



LAND O LAKES®

COLOSTRUM REPLACEMENT

The only replacement for maternal colostrum that is licensed by the USDA

BOVINE IgG

Why Calves Need Quality Colostrum

Although a cow provides nutrients for calf growth and development during gestation, there's one thing she fails to provide during that time, antibodies in their bloodstream.

Colostrum "transfers" immunity against infectious disease as well as nutrients and growth factors from the mother to the newborn calf.

Common Reasons for Use of Colostrum Replacement

Prevent Disease Transmission

Of all the animals on the dairy, the calves are most vulnerable to infection and disease such as:

- > Johne's (Mycobacteria paratuberculosis)
- > BLV (Bovine Leukosis Virus)
- > Salmonella, E coli
- > Mastitis organisms

- Failure of Passive Transfer occurs if calves do not receive adequate colostrum and is associated with increased disease and death losses.

About 50% of cows have colostrum IgG < 50mg/ml which will not prevent Failure of Passive Transfer.

Why Calves Need LAND O LAKES® Colostrum Replacement

- Natural colostrum from "Grade A" dairy farms with high fat levels providing immediate energy for newborns.
- The Only Colostrum Replacement licensed by the USDA regulatory agency as a single dose maternal colostrum replacement.
- Nutritionally complete with all the protein and fat of natural colostrum
- High immunoglobulin levels
- Highly palatable
- Pasteurized for safety
- A single dose fed within 6 hours of birth prevents Failure of Passive Transfer.
- Available in single dose packet and *NEW* 40 dose pail.

You're Assured of Quality and Safety

- Lab analysis: Guaranteed free of bacteria and disease causing pathogens.
- Each batch is tested
- Complete product traceability
- Potency and Efficacy backed by USDA

Easy to Mix and Feed

- Pour entire contents (16.6 oz) of one packet or two scoops from 40 dose pail into 1 quart of 110-120° F water.
- Mix vigorously with wire whisk or electric mixer
- For best results, feed the entire mixture with a nipple bottle as soon as possible



CALF CARE PRODUCTS

New Research confirms LAND O LAKES® Colostrum Replacement Meets 3 Critical Needs of Newborn Calves

1. Provides Effective Passive Transfer of Maternal Immunity

- Studies conducted by Dr. Sandra Godden at the University of Minnesota demonstrated that there is a linear relationship between the amount of LAND O LAKES® COLOSTRUM REPLACEMENT fed and the IgG levels in the calf.
- Producers can feed 1, 1.5 or 2 doses to achieve the levels of passive transfer set for their farm. Levels can range from those considered indicative of successful passive transfer (10 mg/ml) to higher levels for optimal health and long-term productivity.
- Dr. Godden has also shown that the method of feeding affects the levels of IgG absorbed from one dose of LAND O LAKES® COLOSTRUM REPLACEMENT.
 - Calves fed one dose by nipple bottle had significantly higher levels than those fed one dose by esophageal feeding tube.

2. Provides Local Immunity to Decrease Scours in the 1st Weeks of Life

- In trials conducted at the University of California, calves fed colostrum-enhanced milk replacer containing 10 grams of IgG/feeding had significantly less diarrhea than calves fed the same milk replacer without colostrum.

3. Provides the Calves with the Critical Energy Needed for the 1st Hours of Life

- The leading cause of death in dairy calves is failure to initiate breathing and metabolic processes in the first hours of life. The newborn dairy calf has only a few hours of energy reserves in stored fat. Newborn calves cannot digest protein or carbohydrates and need extra energy, particularly during times of stress.

ALL IMMEDIATE ENERGY TO BEGIN INDEPENDENT METABOLISM MUST COME FROM THE FAT CONSUMED IN THE COLOSTRUM.

- Independent trials conducted at the University of Saskatchewan have shown that the FAT in 1 dose of LAND O LAKES® COLOSTRUM REPLACEMENT contains all the energy that newborn calves need for the first 12 hours of life.
- Each dose of LAND O LAKES® COLOSTRUM REPLACEMENT averages 24% butter fat (dry matter basis) which supplies 0.98 megacalories of energy from FAT. This meets the calf's total energy needs for 12 hours to temperatures as low as 45°F (7°C).



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