

# 4X Milking

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# 4X Milking

The last few years I was the manager of Hillcrest Dairy in Tolleson, Arizona. At one time the dairy had two herds, of which Hillcrest Dairy #1 will be the herd referenced at this report.

Hillcrest Dairy was milking around 2,000 cows with 250 dry cows in July, 1995. Rolling herd average had been 27,000m and 1,000f for several months. Feeling that everything was in place for producing 30,000 lbs. of milk per cow, we were still not having a constant production level. Production was ranging from 80 lbs. to 92 lbs. per day. Udders were stressed most of the year. Cows were dripping after seven to seven and one half hours of milking intervals, which was an indication that nutrition was there for higher production. Feeling that the labor and facilities were not being utilized to the fullest, we started milking 4X in August, 1995.

By the second day, all cows in the herd were being milked 4X. We milked 2,000 cows in a double-36 4X with two clean ups of the parlor per day. Our peak through put of the parlor was 2,200 cows per day. The peaks on cows increased an average of 7 lbs. per day within 5 months and heifers increased an average of 6 lbs. within 2 months. Heifers seemed to except 4X easier than older cows. All cows seemed to adjust very well as long as feeding

and management was worked around the cows scheduled. Dry matter intake increased around 2 lbs. per day per cow after a month and udder health was improved with the result of being a decrease in the somatic cell count.

As with about everything you do, there are disadvantages. Labor has to be better organized. The time for breeding, giving rBST, sorting cows, etc. is reduced. Therefore, labor has to be better organized to get the cows worked and released so the cows can rest before returning to the parlor for milking. Cows are pushed harder so there is less room for mistakes in nutrition, management, breeding, and cow comfort. Parlors are worked harder so maintenance is a must and inflations are required to be changed more often. The added milk isn't free. A 3-4% increase in milk production is required to cover cost from extra feed, labor, maintenance, and depreciation on the parlor.

**Table 2: Milk Production**

	<b>milk</b>	<b>std. 150d</b>	<b>times</b>	<b>RHA milk</b>	<b>RHA fat</b>	<b>1st peak</b>	<b>2nd peak</b>	<b>3rd peak</b>
July	85.9	94.8	3X	27,013	999	95	111	116
August	89.4	99.1	4X	27,208	1,002	100	112	118
September	87.6	98.1	4X	27,512	1,010	101	114	120
October	94.7	105.7	4X	27,876	1,020	99	118	122
November	79.2	89.4	3X	28,004	1,020	95	116	123
December	76.3	84.8	3X	27,733	1,007	96	116	123
January	84.5	92.0	4X	27,545	992	97	117	124

(all data compiled from official DHIA records)

**Table 1: SSC Scores**

June '95	123,000
July '95	176,000
August '95	218,000
September '95	114,000
October '95	136,000
November '95	107,000
December '95	173,000
January '96	136,000

**Table 3: Body Condition Scores**

	<b>calving</b>	<b>early</b>	<b>1st service</b>	<b>preg. check</b>	<b>late lac</b>	<b>dry</b>
July (3X)	3.2	2.8	2.7	2.9	3.0	3.5
August (4X)	3.2	2.7	2.7	2.8	3.0	3.4
September (4X)	3.3	2.7	2.7	2.8	2.9	3.5
October (4X)	3.3	2.7	2.7	2.8	2.9	3.5
November (3X)	3.3	2.7	2.8	2.8	3.0	3.5
December (3X)	3.3	2.7	2.8	2.8	2.9	3.5
January (4X)	3.3	2.7	2.7	2.8	2.9	3.5



There are a few problems that one needs to be aware of before attempting 4X. Nutrition must be first rate to get the extra production without losing body weight or suffering breeding problems. The distance from the farthest corral to the milking parlor must be kept at the shortest distance possible. Corrals, feed manager, and freestalls or loafing areas cannot be overloaded as heavily as when you milk 2X or 3X. Cows don't have as much time to eat and rest. Therefore if you do not provide enough area for eating or resting, the cow will miss out on one or the other. Milking equipment and procedures must be perfect since there is one more chance per day to cause mastitis. The time cows are away from the feeding area should be limited to one hour or less per milking to allow the cows plenty of time for eating and resting between milkings. Fresh feed needs to be in the manger for cows when they return from the parlor. Man-

agement needs to be good enough to handle the extra production and shorter time that cows can be locked up for routine procedures.

#### **Summary**

4X is not for everyone. It can work into most herds in several situations. A dairy that is starting up without full capacity can milk the cows another time until cow numbers increase. This will help increase cash flow, as well as, better utilize your labor and facilities. The other situation is some dairies can increase their production and efficiency. Cow through put was increased by about 10% at Hillcrest. Somatic cell counts decreased, dry matter intake increased, production increased while body condition stayed the same.

## **Notes**

# Notes