

Dairy Heifer Rearing

Practical Guide

Replacement heifers are one of the biggest costs of the dairy enterprise and farmers reasonably aim to minimise this expense.

However the rearing of these animals can impact on their lifetime profitability, whilst at the same time using valuable and generally limited resources such as land, buildings and labour and having an impact on the farm carbon footprint, so it's worthwhile getting the basics right.

This practical guide looks at rearing dairy heifers for optimum lifetime performance.

Calf Rearing - Key Pointers:

1. **Hygiene** - from calving through to weaning, good hygiene reduces the chances of disease transmission. Remove the calf from the potentially contaminated calving pen to a clean calf pen as soon as possible.

2. **Colostrum** - calves need colostrum (4+ litres) within 6 hours of birth after which the gut wall closes up preventing uptake of the protective antibodies.

3. **Environment** - calves need well bedded and well drained lying areas. Ideally with sufficient straw bedding that their legs are not visible, and if you kneel in the



straw for 10 seconds your knees should remain dry. There should be little or no smell of ammonia. Consider use of calf jackets in very cold weather.

4. **Diet** - ensure milk replacers are prepared and fed as stated on the bag. Calves still need access to fresh clean water at all times. Concentrates should be freely available, together with clean straw for roughage.

5. **Supervision** - Check calves at least twice per day and take prompt action if you see any indicator of ill health.

6. **Weaning** - wean when calves are consistently eating a minimum of 1 kg of concentrate per day; continue ad lib concentrates until approximately 12 weeks, together with fresh water and roughage.



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Websites

www.farmingforabetterclimate.org

www.agrecalc.com

www.volac.com

www.dairy.ahdb.org.uk



Meeting Heifer Growth Targets

The following table shows the typical weights heifers need to reach to be on target for calving at 2 years:

Age/stage	Proportion of mature weight (%)*	Weight (kg) Holstein	Weight (kg) Friesian
6 months	30%	195	165
Service	55—60%	374	316
Pre-calving	90%	585	495
Post-calving	85%	552	468
Second calving	92%	598	506

* Source Dairyco

A typical heifer needs to have grown at **0.7 - 0.8 kg/day** from birth until service.

In practice, however, height may be a better indicator of heifer growth as it means small, fat animals are less likely to be served too early.

Age/stage	Withers height (cm) Holstein	Withers height (cm) Friesian
6 months	104	100
Service	129	122
Pre-calving	140	134

* Source Dairyco

Diet

From 12 months old until calving a heifer's overall diet typically needs to be around **10 ME** (MJ/kg DM) and **12 - 13% crude protein**; some silages, particularly 2nd and 3rd cut may not be adequate and will require supplementation.

Contract Rearing

For some producers contract rearing offers the potential to reduce the resources tied up in youngstock, and agreements often operate on the basis of a payment arrangement contingent on targets being met, for instance for growth and other key performance indicators. These arrangements can work well for both parties and provide for very efficient production of heifer replacements. Ideally a rearer will be 'dedicated', i.e. only have youngstock from one farm.



After Calving

Heifers can suffer significant stress when introduced into an older herd, and at the start of their lactation this can have serious consequences. Ideally heifers should be managed in a separate milking group for their first lactation, or at least until after they have reached peak yield. If it is not possible to manage heifers separately, it is important to ensure that there is adequate trough and lying space.