Virginia Cooperative Extension winter forage conferences:** "Kicking the Hay Habit: Increasing the Profitability of Virginia's Ruminant Livestock Operations"

8:30 am—3:15 pm

**—Jan. 22:** Warren County Community Center, Front Royal

**—Jan. 23:** Weyers Cave Community Center, Weyers Cave

**—Jan. 24:** Wytheville Meeting Ceter, Wytheville

**—Jan. 25:** Southern Piedmont AREC, Blackstone

**Area Dairy Conferences:**

**—Jan. 22:** Culpeper Brandy Station Fire Hall Contact: [Carl Stafford](#)

**—Jan. 23:** Rocky Mount Shively Electric Community Room, Contact: [Cynthia Martel](#)

**—Jan. 24:** Amelia/ Blackstone , Mattoax Presbyterian Church near Amelia Contact: [Cynthia Gregg](#) or [Laura Siegle](#)

**—Feb. 5:** SW Virginia Marion Farm Bureau Contact: [Andy Overbay](#) or [Kevin Spurlin](#)

**—Feb. 6:** Weyers Cave Community Center Contact: [John Welsh](#)

**Feb. 20-22, 2013**  
[VSFA Nutritional Management & Cow College](#), Roanoke, VA

**Feb. 2013**  
No-Till Conference Contact [Matt Yancey](#)

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

## WHAT PERCENT PROTEIN:FAT MILK REPLACER IS BEST ?

It is not uncommon to evaluate milk replacers on a cost/bag basis in an effort to control cost. The standby has been the 20% protein:20% fat milk replacer fed at a rate of 1.0 lb. of powder fed in 4 quarts of total liquid per day. Attempts to improve growth have lead many companies to offer replacers containing 22%, 24% and up to 28% protein. Naturally these higher protein milk replacers are more expensive. Research has shown that greater lean tissue growth occurs with the higher protein milk replacers. Similarly, there are varying levels of fat in milk replacers from 10% to as much as 25%. The lower levels of fat are probably adequate for summer time feeding, while the 20% fat levels are more appropriate for winter when energy requirements are higher. Replacers with 25% fat are recommended for smaller breeds such as Jerseys with higher maintenance requirements.

However the most important concept to remember in feeding calves is that the percentages are not as important as the total amount of protein or fat consumed. Following is a comparison of the amount of protein consumed with a 20 or 28 %CP milk replacer containing 20% fat fed at two different rates.

	Amount of Milk Replacer Powder / Calf / Day	
Percent protein	1 lb.	2 lb.
20	0.20 lb. CP	0.40 lb. CP
28	0.28 lb. CP	0.56 lb. CP

Table 1.

Feeding the higher protein milk replacer at a low feeding rate only changes the amount of protein consumed by 0.08 lb. per day and provides enough energy to increase gain by 0.06 lb. and enough protein to increase gain by 0.3 lb. One can expect much better gains from the higher feeding rate. At 68°F increasing

both nutrient content and amount per day fed to a calf supports better tissue gain and overall growth rate.

Feeding a low level of milk replacer is usually insufficient to support any growth at all, especially during all seasons but the summer.

Responses to fat level are interpreted differently. Lower fat levels may be adequate during the summer when energy needs are lower. However, as temperatures drop below 50°F, increased energy is required and there will be responses to

higher fat% milk replacers when fed at higher levels. This is especially critical for the calf during the first two weeks of life when calf starter intake is negligible. More efficient gain is achieved by feeding higher component milk replacers at higher levels of intake. Nutrient demands for growth demand higher levels of intake from milk replacers, especially during winter and in adverse housing conditions.

“...the most important concept to remember in feeding calves is that the percentages are not as important as the total amount of protein or fat consumed.”

—R. E. James,  
Extension Dairy Scientist, Dairy Nutrition  
(540) 231-4770 | [jamesre@vt.edu](mailto: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 at: [www.vtdairy.dasc.vt.edu](http://www.vtdairy.dasc.vt.edu).

R.E. James,  
Dairy Extension Coordinator &  
Extension Dairy Scientist,  
Dairy Nutrition