



## Age at first calving

### What is age at first calving (AFC)?

The age at which an animal calves for the first time

### What is the average age at first calving in the UK?

The average AFC in the UK is 28 months<sup>1</sup>. Only half of heifers on 19 farms across southern England calved before 26 months of age; AFC ranged between individual cows from 21 to 51 months<sup>2</sup>

### What is the recommended age at first calving?

The most profitable age to calve heifers is 24 months. Heifers calving for the first time at 23 to 25 months outperform later calvers over their first five years of life<sup>2</sup>

1. Better fertility
2. More milk produced (associated with both more lactations per unit of time and a higher survival rate)
3. Better survival - remain in the herd for longer
4. Better fertility + improved survival = reduced forced cull rate = more time to rear fewer heifers or more to sell

Benefits of calving at 24 months			
	23-25 months	26-30 months	>30 months
<b>Better fertility:</b>			
1st service conception rate (L1)*	42%	39%	32%
Days to conception (L1)*	117	137	170
1st service conception rate (L2)*	47%	35%	33%
Days to conception (L2)*	111	133	144
<b>More milk:</b>			
Total 5 year milk yield (kg)	22477	20605	15777
<b>Better survival:</b>			
% of cows starting lactation 3	70%	59%	50%

<sup>1</sup> National Milk Records (NMR) 2014    <sup>2</sup> Cooke et al., 2013 OJAS 3: 1-12  
(L1)\* - Lactation 1    (L2)\* - Lactation 2



### What are the other advantages of a younger calving age?

- Fewer non-productive females on farm
- Fewer heifers need to be reared as replacements to maintain herd size
- Faster genetic progress

Heifers do not become profitable until at least half way through lactation 2 – rearing heifers that are more likely to survive to second and third calving will improve herd profitability.



**REMEMBER - LATE CALVING HEIFERS DO NOT MAKE GOOD COWS**

### How to achieve 24 month calving?

- Breed heifers at 13 months to ensure they are in calf by 15 months – **the average first service conception rate for a heifer ranges from 40 to 70%. Serving heifers for the first time at 15 months is too late**
- Calculate the growth rate required to ensure heifers are 55–60% mature body weight at first breeding – **heifers must have adequate body size to be bred**
- Maximise growth (up to 0.9 kg per day) during the pre-weaning period while feed conversion efficiency is at its greatest – **if heifers get ahead of the target growth rate, it will not matter as much if growth rates subsequently suffer, for example, when at grass**
- As a minimum, double birth weight at weaning
- Feed enough energy and protein to maintain the target growth rate required – **check if you are feeding enough**
- Keep heifers healthy
- Measure and monitor growth to ensure heifers are on track – **use weigh scales or a weigh tape**