

Optimising replacement heifer performance



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Cost of rearing a heifer

- Variable Costs
 - €660 (incl. land rental at €150)
- Fixed Costs
 - €312 (incl. labour at €186)
- Total Costs
 - €1,049 (includes depreciation: buildings/machinery)
- Initial value of calf
 - €350
- Losses
 - €74
- Sales of heifers failing to conceive
 - - €22

€765

Total Cost = €1,450

Target Weights

	Mature BW	6 months	15 months	calving
% Mature BW		30	60	90
Holstein Friesian (HF)	580	175	330	500
NZ or Br Friesian	550	165	315	480
Norwegian Red x HF	580	175	330	500
Jersey x HF	545	165	310	475
Jersey	490	150	280	425

- Every successful heifer rearing programme has set target weights at key points
- Target weights differ between farms
 - use 3rd, 4th, 5th lactation animals to calculate for your herd
 - weigh in May/June (no effect of pregnancy)

Are there any benefits to achieving target weight??



Implications of target weight at MSD on subsequent performance

Buckley et al. 2010

	Bodyweight (kg)			
	≤290	291-316	317-342	≥343
MS (kg) (lactation 1)	383 ^a	394 ^b	404 ^c	417 ^d
MS (kg) (lactation 2)	448 ^a	462 ^b	467 ^b	478 ^c
MS (kg) (lactation 3)	474 ^a	487 ^{a,b}	496 ^{b,c}	503 ^c

Effect of target weight at MSD on farm profitability

Buckley et al. 2010

	Body weight categories			
	≤290	291-316	317-342	≥343
Annual milk yield (kg)	570051	565643	552311	552236
No. of cows	106	103	99	99
Milk price (c/l)	30.4	30.4	30.4	30.4
Total costs (€)	159361	155318	144569	156539
Milk returns (€)	164639	463443	159644	159609
Profit/kg milk solids (€)	0.88	0.94	1.07	0.88
Profit/Ha (€)	916	975	1083	892
Farm profit (€)	36649	39010	43343	35689