

Texas Dairy Matters

Higher Education Supporting the Industry

PASTEURIZE WASTE MILK

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The use of waste milk to feed calves is a common practice on many dairy farms, but it comes with risk. Along with the milk, calves may ingest pathogens that cause disease (mycoplasma, salmonella and Johne's Disease, etc.).

To minimize the risk, pasteurize the waste milk. *Mycobacterium paratuberculosis*, the pathogen caused Johne's Disease, is not easily destroyed. However, researchers at the National Animal Disease Center in Ames, Iowa and at other locations have shown that pasteurization can destroy it and other pathogens provided the milk is heated to the correct temperature and held for a specified time.

There are two general types of on-farm pasteurizers available. The first type is frequently referred to as a batch pasteurizer. Milk is put into this pasteurizer, heated to 150° F (65.5° C) and held for 30 minutes.

The second type is a commercial high-temperature, short-time pasteurizer or a HTST pasteurizer. When using a HTST pasteurizer, heat milk to 161° F (71.7° C) and hold for 15 seconds.



Since both types of pasteurizers have been shown to effectively destroy pathogens, either can be used. The critical point is to use the correct temperature and time for the type of pasteurizer chosen.

Because some of these same pathogens can be transferred in colostrum, there is interest in what happens to immunoglobulins if colostrum is pasteurized. In a recent study using the HTST pasteurizer, there was a 25% reduction in immunoglobulins, thus consider alternative methods to protect calves from disease found in colostrum.

For example, to control Johne's Disease use only colostrum from cows that have recently been tested negative for Johne's. Funds are currently available to Texas producers through the Texas Animal Health Commission to develop herd plans to control and to pay for diagnostic tests for Johne's Disease. (Contact your veterinarian or Dr. Andy Schwartz, Texas Designated Johne's Coordinator , 800-687-4603, for more details.)

Waste milk can be used for feeding calves, however pasteurize it first to reduce the risk associated with this cost-saving practice.