



Growth Rate Targets

Setting targets

It's important to set early on an age at first calving and to estimate the mature body weight. Strategic feeding during identified phases allows you to achieve specific growth targets which help eliminate waste and cost and thereby increase dairy profits.

Heifers need to be 55-60% of mature body weight at first breeding, increasing to 90% by first calving and returning to 85% after calving.

The mature body weight of Holstein-Friesian cattle can vary according to selection policy, so it's important to measure the body weight of cows in your herd.

BIRTH



Birth weight
40kg

FIRST BREEDING



55 – 60% mature weight
360 – 390kg

FIRST CALVING



85 – 90% mature weight
560 – 590kg

LACTATION 3



Mature weight
660kg



To set a target growth rate for your heifers –

1. Set a realistic target age for first calving
2. Set a target first breeding age (first calving age minus 10 months*)
3. Measure herd's mature body weights (lactation 3+)
4. Multiply mature weight by 0.55 for first breeding target weight
5. Calculate weight gain required up to first breeding (breeding weight minus 40kg)
6. Calculate growth rate required (weight gain required divided by age at breeding)

| | Example | Your Herd |
|---|--|-----------|
| Target age at first calving | 24 months | |
| First breeding age (age at first calving minus 10 months) | 13-14 months (in calf by 15 months) | |
| Mature body weight of cows (lactation 3+) | 660 kg | |
| Weight at first breeding (mature weight x 0.55) | $660 \times 0.55 = 360\text{kg}$ | |
| Weight gain required (assume calf birth weight of 40kg) | $360 - 40 = 320\text{kg}$ | |
| Growth rate required up to breeding | $320\text{kg} / 13\text{months} =$ 0.8 kg/day | |

*Heifers require on average more than 1 service per conception, so first breeding must start at least 10 months before the desired time of first calving