

2). Cows that synchronize to Ovsynch are more likely to be inseminated at an optimum time relative to ovulation and thus, to establish a pregnancy.


Given the limited number of cows used in this study, it is not yet clear if G6G alone can improve conception rates in Ovsynch-treated cows. Further study with more cows and farms will be required for validation of the accuracy of conception rates. Nevertheless, the researchers identified three potential predictors of fertility in lactating dairy cows; namely concentrations of progesterone at PGF_{2α} of Ovsynch, size of the preovulatory follicle and concentrations of estradiol at final GnRH of Ovsynch. Based

on these predictors of fertility, ongoing research by Pursley and Bello will concentrate on restructuring Ovsynch to consistently control follicular growth and induce ovulation of follicles with greater fertility potential.

Along with improved ovulatory response, the G6G pre-Ovsynch protocol provides a quick option to lineup cows for Ovsynch. Completion of G6G prior to Ovsynch requires only eight days, in contrast with longer intervals of other pre-synchronization protocols.

If you are using Ovsynch in your reproduction program, the addition of G6G may prove beneficial to optimizing synchronization. Despite

statistically significant improvements in synchronization rates to Ovsynch, keep in mind this study is based on data from only one farm and comprises a limited number of cows. Thus, talk to your veterinarian and reproductive specialist before implementing any changes in your reproduction program. For more detailed information regarding the G6G pre-Ovsynch protocol, contact Dr. Richard Pursley, MSU Department of Animal Science at pursleyr@msu.edu or 517.432.6178.

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Genetic evaluation changes reflected in August sire summaries

A number of modifications were made in the genetic evaluations with the release of the August 2006 sire summaries. Changes were made to Productive Life, Net Merit, and JPI. New traits now available include stillbirth rates for Holstein and Brown Swiss sires, as well as rear teat placement for Holstein and rear legs, rear view for Guernsey and Brown Swiss sires.

Holstein and Brown Swiss sires received evaluations for stillbirth rates. Just like calving ease, bulls now have ratings for service sire (SSB) and daughter stillbirths (DSB). The evaluations are published as the expected percentage of stillbirths in calvings from cows across all lactations. As with any genetic evaluations, the focus should be on ranking of sires and difference in their evaluations. Daughters of a bull at 5 percent DSB would be expected to have 5 percent fewer stillborn calves than daughters of a bull with an evaluation of 10 percent. Daughter stillbirth evalua-

tions should receive more attention than service sire stillbirth values as they have a higher heritability value, 6.5 percent compared to 3 percent for SSB. DSB values range from 4 – 18 percent, while SSB values range from 5 – 12 percent.

Productive life (PL) PTA's for all breeds has been revised. The new PL evaluation gives credit to cows for all months of lactation during their lifetime rather than just the first ten months of lactation. PL values now range from -7.0 to +7.0. This revision makes PL a more pure measure of longevity.

With the addition of stillbirth evaluations and the revision to PL, researchers reformulated USDA's merit dollar values. The new Net Merit Dollars (NM\$) includes stillbirth evaluations and places stronger emphasis on the fitness traits and less emphasis on protein yield. NM\$ ranks sires and cows giving 46 percent weighting to production traits, 45 percent to fitness traits and 9 percent to conformation.

The American Jersey Cattle Association has revised JPI™. The new JPI includes more emphasis on PL and daughter pregnancy rate (DPR) and less emphasis on protein yield. The new JPI gives 60 percent emphasis to production, 22 percent to fitness traits and 18 percent to conformation.

The trait rear teat placement is new for Holstein sires and measures the distance between the rear teats. On the 50 point linear evaluation scale, 1 equals 4.5 inches between rear teats, 25 equals 2.0 inches distance and 50 equals crossed teats. Every 10 linear points is equal to 1.0 inch of distance between the rear teats. Rear teat placement has a heritability of 32 percent, and is not currently included in Udder Composite (UDC).

These changes are designed to provide better tools for improving the health and fitness traits of dairy cattle. For more information on the genetic evaluation changes visit with your NorthStar professional. 