

XTRAMILK C

Calves Milkreplacer

XTRAMILK C is a whey based water soluble complete milkreplacer. The use of organic acids in combination with cold soluble dairy raw materials makes it an ideal product that can secure a problem free breeding program for calves.

1. USE

XTRAMILK C is mixed in water of 25-55 °C. The product can be given to calves after the necessary colostrum. **XTRAMILK C** can be used in bucket feeding as well as in automatic feeding systems.

2. ADVANTAGES

Nutrient levels: The level of protein and fat is adapted to the needs of the young calf.

XTRAMILK C offers a well-balanced high digestible fat/protein level, to avoid digestive problems.

Lactic acid: Acidification of milkreplacers is a well-established practice because it helps to prevent growth of pathogenic gastrointestinal bacteria. Several other organic acids are currently used, such as acetic acid, citric acid, formic acid, etc. Cibus has found that lactic acid, besides being an effective antibacterial agent, also tastes extremely well to calves as demonstrated in internal “drinking pleasure tests” in calves. This is the reason why lactic acid is the acidifier of choice in Cibus’s calf milkreplacers. The table below presents results on daily gain (DG) and feed conversion (FC) on milkreplacers containing various acidifiers.

	Fumaric Acid	Lactic Acid	Commercial Mix
Daily Growth	G	G	G
Week 0-4	422	442	408
Week 0-10	785	794	792
Feed Conversion			
Week 0-4	1.65	1.58	1.71
Week 0-10	1.88	1.89	1.89

Lactic acid shows a lower feed conversion ratio in the first four weeks and an overall higher daily gain. These data simply highlight the importance of Lactic acid in optimizing a milkreplacer. Especially when it is considered that this liquid diet is the only source of nutrition for the growing calf during the critical first weeks of life. Inefficient early gains are hard and costly to recover in a later stage.

Automatic feeding: Important for automatic feeding systems are the good constant flowing properties of the milkreplacer; this is to ensure that calves always receive the programmed quantity of milkreplacer. A density which is too high can cause overfeeding; too low can cause suboptimal technical results. Cibus has investigated thoroughly in controlling the physical parameters and in keeping them at a constant level which would make the product suited for use in automatic feeding systems.

Cold soluble and stock feeding: **XTRAMILK C** can be diluted in water with lower temperature than normal milkreplacers. The raw materials were specifically developed to obtain good emulsifying properties and to ensure a long stability. Stock feeding requires that the milkreplacer keeps a good stability in the period after mixing.

XTRAMILK C combines natural antibacterial short chained and medium chained fatty acids, a higher and faster protein digestibility and the addition of nutritional emulsifiers to increase the solubility and digestibility of the fats. These steps lower the fermentation in the hind gut and decrease the pressure of pathogenic bacteria. This results in a better animal performance and health status without the need for antimicrobial growth promoters.

3. PACKAGING

XTRAMILK C is packed in multiply paper bags with inner liner of 25-Kg net/bag.

4. STORAGE

- ✓ Avoid storing this product in warm conditions. Always keep the product away from direct exposure to sunlight.
- ✓ Never store in moist places or near any sources of water
- ✓ Secure stockroom against all possible breeding ground of insects. Ensure storage area is clean at all times

5. MICROBIOLOGICAL FIGURES

Tot. bacterial count:	Max. 1 000 000/g
Enterobacteria:	Max. 1 000/g
E.coli:	Absent in 0.1 g
Salmonella:	Absent in 25 g
Yeast & moulds:	Max. 1 000/g

6. ANALYSIS

		Average	
Humidity	%	4.0	
Crude Protein	%	21.0	
Crude Fat	%	17.0	
Crude Ash	%	8.5	
Crude Fiber	%	0.1	
PH	±	5.7 – 6.0	
			Dig.
Lysine	%	1.6	1.5
M+C	%	0.8	0.7
Treonin	%	1.0	0.9
Tryptophan	%	0.3	0.2
Vitamin A	IU/KG	55 000	
Vitamin D3	IU/KG	4 500	
Vitamin C	mg/kg	300	
Vitamin E	mg/kg	300	
Ca	%	0.6	
P	%	0.7	
K	%	2.2	
Cl	%	1.6	
Fe	ppm	100	
Cu	ppm	10	

8. FEEDING SCHEDULE

Preparation: 1 kg powder on 8 liters water of about 25-55° C gives about 9 liters milk. Use this feeding schedule as a guideline:

Age	Liters per animal per day		No. of feedings per day
	HEIFER	BULL	
Day 1-3	Colostrum in abundance		Min. 4
Day 4-7	3 L*	3 L*	3
Week 2	4 L	5 L	2
Week 3	4 L	6 L	2
Week 4	5 L	6 L	2
Week 5	6 L	6 L	2
Week 6	6 L	6 L	2
Week 7	6 L	6 L	2
Week 8	5 L	6 L	2
Week 9	4 L	6 L	2
Week 10	4 L	5 L	2
Week 11	3 L	4 L	2
Week 12	2 L	2 L	2

* or 50% XTRAMILK C with 50% cow's milk (cow warm)

9. USEFUL TIPS

1. Use a whisk for stirring. This gives smooth homogeneous artificial milk.
2. Check if the drinking temperature is 37° C. The ideal way to dissolve this product is to dissolve the powder in about ¼ of the amount of water at 55°, and then add the remaining water at room temperature to reach the drinking temperature of 37°C.
3. Take care that the change from feeding colostrum happens little by little. (see feeding schedule).
4. The materials that come in contact with the milk have to be kept VERY CLEAN. Clean them with first with cold and then with warm water.
5. The feeding schedule has to be considered only as a directive. It is very possible that for some calves the above mentioned quantities are too much while others need more.
6. Regularly check the dung on color and solidity.
7. Give concentrate from the first week. Give small portions and no more than is consumed. Change the feed regularly
8. Take care that the calves have enough hay and drinking water at their disposal from the age of two weeks.
9. The need to drink generally can be stated on 10 % of the bodyweight. E.g. a calf of 40 kg needs 4 l/day.

