VYTELLE EMBRYO THAWING PROCEDURE

EQUIPMENT NEEDED:

- Liquid nitrogen tank with embryos
- Tweezers
- · Thermos or electric thaw unit
- Thermometer
- · Paper towels

- Stopwatch or clock
- Embryo transfer (ET) gun
- ET sheath
- · Chemise sheath protector
- Electric gun warmer



PROCEDURE:

- Prepare warm water—95°F (35°C)—in thaw unit. Set the liquid nitrogen tank on a level surface, away from direct sunlight and wind. Room temperature should be between 60°F and 80°F (15°C and 26°C).
- 2. The technician should palpate the recipient cow for a corpus luteum (CL). Once a CL is confirmed, one embryo should be thawed and then immediately transferred. Do not thaw multiple embryos at a time. When a recipient cow has been approved for an embryo, locate embryos in the liquid nitrogen tank and remove top goblet, below the frost line. Use tweezers to remove one straw.
- 3. Hold the embryo straw in the air for 10 seconds, followed by submerging it in the 95°F (35°C) water bath for a minimum of 30 seconds.
- 4. Remove the thawed straw from the water bath and dry thoroughly with a paper towel. Remove straw top plug and load the straw, into a warm ET gun. The cotton plug should be visible from the back once loaded. Pull the ET sheath and protective chemise over the gun, and place in the gun warmer until transfer. For best results, embryos should be transferred within 5 minutes of thawing.

- 5. Record the following information for embryo transfer certificates:
 - Recipient cow ID
 - Embryo mating
 - Straw number
 - Side of implantation (right or left)
- 6. Calculate pregnancy check dates for 35 to 90 days post transfer, as well as projected calving date (average 280 days gestation).







Vytelle is a precision livestock company reshaping how cattle producers worldwide optimize their herds. Through Vytelle's integrated technology platform, generations of genetic gains can be made in just a few years. This allows producers to sustainably deliver more protein with fewer inputs, helping to ensure meat and milk are viable, competitive food choices for future generations.