



SUCCESS WITH BEEF DONORS

MINIMIZE STRESS

- Stress can impact oocyte quality for 60-90 days
- Stresses can be associated with nutrition, calving and lactation, weather and temperature (heat/cold), illness, transport and socialization with other cattle
- Low stress handling should be used when sorting and transporting animals
- Donors should have access to shade or shelter in times of extreme heat or cold

There's no one key to success, rather an entire protocol that nets the best results

NUTRITION

- Diet can significantly impact oocyte quality and donor performance in an IVF program
- Donors should be fed a consistent diet not competing with other cattle for feed or bunk space and not exceeding 15% crude protein
- Ideal body condition score for beef donors on collection = 6
- Avoid feedstuffs that are high in palmitic acid
- Regular testing of feedstuffs is as important as quality and composition of feed, which can vary based on crop year and conditions
- Moving cattle to grass can alter performance; consider pasture conditions and supplementation

- A well-balanced vitamin and mineral program can improve donor performance
- Consult a nutritionist or veterinarian when questions arise

DONOR SET UP

- Donors should be at least 30 days post-partum and have had one natural heat since the most recent conventional embryo flush
- Ill or Injured donors are not good candidates for OPU and should be treated by a veterinarian
- Dominant follicle removal (DFR) prior to collection is the best set up to ensure a new healthy follicular wave and consistent results
- Progesterone is necessary for development of good quality oocytes and to avoid irreversible in vivo maturation; CIDRs should be inserted following DFR and replaced immediately if lost prior to OPU
- Shots should be given at precise 12-hour intervals as deviation from this schedule can cause follicles and the oocytes inside to decrease in quality and even die prior to collection

RECIPIENTS

- Recipients should be 70 days post-partum
- The same nutrition and body condition score considerations for donors apply to recipients
- Heat detection is critical for identifying the best recipients; Age of a CL cannot be determined by ultrasound or palpation
- Embryos should be transferred 6.5-8 days following estrus
- Keep good calving records and induce recipients that haven't calved by their due date