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Comparison of the effects of high and low milk-replacer feeding regimens on health and growth of crossbred dairy heifers

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Table S1. Descriptive data for the candidate variables tested for the multivariate models

Variables tested		Descriptive statistics	Final variable tested for inclusion
Age		Age at each examination pre-weaning was included in each of the repeated measures models. It was normally distributed with a mean of 32.3 ± 15 days	Continuous
Calving week		Week of birth was recorded as the calving group to give a description of where calves were born in the calving block: • Week 1 – 33 (17.6 %) • Week 2 – 17 (9.1 %) • Week 3 – 37 (19.8%) • Week 4 – 27 (14.4 %) • Week 5 – 23 (12.3 %) • Week 6 – 10 (5.3 %) • Week 7 – 20 (10.7 %) • Week 8 – 15 (8.0 %) • Week 9 – 5 (2.7 %)	Tested as an ordered factor but the raw data were found to give a significantly better fit in all models and so this was used in the model results presented.
Breed	Breed	Calf breed was recorded. Friesian n=96 (52.1 %) Jersey cross n=80 (41.7 %) Montbelliard cross n=1 (0.5%) Hereford cross n=11 (5.2 %)	Categorical
	Grouped Breed Data	No differences were noted between the Friesian calves and the Montbelliarde or Hereford crosses and so these animals were grouped to give Friesian type n=108 (58.3 %) Jersey cross n=80 (41.7 %)	Categorical
Passive Transfer		Total protein at recruitment was used to record passive transfer of immunity. It was normally distributed with a mean of 60.8 ± 9.5 mg/ml	Continuous

Dystocia		Assisted calvings were recorded by the farm staff. 18 heifers (9.6 %) of the cohort had calving assistance.	Binary Y/N
Size at Recruitment Week 1	Weight	Normally distributed with a mean of 41.3 ± 8 kg	Continuous
	Height	Normally distributed with a mean of 74.9 ± 4.1 cm	Continuous
	Length	Normally distributed with a mean of 60 ± 3.6 cm	Continuous
	Age at Recruitment	Normally distributed with a mean of 4.5 ± 2.7 kg	Continuous
Bovine Respiratory Disease	Disease pre-weaning	49/192 (26.2%) of calves had respiratory disease pre-weaning.	Binary Y/N
	Total score above the threshold for diagnosis pre-weaning	Data were not normally distributed, the range was 0-7 with a median of 0 and an interquartile range of 0-1.	Treating the data as an ordered factor was tested but using the raw data significantly improved the model in all cases
Diarrhoea	Disease pre-weaning	121/192 calves (64.7%) had diarrhoea pre-weaning	Binary Y/N
	Total score above the threshold for diagnosis pre-weaning	Data were not normally distributed, the range was 0-4 with a median of 0 and an interquartile range of 0-1.	Treating the data as an ordered factor was tested but using the raw data significantly improved the model in all cases.