



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