

65. Barton, M.A., and Broom, D.M. 1985. Social factors affecting the performance of teat-fed calves. *Anim. Prod.* 40, 525 (Abstr.)

22. SOCIAL FACTORS AFFECTING THE PERFORMANCE OF
TEAT-FED CALVES

M. A. Barton and D. M. Broom, *Department of Pure and Applied Zoology, University of Reading, Reading RG6 2AJ.*

Calves reared in groups may show variation in growth rate due to differential intakes. During a study of Friesian calves reared in groups of 10 on acidified milk supplied by two teats it was observed that social factors affected feeding. Some individuals were never observed to drink from the teat alone and the initial consumption of concentrates was synchronized within a group, even with a 10-day age range. Social facilitation of feeding was therefore investigated by feeding calves from a teat in complete isolation, in the presence of a hungrier calf feeding in an adjacent pen, and in physical contact with a muzzled hungrier calf in the same pen. The mean daily intakes were 5.5, 7.5, and 9.2 l respectively ($P < 0.05$) as a consequence of equivalent differences in time spent sucking. The occurrence of social facilitation can be exploited in group housing by providing several teats close together. Calves fed *ad libitum* showed more uniform growth rate when two teats were 0.5 m apart than when teats were on opposite sides of the pen (s.d. 0.14 v. 0.29, $P < 0.05$). Growth rates of 10 calves restricted to 8.5 l/day were more uniform when fed via five teats 10 cm apart than via two teats (s.d. 0.08 v. 0.21, $P < 0.01$). With more teats close together, social facilitation results in greater intake and better growth by the calves which would otherwise drink least milk. Individually-reared calves should benefit most from social facilitation if they can always see and hear other calves.