



MILK REPLACERS				
	Nurture Basic 20/20 Bov	Nurture Basic 20/20 Dec	Nurture Professional 24/17	NS Custom 24/20
Protein/Fat Ratio	20:20	20:20	24:17	24:20
Performance Type	Traditional	Traditional	Accelerated	Accelerated
Protein Source	All Milk Protein	All Milk Protein	All Milk Protein	All Milk Protein
Coccidiostat	Bovatec	Decquinate	Bovatec	Bovatec
Larvicide (year-round)	Clarifly	Clarifly	Clarifly	Clarifly
MOS/Yeast	Celmanax	Celmanax	Celmanax	Safmannan
Technologies	NeoTec5g/AmNeo	Neotec5g/AmNeo	Neotec5g/AmNeo	
Feeding Rate/day	1.0 – 1.25 lbs.	1.0 – 1.25 lbs.	1.5 – 2.0 lbs.	1.5 – 2.0 lbs.
Mixing Instructions	Mix milk replacer powder in 120°F water until thoroughly mixed. Feeding temp should 100-105°F.	Mix milk replacer powder in 120°F water until thoroughly mixed. Feeding temp should 100-105°F.	Mix milk replacer powder in 120°F water until thoroughly mixed. Feeding temp should 100-105°F.	Thoroughly milk replacer powder in 110° F water. Feed reconstituted milk replacer at 100°-105°F.

*Mixing temp will vary based on how fat agglomeration.

PERFORMANCE ADDITIVES	
Bovatec®	Ionophore containing lasalocid fed in milk replacer and dry feeds for the effective control of coccidiosis in calves caused by E. Bovis and E. Zurnii.
Clarifly®	Feed-through larvicide for controlling house flies, stable flies, face flies, and horn flies that can develop and emerge from calf manure.
Celmanax™	Refined functional carbohydrates from yeast culture that prepare the immune system to respond quickly to challenges, reduce scours and support rumen fermentation.
Safmannan™	Premium yeast fraction, rich in mannan-oligosaccharides and beta-glucans that increase immune and gastrointestinal function to support healthy calves.
Neotec5g®	Research proven fatty acid technology that strengthens the immune system and increases growth, plus 3 growth factors that improve digestion, absorption, and metabolism.
AmNeo™	Research proven amino acid balance



FORTIFIERS/BALANCERS		
	Nurture Milk Balancer	Neotec5g Milk Supplement
Protein/Fat Ratio	24:10.5	9.6:1
Protein Source	All Milk Protein	
Vitamin & Minerals	X	X
Coccidiostat	Bovatec	Bovatec
Larvicide (year-round)	Clarifly	Clarifly
MOS/Yeast	Celmanax	
Technologies	NeoTec5g/AmNeo	Neotec5g
Feeding Rate/day	4 oz/hd/day	1 oz/hd/day
Mixing Instructions	Mix milk balancer powder at a rate of .125 pounds (2oz) of dry powder to 3 quarts of whole milk. Make sure the mixing temperature is at 120°F.	Mix Neotec5g supplement at a rate of .055 pounds (1oz) <u>per day</u> or dry powder to allotted milk feeding. WARNING: OVER FEEDING THIS PRODUCT CAN CAUSE DEATH IN YOUNG CALVES. FOLLOW RECOMMENDED FEEDING RATE.

DISCLAIMER: DO NOT ADD BALANCER'S OR FORTIFIERS BEFORE PASTEURIZATION!

Milk Balancer: Are designed to supply more protein than fat to create a more favorable protein:fat ratio in the final product. Balancers are also fortified with essential vitamins and mineral that are lacking in whole milk. They also serve as a source for coccidiostats and larvicides.

Pros:

- Increase total solids (energy) in the diet
- Able to extend whole milk supply
- Improve consistency of total solids in diet
- Enhance protein/micro-nutrient nutrition

Cons:

- Expense
- Accurate evaluation of milk supply total solids
- Mixing and handling powder appropriately
- Intensive management

Milk Fortifiers/Supplements: Are designed to supply essential vitamins and minerals without changing total solids of whole milk. They also serve as a source for coccidiostats and larvicides.

Pros:

- Enhance micro-nutrient nutrition
- Economical

Cons:

- Intensive Management



%Total Solids

	oz	8	10	12	14	16	18	20	22	24
L	lbs.	0.5	0.625	0.75	0.875	1	1.125	1.25	1.375	1.5
2.00	4.40	10%	12%	15%	17%	19%	20%	22%	24%	25%
2.25	4.95	9%	11%	13%	15%	17%	19%	20%	22%	23%
2.50	5.50	8%	10%	12%	14%	15%	17%	19%	20%	21%
2.75	6.05	8%	9%	11%	13%	14%	16%	17%	19%	20%
3.00	6.60	1%	9%	10%	12%	13%	15%	16%	17%	19%
3.25	7.15	7%	8%	9%	11%	12%	14%	15%	16%	17%
3.50	7.70	6%	8%	9%	10%	11%	13%	14%	15%	16%
3.75	8.25	6%	7%	8%	10%	11%	12%	13%	14%	15%
4.00	8.80	5%	7%	8%	9%	10%	11%	12%	14%	15%
4.25	9.35	5%	7%	7%	9%	10%	11%	12%	13%	14%
4.50	9.90	5%	6%	7%	8%	9%	10%	11%	12%	13%

***Never feed more than 15% solids**

	Milk Replacer	Feeding Rate	Total Solids
Conventional/Traditional	20/20	1.25 lbs/day	10-12%
Moderate	24/17 or 24/20	1.5 lbs/day	12%
Intensive/Accelerated	24/17 or 24/20	2.0-2.5 lbs/day	13-14.5%



Cold Stress in Calves:

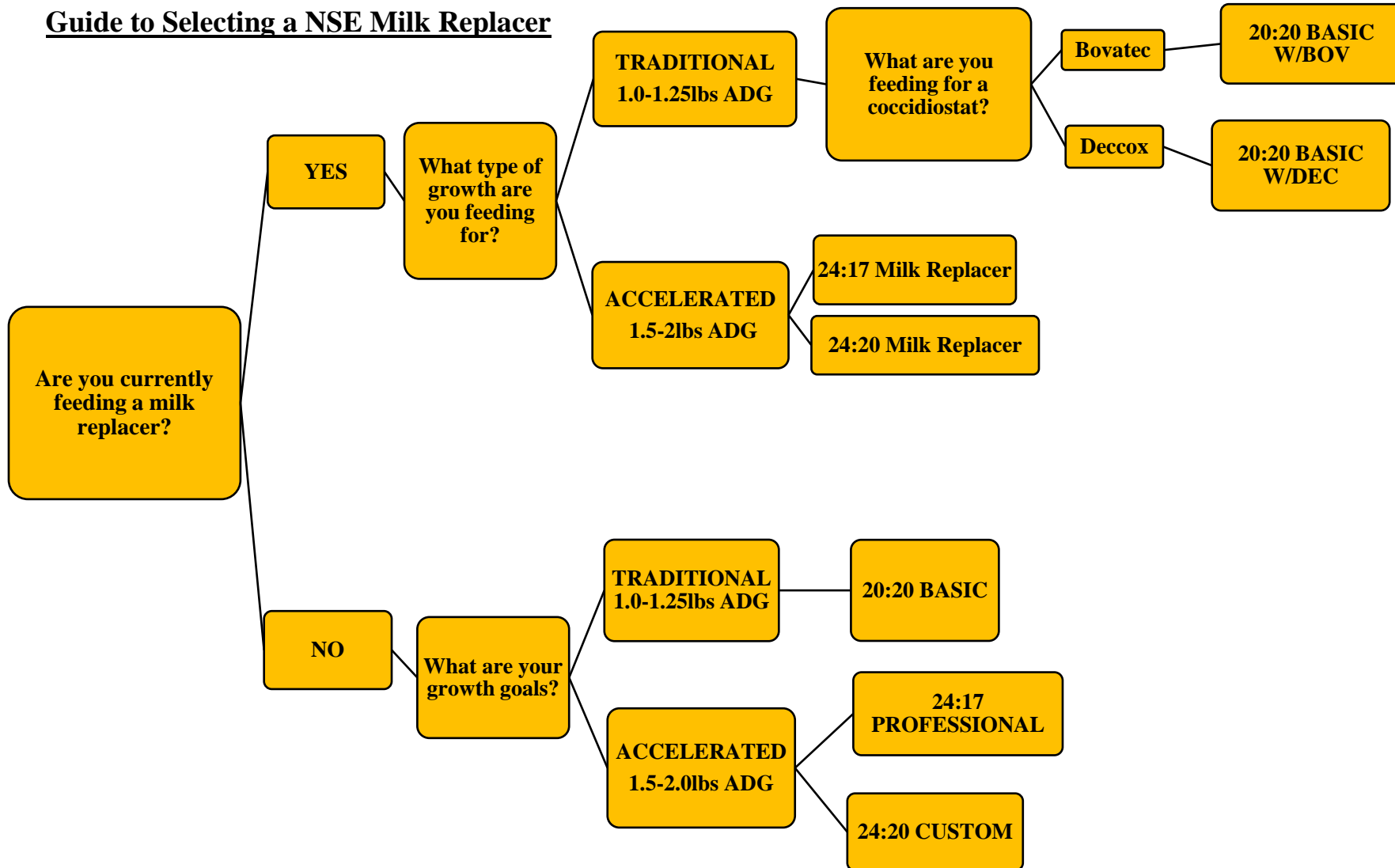
Cold affects the calves need for energy. The rule of thumb is for each degree the temperature drops below 50° the calf needs 1% more energy.

- 50°-32° = 20-25% more energy
- <10° = 40-50% more energy

Cold Weather Feeding Options	
Option 1: Feed More Milk Replacer	Option 2: Feed an Energy Supplement
<p>A: Increase volume by a pint (25%) or a quart (50%) per feeding.</p> <p>B: Add a third milk replacer feeding during the middle of the day. Feedings should be done every 8 hours.</p> <p>Example: 5:00AM 1:00PM 9:00PM</p>	<p>ThermoCalf is a quick simple and economical way of adjusting energy to fit conditions.</p>

THERMOCALF – ENERGY SUPPLEMENT	
Protein/Fat Ratio	7/60
Feeding Rate	Temp 45°-20° 2 oz/hd/day Temp < 20° 4 oz/hd/day
Mixing Instructions	Add ThermoCalf to any milk replacer or whole milk based on the feeding rate and mix thoroughly.

Guide to Selecting a NSE Milk Replacer



	Milk Replacer	Feeding Rate
Conventional/Traditional	20/20	1.25 lbs/day
Moderate	24/17 or 24/20	1.5 lbs/day
Intensive/Accelerated	24/17 or 24/20	2.0-2.5 lbs/day