

# DAIRY PIPELINE

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## “WASTE” MILK FOR CALVES?

Every dairy farm produces a quantity of milk which is not suitable for sale. With the rising cost of milk replacers, many producers are looking towards utilization of waste milk as a source of nutrition for their calves. Before making this management decision, several important factors should be considered:

- “Waste” milk comes from fresh cows and those treated with antibiotics. It frequently has a high bacteria count and may contain disease organisms not favorable to calf health. It is not known what the influence of antibiotics from treated cows does to calf health.
- Several field studies in California, North Carolina and Wisconsin have shown both quality and quantity of waste milk varies considerably. Fat varied from 1.5% – 5.0% and protein from 2.7% to more than 5.0%. One 1200 cow commercial dairy tracking their waste milk supply for a seven month period found that supply varied from a low of 100 lb. to a high of over 800 lb. per day. This supply did not necessarily align with the population of milk fed calves.
- Milk needed for the preweaned calf enterprise varies by the intensity of feeding program. More biologically normal feeding programs recommend feeding over 2 lb. of milk solids (2 gallons of milk) per day. This would require sourcing 160 lb. per day from waste milk for every 10 calves. Producers should seriously consider the effectiveness of their herd health program if there is this much “waste” milk available on a daily basis.

- It is strongly recommended that any farm considering the use of waste milk purchase an on farm pasteurizer. Remember to consider cost of purchase of the equipment and associated infrastructure as well as daily operating costs. A spreadsheet developed at Penn State and Virginia Tech (<http://www.vtdairy.dasc.vt.edu/tools/tool-data.html#>) enables one to estimate total operating cost for various calf feeding systems.
- There are a number of very effective pasteurizers well suited for heating waste milk to a sufficient temperature to destroy known disease organisms. However, field studies of on farm pasteurizers reveals that failure to reach sufficient temperature and time of heating is not uncommon. Routine testing of pasteurizers is advised.

A well-managed waste milk feeding program can provide desirable nutrients to calves. However, it's not as easy as one might imagine. Variation in quality and quantity must be considered as well as the risks of disease transfer from equipment not functioning as desired. Operation and maintenance of a pasteurizer system requires additional skilled labor. In most cases strategies must be developed to supply needed milk solids when quantities of waste milk are inadequate. Using saleable milk rapidly escalates calf feeding costs. Strongly consider all costs in using waste milk in comparison to use of a high quality milk replacer which can supply nutrients more consistently as well as valuable additives to enhance nutrition and animal health.



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## Upcoming Activities

See [VTDairy](#) for details.

**July 13-17, 2014**

[Southeast Dairy Youth Retreat](#)

**July 30, 2014**

VA Dairy Expo, Weyers Cave

**July 31, 2014**

VA State Colored Breeds Show

**July 31, 2014**

District Dairy Show

**August 1, 2014**

VA Sale of Stars

**August 2, 2014**

VA Summer Show

**August 8-9, 2014**

[Franklin Co. 1st Annual Open Youth Livestock Fun Show](#)

**September 14, 2014**

4-H/FFA Dairy Goat Show  
Isle of Wight County Fair

**September 22-24, 2014**

[Southeast Quality Milk Initiative 2nd Annual Meeting](#)

**October 23, 2014**

Farm Succession Workshop  
Staunton, VA

*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.*

*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](http://www.vtdairy.dasc.vt.edu).*



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## IF YOU DON'T MEASURE IT YOU CAN'T MANAGE IT!

There are many things that make dairy farms successful today. Good nutrition, comfortable cows, fresh water—these are all very important for operating a profitable dairy farm. Do you set goals for the future of your farm? Do you have written Standard Operating Procedures? Again, these are very important aspects to the management of your farm. There is one thing, however, that encompasses all of these things and actually makes all of them more effective.

Keeping detailed records may be one of the most important things you can do to improve the profitability of your dairy. Be meticulous, measure as many things as possible and keep the records organized. Keep records in a manner that others can understand. Consultants or Extension agents can use your records to make recommendations or for problem solving. It is important that someone

else knows where and how you keep your records, in case of an emergency. Record keeping should be part of your plan for continuous improvement.

Keep records of crops: what was planted, where, and when. Record crop harvest dates and yields. Soil samples, manure samples and forage samples should all be kept for several years. With today's focus on environmental awareness, you should have a nutrient management plan that includes how much fertilizer and chemicals are applied to each field, and when they are applied.

Cow records can tell you where you came from, where you are now, and help shape where you will be. There are three main aspects of cow record keeping. The first is the cow herself. Some may think this means registered verses non-registered cattle, but in fact it is important to keep records and identify ALL dairy cat-

tle regardless of registry status. Properly identifying cows, their sires, and their offspring are very important for making mating decisions. These records can help reduce inbreeding and increase the profitability of your dairy. They can also be used to evaluate past breeding decisions.

Second, keep detailed health records. Health records can be very useful in identifying when animals are getting sick and how quickly they recover. These records

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also should include treatments with withdrawal times for any antibiotics used. This can prevent antibiotic residue violations. You may also be able to use these records to evaluate performance later. For instance, how much less milk will a cow make if she had scours in the first week of life? Your records can be used to answer questions like these.

Third—and maybe the most important—are production records. Many people are using DHIA for these, which is a great option. I would recommend using a system that can keep your cow records up to date at least weekly, this is particularly important for looking at pregnancy rates. Production information records are important for evaluating many things on a whole herd scale or an individual cow. Whole herd information can be used to determine changes in management or changes in forages. Individual cow information can be used to make culling or breeding decisions.

No matter how you keep your records, it is important to keep them up to date and accurate. If you find yourself having difficulty identifying a problem or can't seem to find the information you need, you may need to evaluate your record keeping system. Maybe you just need to keep more up to date or detailed records. Remember, if you don't measure it you can't manage it!

—Jeremy Daubert  
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