

**By the end of this unit, students will be able to...**

- Summarize the steps involved in proper animal management immediately after a cow has had a calf.
- List the symptoms of Johne's and describe ways in which a newborn calf could become infected with Johne's Disease.
- Summarize the method(s) of prevention and treatment for an animal with Johne's.
- List the symptoms of scours; describe ways in which a newborn calf could become infected with scours.
- Summarize the method(s) of prevention and treatment for an animal with scours.
- Summarize the steps involved in proper management of calves that are 4 days old to 2 months old.
- Calculate how much milk a calf should be fed each day based on its birth weight.
- Summarize the steps involved in proper animal management of fresh cows.
- List the symptoms of mastitis and describe ways in which a cow could become infected with this disease.
- Summarize the method(s) of prevention and treatment for an animal with mastitis.
- Summarize the processes and factors involved with the Milk Letdown Reflex and describe the importance of oxytocin and cortisol in regards to this process.
- Describe how milk should be properly handled and stored once it is collected from the cow.
- Define Somatic Cell Count (SCC) and explain its importance to producing a high quality food product.
- Define each of the following: heritability; PTA; STA; EBV; sire summary; genetic base.
- Summarize how a PTA, STA, and EBV are similar and dissimilar.
- Explain how STA scores are calculated and summarize what they mean.
- Use given PTA & STA scores for various traits to summarize the genetic value of bulls.
- Use a sire summary to analyze the genetic potential value of a bull.
- Summarize how the information in a sire summary is generated by describing the process of conducting genetic evaluations.
- Define each of the following: a. In Vitro Fertilization b. Embryo Transfer c. Genomics