

Imunogard Calf Trial

Objective

To generate calf performance data for heifer calves reared on Imunogard milk replacer.



Trial Site	Duchy College (Cornwall, England)
Calf type	Holstein heifers
Number of Calves	12 (born Sept to Oct 25)
Milk Powder	Imunogard (23% crude protein, 21% fat; 100% dairy protein; contains Celmanax™, Butyrate & Gardion)
Feeder Type	Forster Technik Computerised Feeder

Management and Feed

Colostrum:

- Calves were tubed with 4L pooled colostrum (>22% Brix) within 4 to 6 hours of birth & then group housed (n=10 calves/pen) for 72 hours & fed colostrum / whole milk (2nd & 3rd milking) via an ad lib drum (~4L milk per feed)

Milk Replacer:

- On day 4, calves were introduced to a computerised feeder (2 feed stations), & fed Imunogard mixed at 150g/L (150g powder + 850ml water = 1L of mixed milk) (Table 1)

Table 1. Milk Feeding Plan

Age period (days)	Days	CMR (g/litre)	CMR (litres/d)	CMR (g/d)
1 to 3	3	4L colostrum, followed by ad lib colostrum/whole milk		
4 to 10	7	150	5 to 7	750 to 1050
11 to 45	35	150	7	1050
46 to 66	21	150	7 to 2	1050 to 300

Total days on feeder=63d; Total milk powder, 57.1kg

**Water and Dry Feed:**

- Fresh water, calf starter pellets (Calf nuts, 17% CP) and straw in racks was available ad-libitum (from day 4)

Weaning:

- Milk was reduced gradually from 7 to 2 litres over 21 days and calves were weaned at 66 days of age

Results

- Calves weighed on average 40kg at birth (range 35 to 43kg) & 87kg at weaning (range 79 to 94kg) (Table 2 & 3). All calves doubled their birth weight by weaning (Figure 2).
- Calves had a daily live weight gain (DLWG) of 0.74kg/d from birth to weaning & 0.78kg/d from 7 days to weaning (Table 2).
- After weaning, calves weighed on average 105kg at 12 weeks equating to a post weaning DLWG of 0.87kg/d (Table 2 & 3).

Table 2. Calf body weight & daily live weight gain (DLWG) pre & post weaning

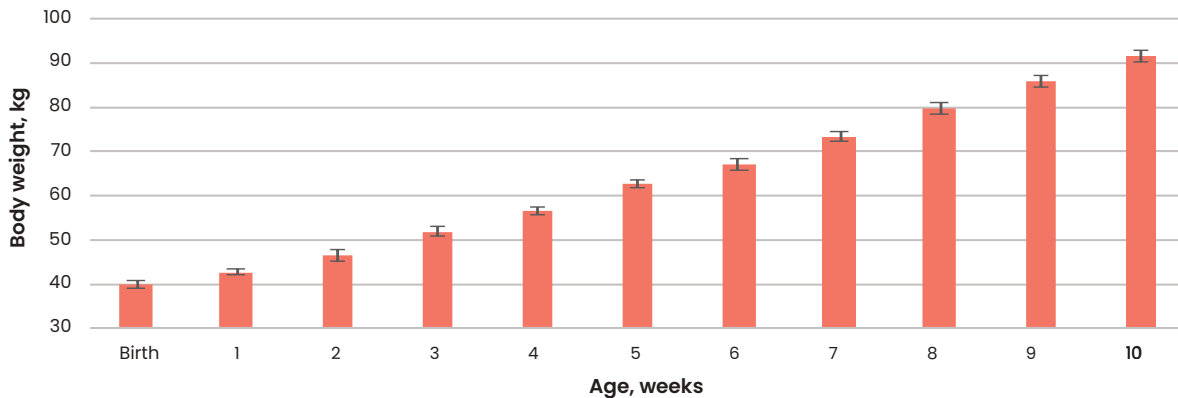
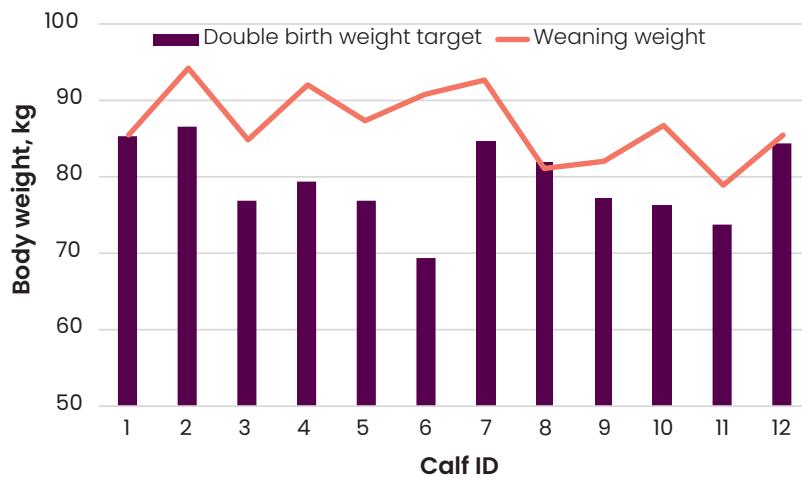
	Mean $\pm$ SE	Range
Birth weight, kg	39.7 $\pm$ 0.8	35 – 43
Body weight at weaning, kg	86.7 $\pm$ 1.4	79 – 94
DLWG birth to weaning, kg/d	0.74 $\pm$ 0.02	0.6 – 0.9
DLWG 7d to weaning, kg/d	0.78 $\pm$ 0.02	0.7 – 0.9
DLWG weaning to 12 weeks, kg/d	0.87 $\pm$ 0.05	0.5 – 1.1

*Calves weaned at 66 days.

Table 3. Calf body weight (kg) up to 12 weeks of age

	Body weight, kg			Body weight, kg	
	Mean $\pm$ SE	Range		Mean $\pm$ SE	Range
Birth	39.7 $\pm$ 0.8	35 – 43	Week 7	72.9 $\pm$ 1.2	66 – 81
Week 1	42.4 $\pm$ 0.6	39 – 45	Week 8	79.3 $\pm$ 1.4	71 – 88
Week 2	46.1 $\pm$ 1.4	35 – 52	Week 9	85.5 $\pm$ 1.4	79 – 94
Week 3	51.6 $\pm$ 1.1	43 – 57	Week 10	91.1 $\pm$ 1.3	86 – 100
Week 4	56.1 $\pm$ 1.0	51 – 61	Week 11	97.7 $\pm$ 1.7 (n=11)	91 – 109
Week 5	62.3 $\pm$ 1.0	55 – 67	Week 12	104.6 $\pm$ 1.6 (n=10)	96 – 113
Week 6	66.6 $\pm$ 1.3	59 – 73			

Introduced to feeder & fed milk replacer on d4; milk reduced d46 & weaned d66.

**Figure 1. Calf body weight ($\pm$ SEM) up to 10 weeks of age****Figure 2. Body weight at weaning (d66) vs target BW at weaning (based on double birth weight)**

Calf Health

- Calf health was good; most calves received a faecal, nasal & eye score of 1 (normal) up to 12 weeks. Only 1 calf (at week 4) had a faecal score of 2 (loose) & no calf received a score of 3 (watery) at any point.

Conclusions

- Calves fed a total of 57kg Imunogard milk replacer over 63 days doubled their birth weight (40kg) by weaning, weighing on average 87kg at 66 days of age.
- Calves had good growth rates up to weaning of 0.78 kg per day & continued to thrive post weaning with growth rates of 0.87 kg per day to week 12.
- Calf health was excellent throughout the trial.
- With good management, feeding calves up to 7L per day of Imunogard results in good performance through to 12 weeks of age in terms of growth & health.

A HELPING HAND WITH IMUNOGARD

Some calves need a helping hand to help them overcome the challenges they face.

Imunogard® is a unique milk replacer specifically for those farms where calves are repeatedly suffering digestive disturbances. Formulated with 100% concentrated milk protein and powered with Celmanax™ to ensure your calves receive the helping hand they need.

www.feedforgrowth.com

CELMANAX™

Volac Milk Replacers Limited
50 Fishers Lane, Orwell, Royston, Hertfordshire SG8 5QX, UK
+44 (0) 1223 206207 | orders@feedforgrowth.com | feedforgrowth.com

Volac Milk Replacers Ireland Limited
Feagh, Mullagh, Kells, Co. Meath, Ireland, A82 W328
+353 469 212 950 | sales@feedforgrowth.com | feedforgrowth.com
Copyright ©2025

**YOUR PARTNER FOR
PERFORMANCE**

