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Can HEIFERS BE FED TOO WELL?

By L. C. SNOOK, D.Sc., Animal Nutrition Officer

During recent years, emphasis has been given to the results of experiments conducted overseas, which appear to show that when heifers are generously fed, this reduces their ability to produce milk in later life. As a result, some dairymen now believe that heifer calves should be kept lean rather than in prime condition. It has become common to hear statements to the effect that generous feeding encourages calves to become “beefy,” at the expense of the milk-producing attributes which are essential in a dairy cow.

Many dairymen must have felt that there was something wrong with this assumption. If a well-fed heifer runs to beef, surely this is indicative of bad breeding rather than bad feeding. Lovers of well-fed animals will be relieved, therefore, to learn that there is plenty of evidence to support the contention that dairy heifers should be generously fed, to permit maximum growth and development.

In the October issue of “Hoard’s Dairyman,” Dr. R. S. Adams quotes a series of figures which show that big, well-fed heifers make the most productive cows. Careful measurements have been made in a series of officially-tested herds. These all show that the retarded growth associated with restricted feeding seriously reduces the life-time returns obtained from the cows. In those herds in which the growth rates of the calves were standard or above standard, the average production of butterfat by the whole herd was 50 lb. better than in herds where the growth rates of the calves were below standard. With butterfat at 4s. per pound such a difference amounts to £10 per cow per annum.

The results obtained from thousands of two-year old cows have likewise been analysed. These show clearly that the big heifers are the best, no matter what the breed. In other words, calves which have been heavily fed to permit maximum growth become the most profitable cows. It is of value to quote the results reported from the U.S.A. for highly productive Guernsey and Friesian herds. All the figures have been adjusted to Mature Cow Equivalents, so that the production averages appear rather overwhelming. The 3,000 Guernseys under consideration after adjustments averaged 807 gallons of milk and 391 lb. of butterfat in their first lactation. The 13,000 Friesians had an adjusted average of 1,186 gallons of milk and 446 lb. of butterfat.

In both breeds it is the small heifers which drag down the average. Among the Guernseys there were 25 per cent. which weighed between 800 and 900 lb. These averaged 368 lb. of butterfat. In contrast, the 22 per cent. which were somewhat heavier at 1,000 to 1,100 lb. liveweight, averaged 414 lb. butterfat. The 8 per cent. which were heavier again, averaged 442 lb. butterfat, or 74 lb. per head more than the heifers which weighed less than 900 lb. The same trend is seen in the Friesian breed. The 15 per cent. of heavy cows weighing between 1,200 and 1,300 lb. averaged 478 lb. butterfat, which is 70 lb. better than the 408 lb. produced by the 15 per cent. of so-called light-weights weighing between 900 and 1,000 lb.

These figures indicate very clearly that it pays handsomely to feed heifers so that they make maximum growth. Admittedly, with good feeding, cows which are under-sized when first they freshen, may still...
grow to reasonable size, and subsequently produce very well. But maximum production cannot be expected while such growth is taking place. It seems much more logical to make sure that this growth is made before calving, rather than have returns reduced because of growth during the initial lactation.

The lessons to be learnt from this American study are of considerable importance. In fact, the conclusions are so much as one would expect that one wonders why the vogue for underfeeding ever came into being. A possible explanation is that the effects of good feeding have become confused with the evils of delayed mating. Many stud-breeders believe that it is an advantage to delay mating until the heifer is well-developed. There is no doubt that, as a result, many well-grown heifers have been penalised. If big heifers are not mated, there is a definite possibility that nutrients which should be used for pregnancy and lactation will be diverted to the development of grossly overweight carcasses. It is not fair, however, to blame overfeeding for this undesirable consequence. The fault lies with the farmer who fails to exploit the rapid development which good feeding has permitted.

Fortunately, most breeders of livestock now realise that well-grown animals come to no harm if mated at an early age, so long as they are well fed during lactation. In fact, both cattle and sheep breeders now realise that there is much to be gained from early mating. The sooner that young stock can be brought into profit the better, providing that there is no reduction in lifetime production. Certainly there is much to be gained and nothing to lose by having heifers calve at two years of age, rather than later.

In contrast, if feed intake is restricted so that the heifers remain lean, oestrus will be delayed, more services will be required for conception, and there is more likelihood that trouble will occur at calving time.

Most farmers take a delight in rearing sleek, healthy, well-fed animals. It should be a source of satisfaction, therefore, to be reassured that well-bred heifers can come to no harm if generously fed on good quality feed, which will ensure the maximum rate of growth.

HORSE LOSSES IN THE KIMBERLEYS

The Veterinary Branch of the Department of Agriculture, in association with the Government Botanist, has been carrying out investigations into horse losses on a number of West Kimberley properties.

The main reason for the work was to determine whether there were any indications that infectious equine anaemia was present in this State, following its diagnosis in Queensland.

These investigations were carried out on Gogo, Brooking Springs, Jubilee Downs and Millijiddee Stations. On Gogo there was a mortality of 20 horses in the 1958/59 wet season but after the river frontage area was fenced off no losses were experienced in the 1959/60 season.

Losses also occurred on Brooking Springs where the animals had access to considerable amounts of Crotalaria in 1959. However care was being taken this year to keep them out of the paddock where Crotalaria was plentiful.

On Jubilee Downs there were no abnormal losses but on Millijiddee there had been heavy losses and many of the wet mares and foals on the property were in poor condition.

The investigations failed to provide any evidence that infectious equine anaemia was present in the West Kimberley area. Losses appeared to have been caused by plants responsible for liver damage, mainly Crotalaria but possibly in some cases Indigophora (which causes "Birdsville Disease"). Heavy parasitic infestation, associated with poor nutritional conditions during the dry season, had contributed to the mortality.
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