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April 2015 Newsletter **Prepared by Blake Nguyen, DVM**

Replacement heifer programs are a hugely influential player in dairy performance and profitability. An operation that grows a good quality heifer who calves at an appropriate age (by 23 to 24 months) and an appropriate body size (shoot for 1250lb Holsteins without body condition scores greater than 4) will capture approximately \$400 of marginal profit per heifer. The profits are generated by higher milk production in that heifer's first lactation and reducing days on feed for the heifer that is not generating any income. There are a number of management decisions that can help an operation achieve optimal replacement heifer and lactating heifer performance.

Colostrum and early life health are the first steps to heifer performance and the importance of colostrum cannot be stressed enough. Growth, and maturation of the replacement heifer are the next steps to high performance. The average daily gain required of a heifer to achieve a breeding weight of 800lbs by 13 months of age is 1.8lbs per day. Interesting research has been conducted on weight gain in heifer calves demonstrating that average daily gains in excess of 2.2lbs can be achieved and are worth the cost of additional milk. After weaning, 1.5 to 1.7lbs ADG should be targeted. Heifers that become pregnant at about 800lbs then must gain 1.95lbs per day to weigh 1250lbs after delivering a 100lb calf. Lean frame growth is the desired goal for your feeding program since over-conditioned heifers are at higher risk of dystocia (calving difficulties) and metabolic disease after calving. Forage sampling and ration balancing for heifers are important to supply protein and energy in a way that achieves lean frame growth and maintains appropriate body condition.

Efficient heifer breeding programs are essential to achieve performance and profit. Like cows, heifers need to be evaluated for entry into the breeding program, inseminated in a timely manner once they are breeding-eligible, and re-inseminated in a timely manner after AI not resulting in pregnancy. Size and maturity are the factors affecting breeding eligibility and 800lbs with an active reproductive tract is the goal for Holsteins. Timely insemination for first service and follow-up services relies heavily on heat detection, so placing capable personnel in a heifer management role is worthwhile. Finally, pregnancy (open) checking and interventions for heifers that are breeding eligible also play a key part in reproductive efficiency in heifers. A widely forgotten benefit of good heifer reproduction and records is giving heifers an appropriate amount of time in the close-up pen where they can adjust to adult cow life and receive essential nutrients prior to the stress of calving and beginning lactation.

Successful heifer raising takes almost no additional resources compared to mediocre heifer raising, it just involves accomplishing all the tasks at the correct time. If you raise 100 heifers, you can have \$40,000 for doing all the same things just adjusting them to the right time. Talk to your veterinarian about dialing in your heifer raising program and capture this performance opportunity.