

Research Summaries

Dr. Erich Studer, *Presiding*

Daily Income Over Feed Cost Value of an Open Day for Holstein Cows

James G. Thorne¹

*University of Missouri-Columbia
Columbia, MO 65211*

William J. Goodger^{2,3}

H. Fred Troutt^{2,3}

*University of California-Davis
Tulare, CA 93274*

Thomas A. Farver²

*University of California-Davis
Davis, CA 95616*

Jamon L. Scott³

*University of California-Davis
Tulare, CA 93274*

Abstract

The value of an open day for Holstein cows was determined using actual feed costs and detailed production and income records from seven large dry-lot, group-feeding dairies in Tulare County, California, which represent large scale dairy farm technology. Daily income over feed costs at different calving intervals was calculated from DHI records. Feed costs were obtained by summation of daily ration costs used for different production strings in each dairy.

Daily income over feed cost increased with higher 305-day milk production. In lactation one, mean daily income over feed cost for 11, 12, 13, 14, and 15 month calving intervals was \$2.68 (range = \$2.65-\$2.7). For lactations two and three or greater, mean daily income over feed cost declined beginning at 11 months through 15 months. Daily

income over feed cost value of an open day for heifers with 12 months as reference calving interval for all milk production abilities was -\$0.54, \$0.122, and \$0.218 for 13, 14, and 15 months respectively. Daily income over feed cost value of an open day for second and third or greater lactations at 13, 14, and 15 months was -\$2.736, -\$1.556, -\$2.943 and -\$3.606, -\$2.579, and -\$2.785, respectively.

In first lactations, optimal income over feed cost was obtained with a calving interval of greater than 13 months, whereas this interval was 12 months for lactations two and three or greater.

¹*Department of Veterinary Medicine and Surgery*

²*Department of Epidemiology and Preventive Medicine*

³*Veterinary Medicine Teaching and Research Center*