

The Value of Improving Fertility

Supplementation Can Lead to Improved Fertility and Increased Producers' Bottom Lines.

The financial benefits of getting dairy cows pregnant extend far beyond milk production. According to the Dairy Cattle Reproduction Council and a study they cite by Dr. John Fetrow of the College of Veterinary Medicine at the University of Minnesota, one pregnancy is worth between \$200-\$600 to the dairy, depending on the price of milk and cost of replacement heifers¹. Pregnant cows with high production records or superior genetic potential are worth even more because of the additional profits their offspring can provide.

According to Dr. Fetrow, a 1% improvement in pregnancy rate is worth \$15-\$35 per cow per year – and part of the value of improving pregnancy rates comes from reducing days open¹. One day open can cost anywhere from \$2-\$6, according to Dr. Fetrow, which takes into consideration the impact that additional days open have on milk production and the number of calves born¹.

There are many ways we can evaluate fertility in cattle, such as conception rates and days open². Recent areas of increasing interest are superovulation and embryo transfer in cattle. These techniques are gaining popularity among dairy producers to achieve faster genetic progress or sales of beef calves. However, inflammation and immune dysregulation may limit fertility and optimal results in cattle embryo transfer³.

Increasing Superovulatory Response Through Nutritional Supplementation

To improve superovulatory response in cattle, a study conducted by researchers from Oregon State University and Phibro Animal Health Corporation

sought to evaluate the impact of feeding OmniGen[®] on superovulatory response and serum progesterone and cortisol concentrations in embryo donors treated with two different doses of Folltropin[®]-V (FSH)³.

Twenty-four Angus cross-bred beef cows were assigned to four groups, fed OmniGen at 0 or 56 g/animal/day for 49 days and were treated with 200 or 400 mg FSH to induce superovulation³. The authors reported benefits of feeding OmniGen along with 400 mg of FSH to the donor cows. For example, the cows fed OmniGen while receiving the higher dose of FSH, had numerical higher total ova recovered, embryos recovered, and transferrable embryos recovered³.

The authors concluded that the overall results support the thought that there is a beneficial effect on transferrable embryo production when donor cows are fed OmniGen during the period when superovulation procedures are being imposed³.

In the study mentioned above, the effect of OmniGen in fertility was assessed by superovulatory and embryo transfer metrics. Although this is novel data, it corroborates other trials that demonstrated improved fertility in dairy cattle, such as the decreased days open report in a study conducted on a large commercial dairy by researchers from University of Florida².

Visit www.theOmniGenDifference.com or contact your local Phibro representative to learn more.

¹Dairy Cattle Reproduction Council. "The Dollar Value of a Pregnancy." <https://www.dccouncil.org/wp-content/uploads/2017/04/The-dollar-value-of-a-pregnancy.pdf>

²Casarotto et al., 2020. *Anim. Feed Sci. Technol.* 267:114527.

³Snider et al., 2019. *Anim. Repro. Sci.* 210:106174.