

Donors & Embryo Collection

Planning ahead and paying close attention to detail are hugely important when looking to maximise success from embryo transfer programmes. With respect to the donor the following are the most important points to consider;

Selection

The best results are achieved from maiden heifers (at least 14 months old for dairy and 16 months old for beef) and young cows. Prospective donors must have a good breeding history with no record of ill health or poor fertility. Fewer embryos will be collected from older cows (over 10 years of age).

Health and Fertility

Prospective donors should be at least 10 weeks calved (14 wks for high yielding dairy cows), clean and cycling normally (ideally 2 heats observed). Target body condition scores are 2.5 and 2-3 for maiden heifers and cows respectively.

Management

A controlled management system should be in place six weeks prior to flushing. AVOID CHANGE WHEREVER POSSIBLE.

Donors should be housed in small groups with a large emphasis on cow comfort. Stressful events such as spring turn out, autumn housing, foot trimming, worming, vaccinations, mixing of groups and showing should be avoided in the run up period.

Nutrition

Plan the nutrition for the entire management period and avoid change wherever possible. Over conditioned donors or those in poor condition losing weight have poor responses to superovulation. Ideally donors should be on rising plane of nutrition, this is especially important with respect to energy and fibre. The addition of beet pulp to the diet for at least four weeks prior to the programme can be beneficial. Feeding long fibre is advised, this can be achieved by feeding hay, haylage, big bale silage and straw.

Large quantities of concentrates should be avoided (no more than 4kg at any one time) as should high protein feeds such as young grass. In fact, the management of the donor at grass is difficult due to the unpredictable quality of grass, this can be low in fibre and it is difficult to measure intakes.

Mineral supplementation is important and can be provided in the form of buckets, powder supplements, licks and boluses. Cosecure boluses every three months are recommended for copper, selenium and cobalt (take care with additional supplementation of copper by other routes; copper toxicity is possible).

Infectious Disease

It is important to appreciate that diseases such as IBR, BVD, leptospirosis and Johne's Disease can have implications on the success of flushing.

Veterinary advice is always available on this subject. Through testing, the disease status of prospective donors can be determined.

Semen choice

It is important that this is of good quality so that this is not the limiting factor when flushing. If feasible it is advisable to test thaw a straw of semen pre use. At least three straws of semen should be used for each donor, using more than this is often unrewarding unless donors are bulling for longer than expected.

