



IRISH CATTLE BREEDING FEDERATION

Optimum age first calving dairy heifers (22-26months)



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An Roinn
**Talmhaíochta,
Bia agus Mara**

Objective

- The purpose of this project was to assess the association between AFC on milk production and survival.
- Evaluate statistics on 4 categories of Age First Calving (AFC):

1. Optimum 22-26 months

2. 27-32 months

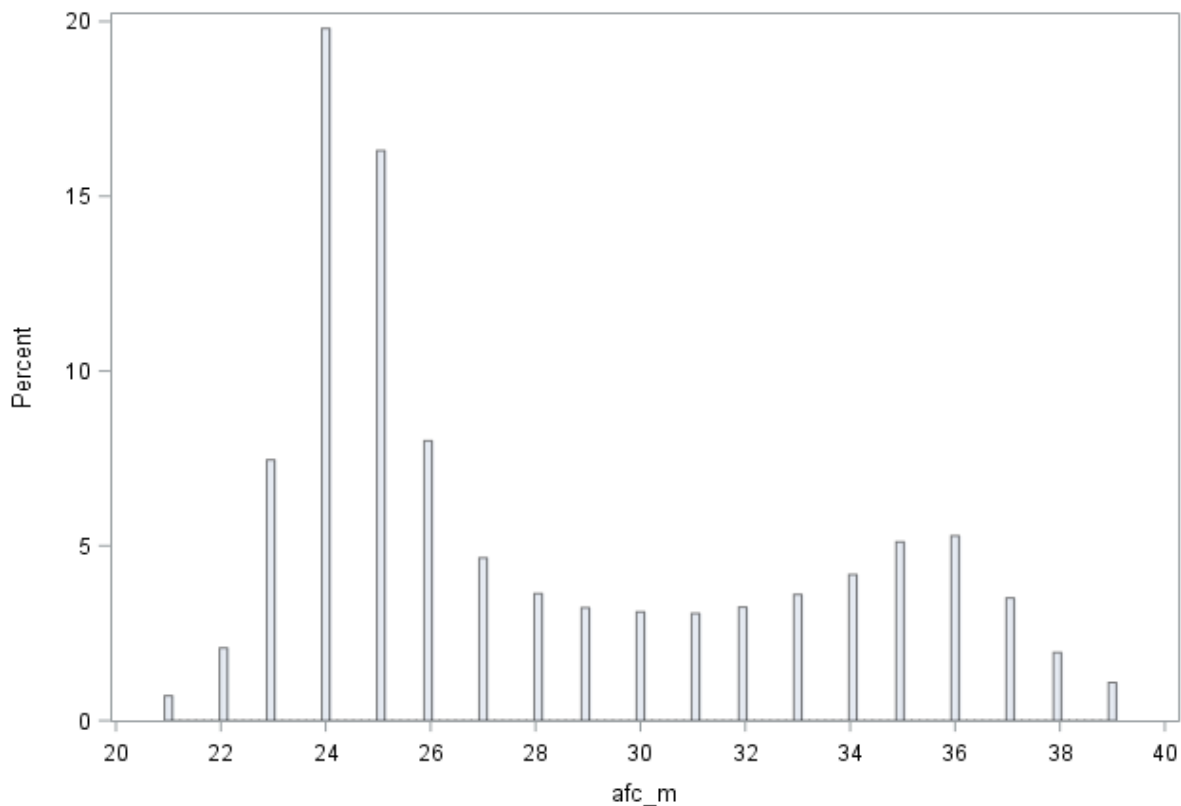
3. >32 months



Edits

- Year of calving 2014.
- AFC <20month and >40month removed.
- Over 90% of herd calved between January – June.
- 305d milk used.
- Animals with consecutive 305d records retained.

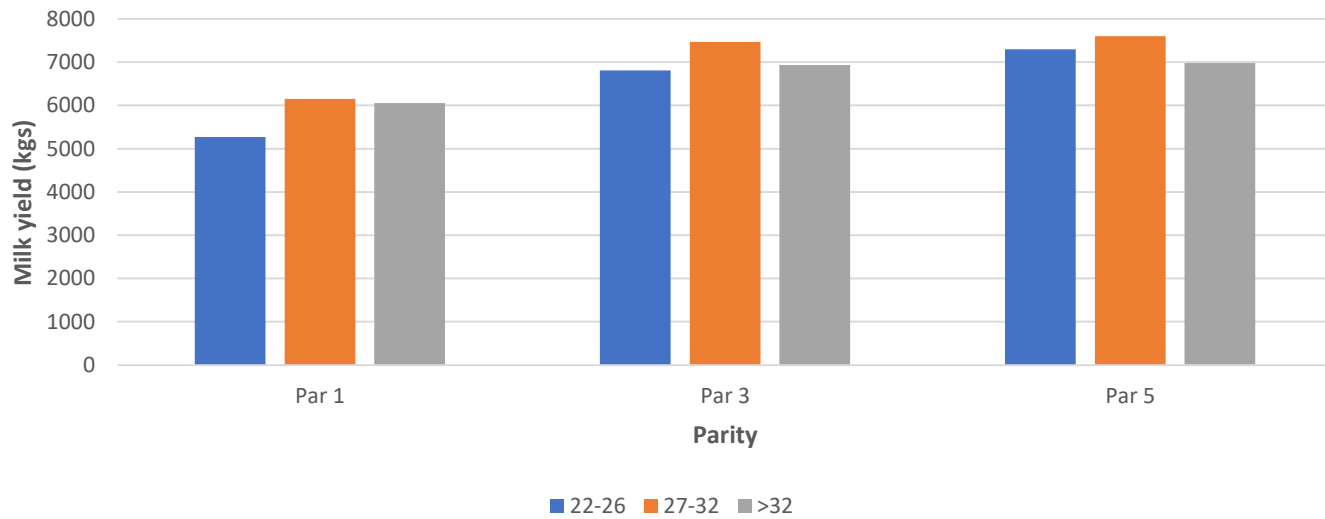
Distribution of afc_m



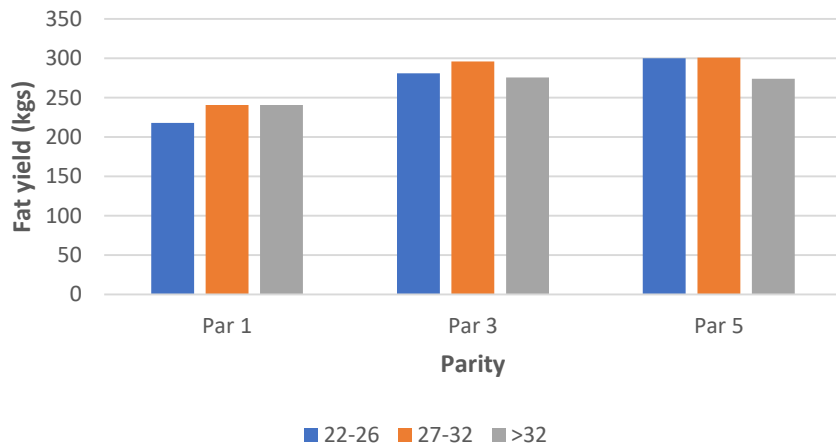
AFC Category	Number of records (animals)
Under 22M	950
Optimum 22-26M	118,861
27-32M	19,840
Over 32M	21,043
Total:	160,334

Mean	Minimum	Maximum
28	21	39

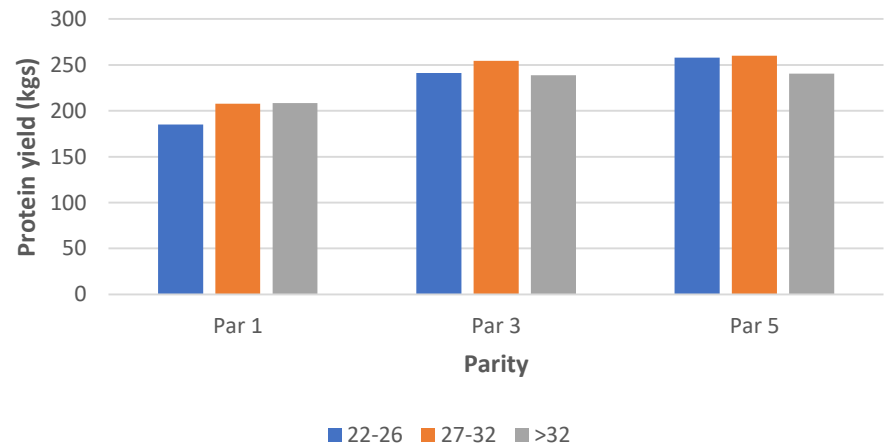
Milk Production



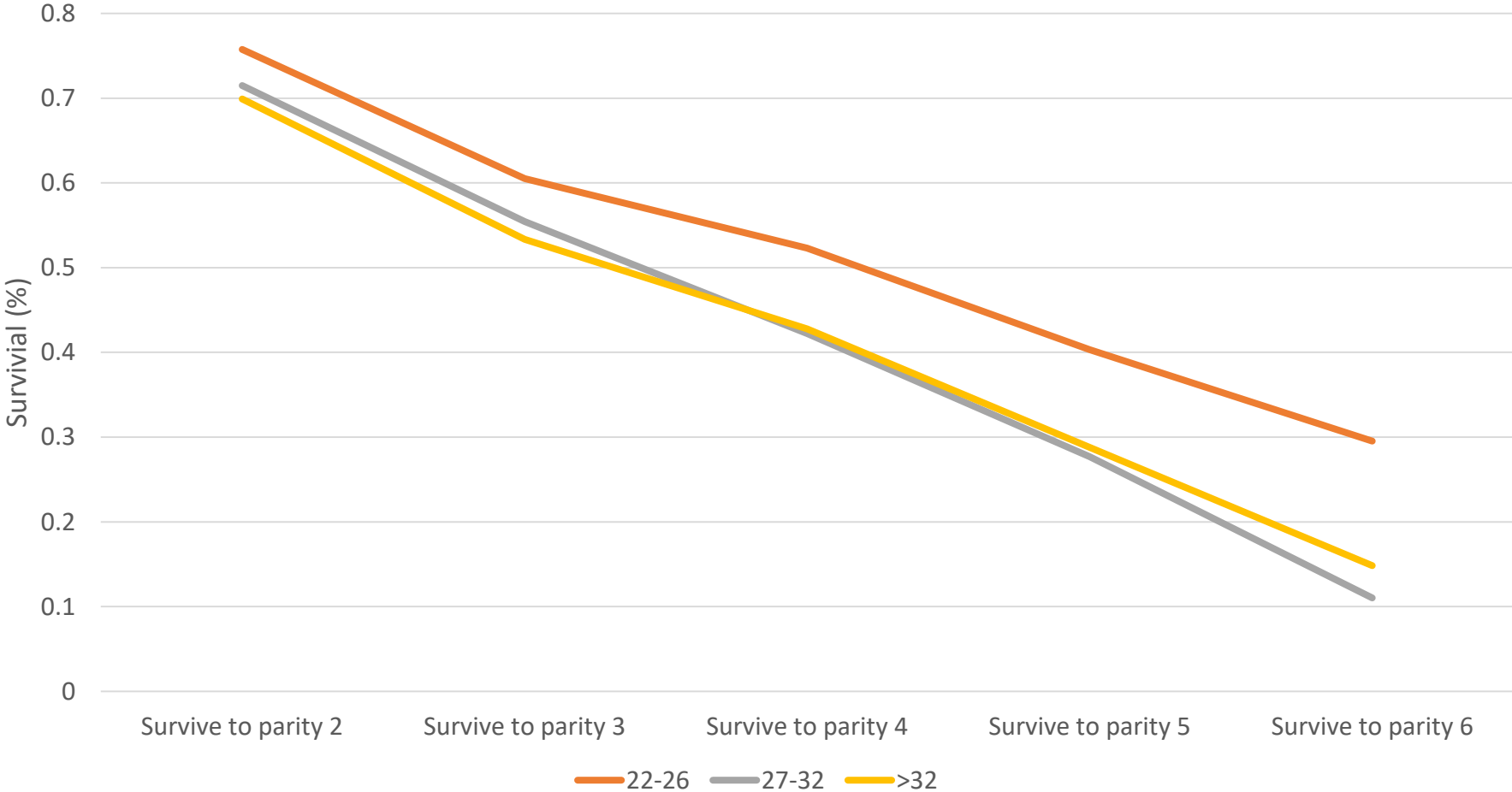
Fat Production



Protein Production



National Survival Statistics



In a 100-cow herd:

AFC	Survive to par 2	Survive to par 3	Survive to par 4	Survive to par 5	Survive to par 6
22-26	75.8	45.9	24.0	9.7	2.9
27-32	71.5	39.6	16.7	4.6	0.5
>32	69.9	37.3	16.0	4.6	0.7

Cost of replacing heifers					
	Survive to par 2	Survive to par 3	Survive to par 4	Survive to par 5	Survive to par 6
22-26	€38,475			€143,344	€154,166
27-32	€53,073			€177,570	€185,250
32+	€64,253	€133,966	€179,590	€203,879	€212,245

Difference of €25,778!

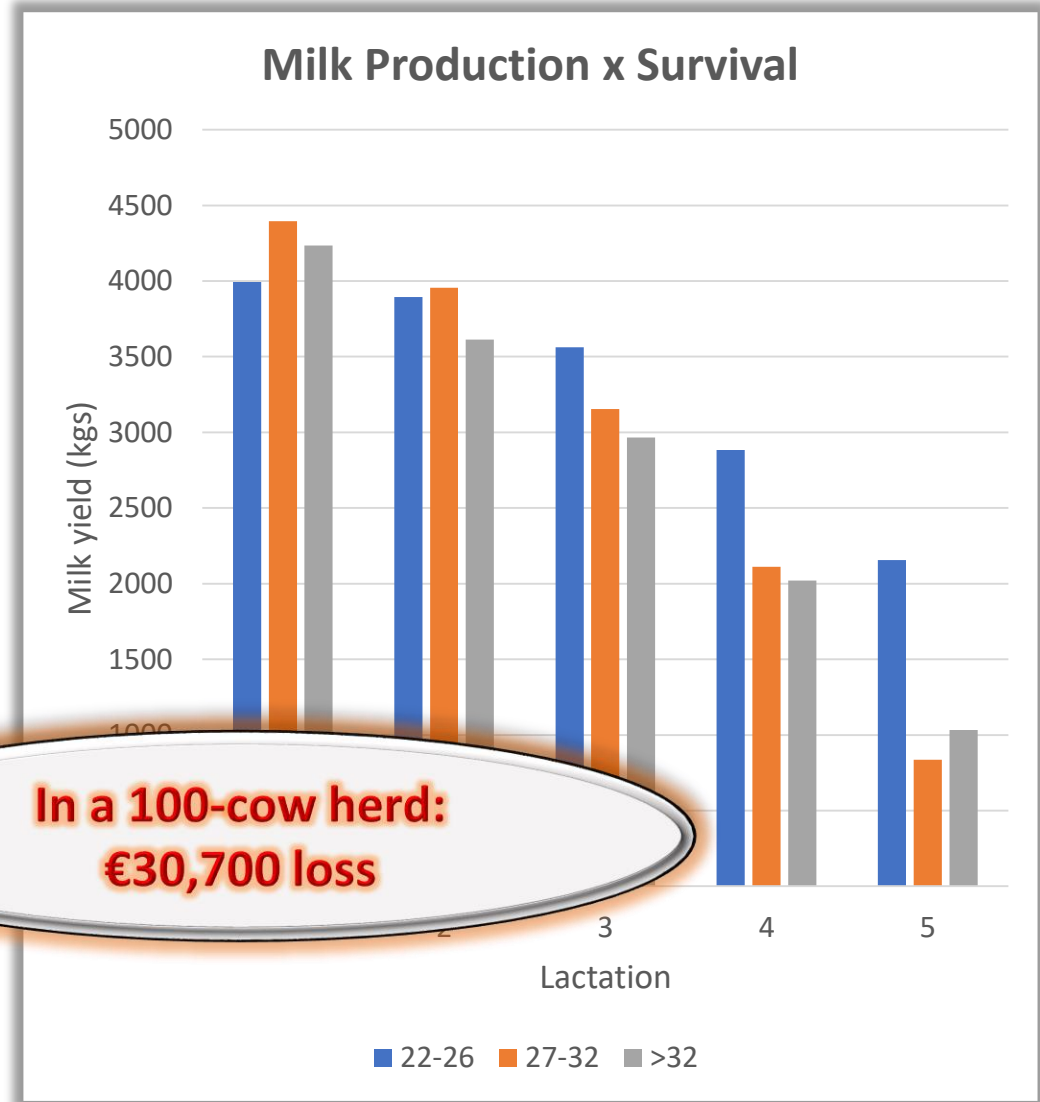
Production differences between AFC 22-26M and 32M+ when survival incorporated into milk:

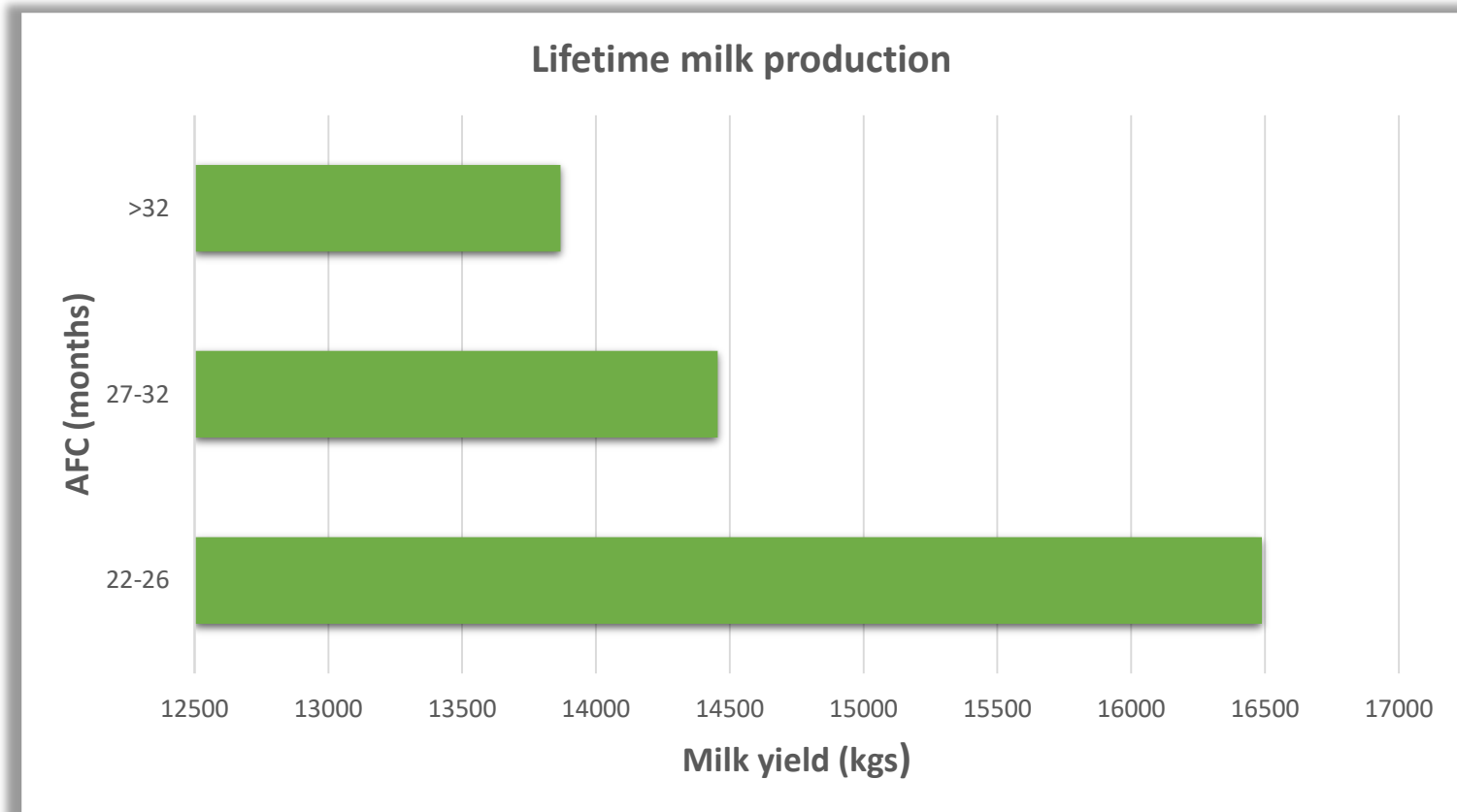
Par 1 (32M vs 22-26):

- 240 kg more milk
- 3 kg more fat
- 6 kg more protein

Par 4 (32M vs 22-26):

- 862 kg less milk
- 38 kg less fat
- 33 kg less protein





Put into perspective: Optimal 22-26 group producing 15% more milk over lifetime!

Conclusion

- The study highlights the importance of AFC for survival of heifers and calving at optimum 22-26 months for increased lifetime yield.
- Increases a cow's lifetime profitability.
- Sustainability element: Cows lasting longer in the herd and reducing the replacement rate. Calving heifers at an older age group results in additional unwanted methane produced.

Thank Moo!





Our Farmer & Government Representation



Our AI & Milk Recording Organisations



Our Herdbooks



Acknowledging Our Members