

# United Feeds

Accelerated Heifer Rearing Programme



Growing your Future...

# Benefits of 24 Month Calving

Heifer rearing represents a significant financial investment on the dairy farm and there are several ways in which to reduce the financial burden. The age of heifer at first calving has a major impact on the overall cost of heifer rearing. The optimum age to calf heifers is at 24 months old.

## Advantages of 24 month calving include:

- ▶ Less stock needs to be carried on the farm. Calving at 36 months rather than 24 months results in 50% more replacements on farm in a 100 cow herd with 30 replacements each year.
- ▶ Less stock being carried results in land and housing being freed up. Possibility of increasing cow numbers.
- ▶ Savings in rearing costs - less forage and land costs
- ▶ Reduced labour costs
- ▶ Calving all heifers at 24 months results in a tighter calving pattern in the overall herd
- ▶ With successful 24 month calving, savings of 1ppl on overall milk production can be achieved.

Heifers have the best genetics on the farm and represent the future of the dairy herd. A 24 month rearing period has proven to have significant financial benefits provided all nutritional and health targets are met.

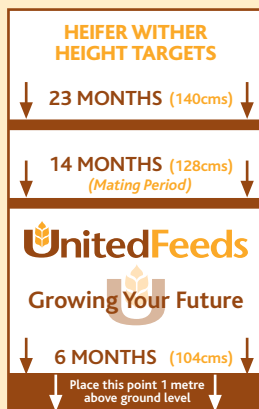


## Aims of successful heifer rearing

To grow the heifer at an average of 0.8 kg /day to achieve a well developed heifer ready for calving at 24 months

Calf down at:

- 24 months
- 580-620kg
- BCS 2.75-3.0
- Wither height of 140cm



Close monitoring of the wither height, which is made easy using the United Feeds Heifer Growth Stick, will give a good indication of live weight.

### Key Targets

Age (Months)	Liveweight (kg)	Withers height (cm)
2	95	86
6	200	104
14	392	128
23	590	140
24	615	141

**THE KEY TO HEIFER REARING IS REGULAR GROWTH MONITORING AND MEETING THE TARGETS**



## *Birth - Day 4*

It is vital that the calf gets off to a good start and great care should be taken within the first few days, especially to ensure adequate colostrum intake.

The newborn calf has no active immunity and is therefore vulnerable to infection. Colostrum is a rich source of antibodies for the newborn calf. It also has a high nutritive value and is essential for the establishment of gut flora. Colostrum intake in early life is essential and should be managed as follows:

- 3.5-5 litres in first 6 hours
- As much colostrum as possible in 12 hours
- Calves should be fed on their mother's milk for three days.



## *Day 4 - Weaning*

- Computer controlled milk feeding system is ideal in terms of labour but twice a day bucket feeding is adequate - once a day milk feeding is not advised
- Clean fresh water should be made available at **all** times
- Access to clean straw - 50 g/day (Clean bedding straw is sufficient)
- Feeding adlib concentrate from day 4 is VITAL for rumen development
  - UF Calf Starter Pellets / Feed



Milk replacer should be gradually introduced to the calf over a period of 3 to 4 days. When feeding milk replacer it is vital to feed at the correct level and at the correct concentrations. The table below illustrates the correct feeding levels. Care should also be taken to ensure that milk is offered at the correct temperature and thoroughly mixed.

Age (days)	am	pm	Total
<b>Colostrum (litres)</b>			
1 to 3	1.5 - 2	1.5 - 2	3 - 4
<b>UF calf grow range @ 125g/l</b>			
4 to 7	1.5	1.5	3
8 to 10	2	2	4
11 to weaning	2.5	2.5	5

### **Weaning to week 12**

- ▶ Abrupt weaning is ideal for management but only when:
  - calf must be eating minimum of 1kg concentrates per day for 2-3 days consecutively.
  - Calf is at least 5 weeks of age.
- ▶ Continue to feed ad lib starter pellets with straw up to end of this period.



## *Rumen development*

Developing a functional rumen is fundamental to an efficient and economic heifer rearing programme. Getting the calf onto lower cost dry feeds and forages as quickly as possible should be the aim and in order to do this, the focus should be on early rumen development.

There are two aspects of rumen development; an increase in physical size, along with the longation and thickening of the rumen wall.

As can be seen in the photographs on the right, feeding milk only up to 6 weeks of age results in very little increase in size or development of the rumen wall.

In the case of calves fed hay from day 3, even at 12 weeks of age, there is very little development of the rumen wall, indicating that the calf requires concentrates rather than just forage to stimulate early rumen development.

The introduction of concentrates to the calf in early life results in an increase in size, substantial development and thickening of the rumen wall. This increases the calves ability to absorb nutrients and improve intakes throughout the duration of its life.



*6 weeks - milk only*



*12 weeks - milk & hay*



*6 weeks - milk & concentrate*



### **3-10 months**

- During this period the heifer has the potential to grow at 1.1 kg per day.
- Critical to restrict growth rates during this period to **0.8 kg** per day. It has been shown that higher growth rates result in an increase of fat deposit within the udder and therefore reduce development of milk secretory tissue.
- The optimum growth rate should be sustained via grazed grass or silage supplemented by 1-3 kg of **UF Heifer Rearing Nuts** depending on forage quality.
- Or, straw plus 3-5kg **UF Heifer Rearing Nuts**
- Minimum age to go to grass - 6 months

### **10-15 months**

- Monitoring growth rates during this period and supplementing of diet with concentrates depending on forage quality, ensuring growth rates are sustained.
  - \* Supplement diet with 1-3kg of UF heifer rearing nuts to boost energy levels, aiding conception

### **16 months - 1 month pre calving**

- Monitor growth rates and BCS, aiming for BCS 2.75- 3 at the end of this period. Feed accordingly depending on forage quality

From one month pre calving, heifers should begin the dry cow management programme. This will ensure that they are prepared for joining the milking herd, remain in the correct condition and receive the required balance of vitamins and minerals.





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