LACTATIONAL RESPONSE OF FRIESIAN cows SUCKLED IN EARLY LACTATION

G.W. THOMAS*, S.A. SPIKER* and F.J. MICKAN*

Multiple suckling is a labour saving alternative to conventional bucket rearing. This paper collates results that compare the effects of machine milking and multiple suckling in early lactation on subsequent lactational and reproductive performance in multiparous Friesian cows. A report is also made of the effects of duration of twice daily suckling up to eight weeks on post partum anoestrus interval (PPAI).

Treatments for the first eight weeks of lactation were -
1. Machine milked twice daily
2. Multiple suckled twice daily
3. Multiple suckled in the a.m. and machine milked in the p.m.

Cows were race suckled by three or four calves and milk yields estimated thrice weekly from differences in calf liveweights before and after suckling. After weaning at eight weeks, all cows were milked daily and individual milk yields were recorded at each milking. Oestrus was detected by vasectomized bulls wearing markers.

Table 1: Effect of once and twice daily suckling on milk production (kg),

<table>
<thead>
<tr>
<th></th>
<th>n Milked</th>
<th>Suckled 2/day</th>
<th>L.S.D.</th>
<th>n Milked</th>
<th>Suckled 1/day</th>
<th>L.S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 8 weeks</td>
<td>23</td>
<td>1084</td>
<td>1271#</td>
<td>98</td>
<td>26</td>
<td>983</td>
</tr>
<tr>
<td>8 to 28 weeks</td>
<td>23</td>
<td>2046</td>
<td>2071</td>
<td>154</td>
<td>26</td>
<td>2103</td>
</tr>
</tbody>
</table>

# Significant at 5% n = Number of cows.

The lack of a positive milk yield response after weaning from twice daily suckling contrasts with observed responses by Jersey and Guernsey cows. Walsh (1974) observed a marked increase in milk yield by twice daily suckled Friesian cows but attributed it to almost total absence of mammary infection in the suckled animals. We saw no relationship between incidence of mastitis and suckling. Cows suckled once daily had less change in routine, and possibly less stress, at weaning and this may account for the carryover of their greater milk yields compared to cows previously suckled twice daily.

PPAI (days) was positively correlated (P 0.01, r = 0.99) with duration of twice daily suckling (T weeks). PPAI = 32.1 + 5.7 T. No difference in PPAI was observed between cows suckled once and twice daily for eight weeks.

Both suckling systems have an advantage of lower labour and greater milk yield to calves than a system of bucket rearing and milking although extra labour could be expected to treat teats damaged by suckling. Once daily suckling has the advantage of increased milk yields after weaning.


* Ellinbank Dairy Research Station, Department of Agriculture, Warragul Victoria 3820.