SCCL
SCIENCE ◆ NATURE ◆ CARE

POST DAY ONE COLOSTRUM USE

Colostrum can be used **after the first day** to improve gastrointestinal health and create a healthier, more productive calf. We recommend mimicking transition milk for the calf by adding colostrum powder to whole milk or milk replacer for the first two weeks of life.

POST DAY ONE FEEDING RECOMMENDATIONS

Calf Health Challenge Level	Grams of Colostrum Powder to Add Daily		
	1 feeding	2 feedings	3 feedings
LOW	73g	37g	24g
LOW	80g	40g	27g
LOW	87g	44g	29g
MODERATE	93g	47g	31g
MODERATE	100g	50g	33g
MODERATE	107g	53g	36g
MODERATE	113g	57g	38g
HIGH	120g	60g	40g
HIGH	127g	63g	42g
HIGH	133g	67g	44g

STEPS TO POST DAY ONE USE:

1 Determine challenge level of calf program.

Low Challenge	<5% Mortality
Moderate Challenge	5-8% Mortality
High Challenge	>8% Mortality

2 Calculate grams of colostrum powder to add to whole milk or milk replacer.

Due to all of the risks associated with collecting, storing, handling, thawing or pasteurizing maternal colostrum, it becomes much easier and safer to mimic transition milk with colostrum replacer powder than with maternal colostrum.

3 Add the colostrum powder to the milk replacer or whole milk and mix to create transition milk.

If feeding whole, waste or hospital milk, add the powder directly to the milk. If feeding a balancer or milk replacer, you must first subtract the milk powder that you are substituting with colostrum powder.

Mix at 110-120°F for maximum mixability.

Longer durations provide additional benefit, so we recommend adding colostrum powder to milk for at least 12 days for highly challenged herds. Lower challenged herds can be fed transition milk for 3-5 days (or longer as needed).

POST DAY ONE COLOSTRUM USE

HOW DOES COLOSTRUM SUPPORT THE GASTROINTESTINAL TRACT DURING DAYS 2-14?

Whole bovine colostrum naturally offers a combination of bioactive factors that support and develop the small intestine, which is still developing throughout the first two weeks of a calf's life. Other products such as probiotics, prebiotics or other additives do not have this same benefit, as they do not provide a wide spectrum of support for the small intestine.

COLOSTRUM'S BENEFICIAL FACTORS

Globulin Proteins:

- Although no longer absorbed after gut closure at 24 hours of life, globulin proteins support local gastrointestinal health and productivity.

Oligosaccharides:

- There are many prebiotic products used in milk replacers, and typically, they contain a single type of oligosaccharide. Given there are trillions of bacteria in the gastrointestinal tract, it is important to feed numerous types of oligosaccharides to influence the massive bacterial and microbial population.
- The over 40 types of oligosaccharides in colostrum can more dynamically impact microbial populations in the gastrointestinal tract compared to the few used in most milk replacers.

Colostral Fat:

- Colostral fat provides potent energy for thermoregulation and growth in hot and cold environments.
- Colostral fat also supports a healthy gastrointestinal environment and the growth of microflora.

Nonspecific Factors:

- These agents include lactoferrin, lysozyme, lactalbumin and can eliminate harmful components in the gastrointestinal tract.
- Nonspecific factors in colostrum can also create a healthy balance of microflora in the gastrointestinal environment.

Growth Factors and Stimulants:

- These factors help to grow various tissues throughout the body and gastrointestinal tract. They can also help stimulate overall health and digestive productivity.

RESULTS FROM FEEDING COLOSTRUM DAYS 2-14

- Results included less abnormal manure, respiratory issues, depression and abnormal navels
- Antibiotic use in colostrum-supplemented calves was 57.7% lower
- Significantly greater grain consumption and weight gain

(Chamorro et. Al J Dairy Sci. 2017 Vol 100 (2))
(Berge et. al, J. Dairy Sci. 2008, 92:286-295)