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Pilot studies of the VFT formulas on the effect of the somatic cell count in a herd of cows and on the influence of scours onset in newborn calves.

# **Dairy Cow Pilot Study**

# Purpose

To find organic methods to treat diseases in dairy, beef, and other commercial livestock enterprises that are registered as organic commercial producers. These producers have a need for effective treatment protocols in which traditional antibiotics, parasiticides, and other conventional methods of treatment cannot be used.

#### Goals

Somatic cell count (SCC) is the total number of cells per milliliter in milk. Primarily, SCC is composed of leukocytes, or white blood cells, that are produced by a cow's immune system to fight an inflammation in the mammary gland, or mastitis. Since leukocytes in the udder increase as the inflammation worsens, SCC provides an indication of the degree of mastitis in an individual cow or in the herd if bulk tank milk is monitored. The overall goal of the pilot research was to determine if the somatic cell count could be reduced by using the experimental Vital Force<sup>TM</sup> Teat Dip. One herd from Iowa was selected, under winter field conditions.

### Methods

A traditional dairy producer interested in moving towards organic milk production was selected. Before initiating the protocol, the somatic cell count was evaluated and recorded. The protocol was simple: to add the Vital Force<sup>TM</sup> Teat Dip formula to the regular teat dip and follow all other procedures as usual. The same cohorts of cows would receive the dip throughout a three-month period. The group was being scored once monthly for somatic cell counts.

### **Results and Conclusions**

In conclusion, the Vital Force<sup>TM</sup> Teat Dip demonstrated an ability to make a dramatic change in the somatic cell count, reducing it by more than 50%. The beginning somatic cell count ranged from 160,000 to 140,000. At the end of three months the counts were at 60,000. It should be noted that no adverse reactions were observed. Further research is required to determine the role the Vital Force<sup>TM</sup> Teat Dip as well as other products could play, not only in reducing the somatic cell count but assisting in the reduction of teat end lesions and clinical mastitis cases and having

a positive impact on milk production. Furthermore, it is probable that this type of therapy may also be very beneficial as an addition to conventional treatment protocols for herds.

# Preliminary Study on the Use of Vital Force Formulas on Dairy Calves with Scours

### Purpose

To find effective methods for the treatment of scours in dairy herds that are antibiotic resistant. These producers have a need for effective treatment protocols for which traditional antibiotics and other conventional methods of treatment cannot be used.

## Goals

The overall goal of the test was to determine whether adding Vital Force formulas to the conventional treatment protocol for scours in calves could help increase the survival rate of young calves.

### Methods

One traditional dairy producer in Iowa with an antibiotic resistant herd interested in increasing the survival rate of his calves from scours was selected. The test was conducted under winter field conditions. A pre-selected group of Vital Force formulas were to be used. The protocol was to add the Vital Force formulas to the standard protocol for treatment of scours. The calves received their standard treatments with the Vital Force formulas 3 times a day. Three calves were selected that had severe to very severe scours; one of the calves was evaluated as being critical (defined by Dr. Kuennen as having a very low probability of survival).

## **Results and Conclusions**

In conclusion, the three calves treated with the Vital Force formulas demonstrated a dramatic increase in speed of recovery. It should be noted that no adverse reactions were observed. Dr. Kuennen made two notable observations. The first was the speed of recovery made by the calves; they bounced back faster than he had typically seen in any herd. The second was that the most severely affected calf, (the one he was sure would not recover) also made a speedy, full recovery. With the push to reduce antibiotic use in commercial livestock, these formulas could play a role in assisting the industry to find non-toxic solutions.