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TECHNICAL INFORMATION FOR TODAY'S FEED PROFESSIONAL

Using Lamb Milk Replacer For Deer And Elk

A Guide for Successful Fawn & Elk Calf Rearing

Lamb milk replacer is the one milk replacer which most closely resembles deer and elk milk. Use the following guide when raising fawns and elk calves on milk replacer. There are at least 4 breeds of deer and elk that are raised commercially in North America. Some breeds of deer (especially Siki and Red Deer) seem to have a low tolerance to lactose.

As a rule of thumb, fawns and elk calves should consume 10-20% of their body weight in liquid per day (example: a 20 lb fawn should consume 2-4 pounds (2-4 pints, or 32-64 fluid oz., of liquid milk per day). Mix lamb milk replacer according to the same directions as when feeding lambs.

Colostrum is essential to ensuring the best success when raising fawns and elk calves on milk replacer.

During the first 3 days of life, colostrum should be fed in unlimited amounts. Colostrum generally has a laxative effect, and loose bowel movements are expected during this time. Colostrum is essential during this period if the fawn/calf is to have a reasonable chance of survival. Mother's milk is strongly preferred for at least the first 24 hours. If deer or elk colostrum is not available, goat, ewe or cow colostrum should be used. Do not use a microwave oven to thaw frozen colostrum as it will destroy some of the essential nutrients in the colostrum. Feed colostrum according to this schedule: on day 1, feed 20% of body weight as liquid and divide into 6-8 equal feedings at equal time intervals. On day 2, feed 20% of body weight as liquid and divide into 6-8 equal feedings at equal time intervals. Mix 50% colostrum and 50% lamb milk replacer for feeding on day 2. On day 3, feed 20% of body weight as liquid and divide into 6-8 equal feedings at equal time intervals. Mix 25% colostrum and 75% lamb milk replacer for feeding on day 3. Starting on day 4, feed according to the recommended feeding schedule:

Week	Feedings per day	Oz. of Liquid per feeding	Total oz./day
1	8	2.5	20-22
2	7	3.2-3.4	22-24
3	6	4	24
4	5	5	25
5	4	6-7	24-28
6	3	9	27
7	3	8-9	24-27
8	3	8	24
9	2	10-12	20-24
10	2	9-10	18-20
11	2	8-9	16-18
12	1	12-15	12-15

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This schedule is to be used as a guideline only. Feeding rate (ounces per feeding and ounces per day) may need to be adjusted based on fawn/calf body weight. The number of feedings per day should not be changed. If diarrhea occurs, continue feeding milk replacer and start feeding electrolyte solution between each milk feeding. Mix electrolytes according to mixing directions. Electrolyte solutions that are not mixed according to directions may actually do more harm than good! Do not mix electrolytes with the milk replacer - feed the electrolytes separately as the additional fluid intake is essential.

Fluid intake at each milk feeding should not exceed 3% of body weight. Small frequent feedings are essential in minimizing over-eating, which is a frequent cause of intestinal upsets and diarrhea.

Set up feeding times and stay with them. Feeding amount and intervals are very important in successfully raising fawns and elk calves.

In the above feeding schedule, the amount of milk replacer fed increases each week until week 5-6, then gradually is reduced. This encourages dry feed intake, as the milk replacer is not intended to meet all of the protein and energy needs of the growing fawn and elk calf after week 2-3. The dry starter feed should be a good quality grain mix formulated at 16-18% crude protein, with alfalfa or very good grass hay offered free-choice after week 8. The grain mix should be available free-choice starting about day 7. Clean fresh water MUST be available in unlimited quantities from birth.

Suggestions For Common Management Problems

1. The use of goats or surrogate mother is preferable to the labor-intensive bottle feeding.

2. If bottle feeding is the best option for your situation, be very patient as each fawn/calf will be different. Use a soft lamb nipple. Graduated plastic bottles that your veterinarian uses for sterile electrolyte solutions make excellent milk bottles. Do not enlarge the tip of the nipple with a knife, as this frequently results in guzzling and bloating. Guzzling may also allow milk to get into the trachea and into the lungs, which may result in wheezing, coughing, respiratory infections or death.

3. If the fawn/calf will not take to the nipple, place one finger inside one side of its mouth and the nipple inside the other side of the mouth. Put a touch of honey or syrup on the tip of the nipple as fawns & calves may take to the sweet taste. Do NOT squeeze the bottle and force milk into the mouth as this can result in milk getting into the trachea and lungs, resulting in respiratory infections and death.

4. Wash your hands between feeding each fawn or calf. Thoroughly wash and sanitize ALL mixing and feeding equipment after EACH use and between feeding each fawn or calf. This is essential in reducing potential disease causing micro-organisms. Use 1 capful of household bleach per quart of water and allow this solution to remain in the bottle between feedings. Thoroughly rinse the bottle putting milk replacer into the feeding bottle. Each fawn/calf should have its own nipple assigned to it and only used with that particular animal.

5. Clean the mouth and face of the fawn/calf after each feeding to remove all milk. This may help reduce incidence of scours. Wipe the area around the anus with a clean cloth dampened with baby oil to stimulate defecation immediately after feeding.

6. The use of electrolytes is strongly recommended during periods of diarrhea. Electrolytes should NOT be mixed with milk replacer, but offered as a separate feeding as the additional fluid intake is very important. Electrolytes must be mixed and

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fed according to directions. Incorrectly mixed electrolytes solutions may actually do more harm than good. Body temperatures must be monitored during periods of scours and diarrhea. Consult your veterinarian if scours and diarrhea persist for more than 24 hours.

7. Water quality should be tested. Use the same water quality standards for human consumption regarding nitrates (less than 10 ppm), sulfates (less than 500 ppm) and negative for coliform bacteria.

8. Fawns/calves should be kept outside when the temperature is warm. Fawns/calves should be protected from predators at night. Fawns/calves should not become pets. Females may be difficult to mate. All males that are bottle-fed should be castrated as a hand-raised buck or bull elk are very dangerous during mating season, have no fear of people and will protect the females from ANY intruders.

References:

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3. Farming Wapiti and Red Deer. By Jerry C. Haigh and Robert J Hudson. Mosby-Year Book, Inc. 1993.
4. Feeding Orphan Reindeer Fawns. By Jamie J. Dieterich, University of Alaska. Http://reindeer.salrm.alaska.edu/Cir72/htm.

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