

Body Weights as at 31st March

	Well-reared.		Poorly-reared.		Difference.
	Weight.	Number.	Weight.	Number.	
1946-47	lb. 424	17	lb. 326	16	lb. 98
Identical twins	414	8	341	8	73

As in previous years, the method of rotational grazing from an early age (four weeks) resulted in better growth than set-stocking. During the current season, both groups have grown better than usual. Identical twins have been added to the experiment on a split basis, one member of each pair going to each treatment. The mean-growth data for these are included for comparison purposes.

(b) The Yearling Stage : The special interest of this stage is the behaviour of the two groups under continued rotational and set-stocking conditions during the winter period.

In the 1945-46 season 7 set-stocked animals died. These (23 per cent.) died within a fortnight of regrowth of grass following the drought and late autumn rains. Mortality would have been higher without special treatment of several other animals. This failure of poorly-reared dairy calves to stand up to the rapid change in feed characteristics of autumn growth has been typical of such losses over the past seven years. Even the well-reared (rotated) animals suffer a set-back, though to a less severe degree.

The divergence in weight increases from 71 lb. in March, 1946, to 137 lb. in March, 1947, when the well-reared heifers averaged 692 lb., a very satisfactory weight for Jersey heifers entering their second winter. Careful observations are being made of the reproductive behaviour of the two groups of heifers.

(c) The Cow Stage : Results of the first complete year's production of two groups of heifers managed under the two systems from birth are now available. At forty weeks post-calving there was a difference in body weight of 142 lb., the average weight of the control (evenly fed group) being 826 lb. Production records are given in the following table :—

Production Results

Production.	" Controlled " (Even Fed).	" Uncontrolled " (Uneven Fed).	Difference.
Total milk (lb.)	5,022	4,033	989
Fat (per cent.)	5.6	5.5	0.1
Total butterfat (lb.)	282	221	61
S.N.F. (per cent.)	9.3	9.3	..
Total S.N.F. (lb.)	469	377	92
Days in milk	278	260	18

Supplementary Feed of Dairy Cows.—This experiment is one of a series aiming at measuring, as accurately as possible, the precise relationships of supplementary feed to dairy cow performance. Industry surveys indicate that production per cow is affected materially by the amounts of hay and silage fed. From general nutritive principles, importance of supplementary feed during periods of normal grass shortage is obvious, but no reliable information exists on the relative importance of supplementary feed at the various periods when it may be provided. By accurate mapping of this picture it is hoped to assist with the many practical problems of herd feeding and management tied up with the supplementary-feed question. The first step has been