

Heavy calves in first two months give more milk

THE cost of rearing heifer replacements is the second biggest expenditure for the dairy herd, behind only feed costs.

Typical replacement costs range from 15 to 30 per cent of the cost of producing a litre of milk.

Improving the efficiency of the production of heifer replacements has the potential to give greater profitability to a dairy unit, while also promoting greater health and welfare in the herd.

A healthy heifer replacement is the foundation of the herd. Careful planning is needed to produce the correct numbers of suitable heifers, and the basis for this planning is setting some targets for heifer rearing.

The herd culling rate and fertility will dictate how many replacements are needed per year, but the age at first calving and the available buildings and facilities are going to influence how many heifers are in the rearing system at any one time.

Good targets for most Holstein

CALVES

Stuart Morris, of Alnorthumbria Veterinary Group advises on the benefits of good nutrition for calves



Friesian herds would be to breed heifers at 400 days of age and 400kg of body weight with the ultimate aim of calving down at 23 months weighing 650kg (pre-calving).

Research has shown that for every 70kg of additional body weight at calving, an average of an extra 1,000kg of milk can be expected in the first lactation.

Additionally, heifers calving for the first time at under 26 months old have been shown to have greater longevity in the herd.

Two important questions arise from these targets.

How are we going to achieve the growth to meet these targets and when are we going to encourage this growth?

Calf-rearing begins with the birth of a live calf. Make sure that

cows calve down in an appropriate body condition. In particular, fat cows may suffer calving difficulties which can reduce the chances of a live birth.

Colostrum is the first essential for a healthy calf. Give four litres as soon as possible (certainly within 12 hours) after birth. Ensure that the colostrum is of good quality and cleanliness.

Calves in the first two months of life have tremendous feed conversion efficiency. It makes sense to use this period to grow a strong calf as soon as possible. It has been shown that calves that reach a heavier weight in the first two months of life give more milk in their first lactation and have a greater chance of surviving into their second lactation.

While milk powder may appear expensive, when measured against

the weight gain achieved, it is more efficient overall to grow the calf in this pre-weaning period.

It is important to add that the aim of calf-rearing is to not only grow the calf quickly, but also prevent the calf for weaning and prevent a “check” in growth when milk is withdrawn.

The optimum amount of milk replacer is six litres of milk fed over two feeds. Offer a good-quality, palatable starter ration to calves more than one week old. Calves need fresh water for rumen development.

Finally, giving calves some fibre has several benefits. Short chopped (2cm) oat straw is eaten in small quantities but the “scratch factor” encourages both rumen development and the increased consumption of the starter ration.

Various measures can be used as a target for weaning, such as a doubling of birth weight or a heart girth of 38 inches, but it is essential that calves are eating enough of the starter ration—1kg per head, per day, is recommended.

Following weaning, calves still have very good feed conversion efficiency and we should continue to make use of this period. A kilogram of food at this stage is still a cheap kilogram when compared to weight gain.

Calves are still unable to make good use of quality roughage even if they appear to like it and readily eat a lot of it. Continuing to feed short-chopped poor-quality fibre as a component of a dry total mixed ration will continue the process of good growth rates while promoting rumen development.

Lastly, it is a mistake to attempt to correct earlier poor growth rates once a heifer is pregnant. Fast growth rates at this stage are associated with poorer future milk production.

Achieving accelerated early growth rates in heifer calves needs careful planning. Consult your vet and incorporate these targets in your health plan. The gains that can be made from improved calf growth in relation to health, longevity and profitability are clear.