

COMPARISON OF A COMMUNAL TROUGH WITH INDIVIDUAL
BUCKETS FOR FEEDING DAIRY CALVES

J. A. STEWART* and J. W. TAYLOR*

Use of a communal trough rather than individual buckets could reduce the time involved in calf feeding. However, there is no information on the relative performance of calves fed by the two methods and a time-saving technique would be unattractive if it resulted in poor calf performance.

In this experiment 37 male or female Friesian calves, which had been individually bucket-fed for 14 days from birth, were each offered 4 litres of whole milk once daily either from individual buckets (B) or from a communal trough (T) with 40 cm trough space per calf. All calves were grazed together on perennial pasture and only separated for feeding.

After accounting for initial weight (ILW, kg) there was no significant additional effect of sex of calf ($P > 0.4$) on liveweight gain (LWG, kg). Therefore LWG for all calves over 7 weeks was analysed by covariance using ILW as the covariate. LWG and variability of LWG were similar for both feeding methods (Table 1).

Table 1 Individual regression equations and covariance corrected mean liveweight gains over 7 weeks for calves fed by communal trough or individual bucket

T : LWG = 26.1 + 0.114 (+/- 0.258) ILW;	$R^2 = .012$; CV = 13.2%
B : LWG = 8.5 + 0.514 (+/- 0.147) ILW;	$R^2 = .418$; CV = 12.2%
Corrected Mean LWG : T = 30.4 kg	LSD (P = 0.05)
B = 28.7 kg	2.55

Apart from a minor worm infestation, which was rectified with an anthelmintic drench, there were no disease problems. Calves grew at a satisfactory rate of about 600 g/day with acceptable variability. ILW significantly affected LWG for B calves, but not for T calves. The reverse was anticipated due to the potential competition for milk among T calves. The greater range of ILW in B calves (CV = 14.3%) than in T calves (CV = 9.5%) may have contributed to this unexpected result.

In this experiment the feeding of B calves took an extra 20 minutes per day, contributed by individual milk dispensing, batch feeding and bucket washing. In a practical farm situation, more time could be saved since T calves could be fed in the paddock after they had been trained to drink from a trough.

It is concluded that in terms of animal production, feeding of milk to calves by using a communal trough is a satisfactory method to the use of individual buckets.

* Department of Agriculture, Dairy Research Institute, Ellinbank, R.M.B. 2460, Warragul, Vic. 3820