

Are heifers or cows the best source of replacements?

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Nowadays the opportunities and approaches on dairy reproduction have allowed producers to decide from what specific cows their replacements could come. One main questioning on this process is whether first calf-heifers or cows are the best source of replacements for the herd. Using data records from 47 herds, a group of researchers (Dhuyvetter et al) performed a retrospective analysis to estimate the effect of dam parity on early milk production (30-75 DIM).

This analysis included over hundred-thousand records from Holstein cows. In order to avoid confounding effects, these researchers controlled for different factors as days in milk, seasonality, age at first calving and disease occurrence in early lactation, among others. For primiparous cows milk was highest for cows out first lactation heifers (32.53 kg) and lowest for cows out of dams of fifth or greater lactation (31.98 kg). Patterns across dam parity were similar in multiparous cows, but means for dam parities 1-3 were not statistically different.

Although differences in early milk production are small, this analysis agrees with previous studies that support producing replacement heifers out of heifers. Despite the fourth or greater lactation cows have demonstrated to be more longer-lived, they don't seem to be the best source for replacements in the herd.¹

¹ 1293 T Effect of dam parity on early milk production. K. C. Dhuyvetter*, D. McGee, D. L. Prentice. Elanco Animal Health Greenfield, IN.

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