## CALF PROTOCOLS

## Birth to Weaning:

- 1. Move the calf out of the maternity pen/area as soon as possible after birth. If the outside temperature is below 40 degrees, move calf to a "hot box" area until dry-then if calf is healthy, move out into a hutch. If above 40 degrees outside, move calf as soon as possible to hutch.
- 2. Dip the calf's navel with a 7% iodine tincture or similar product (Novalsan) as soon as possible after birth.
- 3. Feed colostrum as soon as possible-within the first hour of birth.
  - \* Feed a large single feeding of approximately 3 quarts in the first feeding and in a second feeding again 12 hours later. Use a cleaned and sanitized esophageal tube if calf will not consume a sufficient amount of colostrum. Do not tube if the calf has no suckling action.
  - \* Colostrum should be good quality. Measure quality with a colostrometer or brix meter. Save good quality colostrum by freezing in double-sided, sealable plastic bags. If quality is marginal, feed a good colostrum supplement. The colostrum supplement should supply at least 100 of absorbable Ig.
  - \* Use a cleaned and sanitized esophageal tube if the calf will not consume a sufficient amount of colostrum.
- 4. Give calf clostridium type A vaccine and selenium-also other veterinarian recommended vaccines.
- 5. Put calf jackets on newly transitioned calves going out in weather 30 degrees or below.
- 6. Feed milk or milk replacer from day 2 until weaning.
  - \* Do not feed waste milk-this will spread salmonella species. Pasteurizing milk before feeding is highly recommended.
  - \* If using milk replacer use milk based milk replacer (at least 20-20 if not higher) supplemented with Deccox.
  - \* Supplement milk replacer or milk with Gen-R K or Bio-Mos to help prevent salmonella. For extra insurance, give 1 capsule of probiotic.
  - \* Mix milk replacer at recommended rates ( or feed whole milk) and feed 2-3 times per day. Increase feedings to 3 times per day if outside temperature drops to zero. Feed four times per day if temperature drops to below zero.

- 7. Free-choice a palatable, good quality calf starter. \*Calf starter should be at least 18%-22% protein.
- 8. Provide fresh water at all times. In very cold weather, increasing the milk or milk replacer feeding will also increase the fluid amount as well as provide extra nutrients. Do not free choice milk or milk replacer as this is a source of bacterial infection.
- 9. Watch for signs of sickness and if any are detected-start the appropriate protocol:
  - \* Early morning rectal temp.(taken at the same time every morning for the first week of life) elevated for 2 days or is accompanied by slow, reduced or no milk intake.
  - \* Slow, reduced or no milk/milk replacer intake
  - \* Watery and/or bloody diarrhea
  - \* Cough, nasal discharge or labored breathing
  - \* Head tilt, umbilical or joint swelling
  - \* Weakness, inability or reluctance to rise
  - \* Lameness
- 10. Wean at 8 weeks. Start feeding a small amount of hay at 7 weeks.
  Make sure the calves are consuming at least 2 pounds of starter before you wean them or feed hay.
- 11. Sanitize, sanitize, sanitize. The key to reducing infection sources such as crypto, giardia and salmonella is sanitation. Maternity pens, hutches, hot boxes, equipment.
  - \* Reducing giardia and crypto means reducing contact with manure. Rodent droppings are the most common source of infection for both-so it is a must to employ pest control practices. Another source is water-mainly stagnant water. Mature cows can ingest stagnant water and shed the parasites in their manure. If the calf licks or ingests manure-she will be infected.
  - \* Reducing salmonella means cleaning and sanitizing any feeding equipment, including the calf handler. Recommended sanitizers are Oxine and DCNR: these stop the spread of salmonella and Oxine kills crypto.