

**DAIRY HEIFER CALF PERFORMANCE TO TWO MONTHS OF-AGE AT THE UNIVERSITY OF MINNESOTA SOUTHERN RESEARCH AND OUTREACH CENTER (SROC) 2004-2006**

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Two to 4 day-old dairy heifer calves from 3 commercial dairy farms have been custom raised in the SROC calf and heifer facility up to 6 months of-age since April 2004. Calves are picked up twice weekly from the dairy farms and housed in individual 4 ft x 8 ft pens for 56 days in a naturally ventilated curtain side-wall frame-steel building. Calves have been assigned to a number of nutritional management projects evaluating milk replacer (MR) and calf starter (CS) programs. A standard control for most of these projects is feeding a 20:20 medicated MR at 1.25 lbs/day for 35 days and 0.625 lbs/day from 36 to weaning at 42 days (12.5% solids) fed with a texturized 18% CS offered free choice plus fresh water. Performance from 175 calves on control diets representing 7 projects is summarized in Table 1 below. A total of 927 calves have been used in the 7 projects. The data indicates that control diets resulted in very good calf performance with the exception of using a non-medicated MR in the summer months.

Table 1. Pre- (1-42 days) and post weaning (43-56 days) performance of dairy heifer calves fed the control diets across 7 SROC research projects 2004-2006 by months of the year

Parameters <sup>a</sup>	04-06 2004	03-05 2005	06- 07 2005	07-09 2005	09-11 2005	Av '04-'05	12 -02 '04 -'05	12-02 '05-'06
Calves/group	26	23	20	25	25	119	20	36
MR Prot:Fat %	20:20 med	20:20 med	20:20 med	20:20 non-med	20:20 med	20:20	20:20 med	24:20 med
MR lb/d, 35 d	1.25	1.25	1.25	1.25	1.25	1.25	1.50	1.25
MR lb/d, 36-42d	0.625	0.625	0.625	0.625	0.625	0.625	0.75	0.625
% solids	12.5	12.5	12.5	12.5	12.5	12.5	15.0	12.5
CS, % CP	18	18	18	18	18	18	20	18
Init. BW, lb	88.00	90.38	87.96	88.29	90.33	88.99	91.84	92.62
Init. HH, in	31.61	31.88	31.28	31.59	31.59	31.59	31.92	31.98
Init SP, g/dl	5.09	5.34	5.48	5.41	5.07	5.28	4.70	5.48
<i>Days 1 to 42</i>	<i>Pre-weaning</i>							
BW, day 42, lb	142.52	148.03	146.89	136.28	155.05	145.75	152.09	152.70
MR DM, lb	46.87	47.31	45.10	47.16	47.05	46.70	47.07	45.91
CS DM, lb	39.09	47.25	49.79	38.36	58.86	46.67	51.82	58.17
ADG, lb	1.30	1.37	1.40	1.14	1.54	1.35	1.44	1.43
G/F, lb	0.63	0.61	0.62	0.56	0.61	0.61	0.61	0.58
<i>Days 43 to 56</i>	<i>Post weaning</i>							
BW, day 56, lb	173.88	177.47	178.73	162.28	187.42	175.96	183.70	182.07
CS DM, lb	61.79	67.79	68.88	57.83	71.67	65.59	68.31	65.65
ADG, lb	2.24	2.10	2.26	1.86	2.31	2.15	2.26	2.10
G/F, lb	0.51	0.43	0.46	0.45	0.45	0.46	0.46	0.45
<i>Days 1 to 56</i>	<i>Total individual feeding period</i>							
Final HH, in	34.63	35.74	35.98	35.22	36.09	35.53	36.12	36.04
Total DM, lb	153.02	162.23	164.45	143.35	177.58	160.13	167.20	174.85
Gain, lb	85.89	87.09	90.57	73.99	87.25	84.96	91.86	89.35
ADG, lb	1.53	1.56	1.62	1.32	1.73	1.55	1.64	1.60
G/F, lb	0.56	0.54	0.55	0.52	0.49	0.53	0.55	0.51

<sup>a</sup>Parameter MR = milk replacer powder; CS = calf starter; HH = hip height; SP, g/dl = serum protein, grams/100 mil (deciliter). ADG = average daily gain; G/F = Gain/Feed DM (dry matter).