



# Swedish dairy herds with long and short productive life

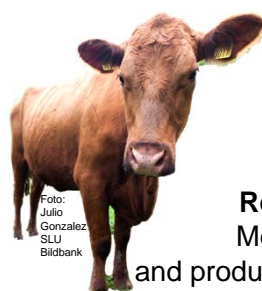
## Associations with animal welfare and productivity

### Question

Is there an association between length of productive life (PL) and animal welfare and productivity in dairy herds?

### Answer

Short PL was associated with higher on-farm mortality (~welfare), higher milk yield and more pro-active reproductive management.



### Material and methods

- Productive life of a cow was defined as days from 1st calving until culling
- All herds in the Swedish milk recording system with > 35 cows (n=2885) were classified according to their length of PL
- The classification was based on three consecutive years to avoid "random" fluctuations
- Herds classified as having **long PL** belonged to the highest quartile for the last two years and were above the median for the remaining year
- Herds with **short PL** belonged to the lowest quartile for the last two years and were below the median for the remaining year
- Data from the last year (1/9/2010-31/8/2011) was used to compare herds with long and short PL

### Results

Medians of variables related to animal welfare and productivity for 218 Swedish dairy herds with long productive life and 234 herds with short productive life

Variable <sup>a</sup>	Long PL	Short PL	p <sup>b</sup>
Productive life (PL, months)	41.7	20.9	<0.001
Heifers not bred > 17 months (%) *	42.5	28.3	<0.001
Cows with last AI > 120 days after calving (%) *	7.8	7.4	0.35
On-farm cow mortality (deaths/100 cow-years) *	4.5	5.8	<0.001
Milk yield per cow and year (kg ECM)	9263	9581	0.001
Calving interval (months)	13.7	13.1	<0.001
Age at first calving (months)	29.2	27.4	<0.001
Herd size	58.6	68.4	<0.001

<sup>a</sup>Variables with an \* are used as indicators of animal welfare in the Swedish milk recording system

<sup>b</sup>p-value from Wilcoxon rank-sum tests

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