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Premium

Quality

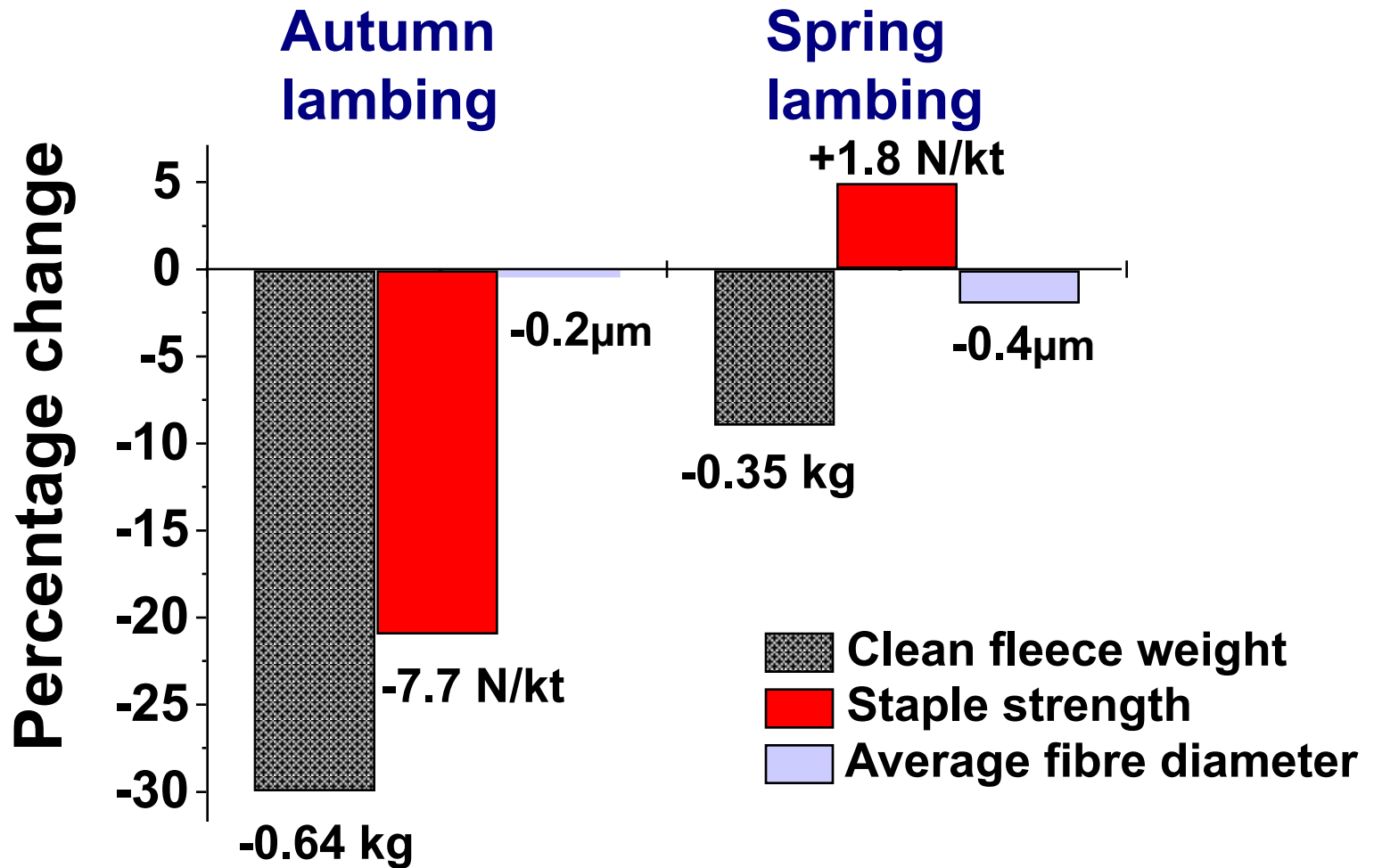
Wool

Strategies for Managing Wool Quality in Breeding Ewes

Produced for the CRC for Premium Quality Wool undergraduate program by;
David Masters, CSIRO, Animal Production.



Wool production and quality in breeding ewes



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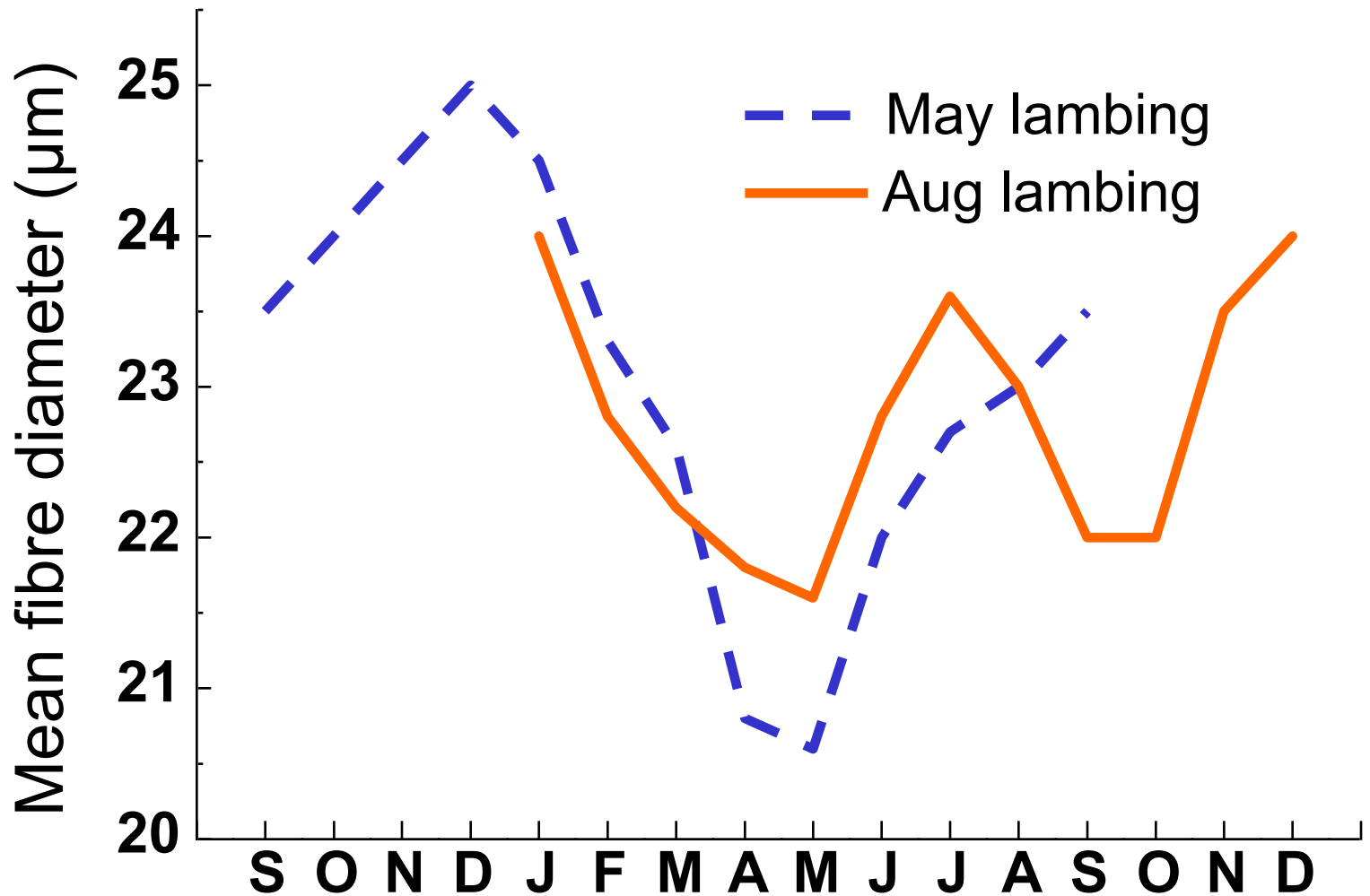
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Fibre diameter profiles for May and August lambing ewes

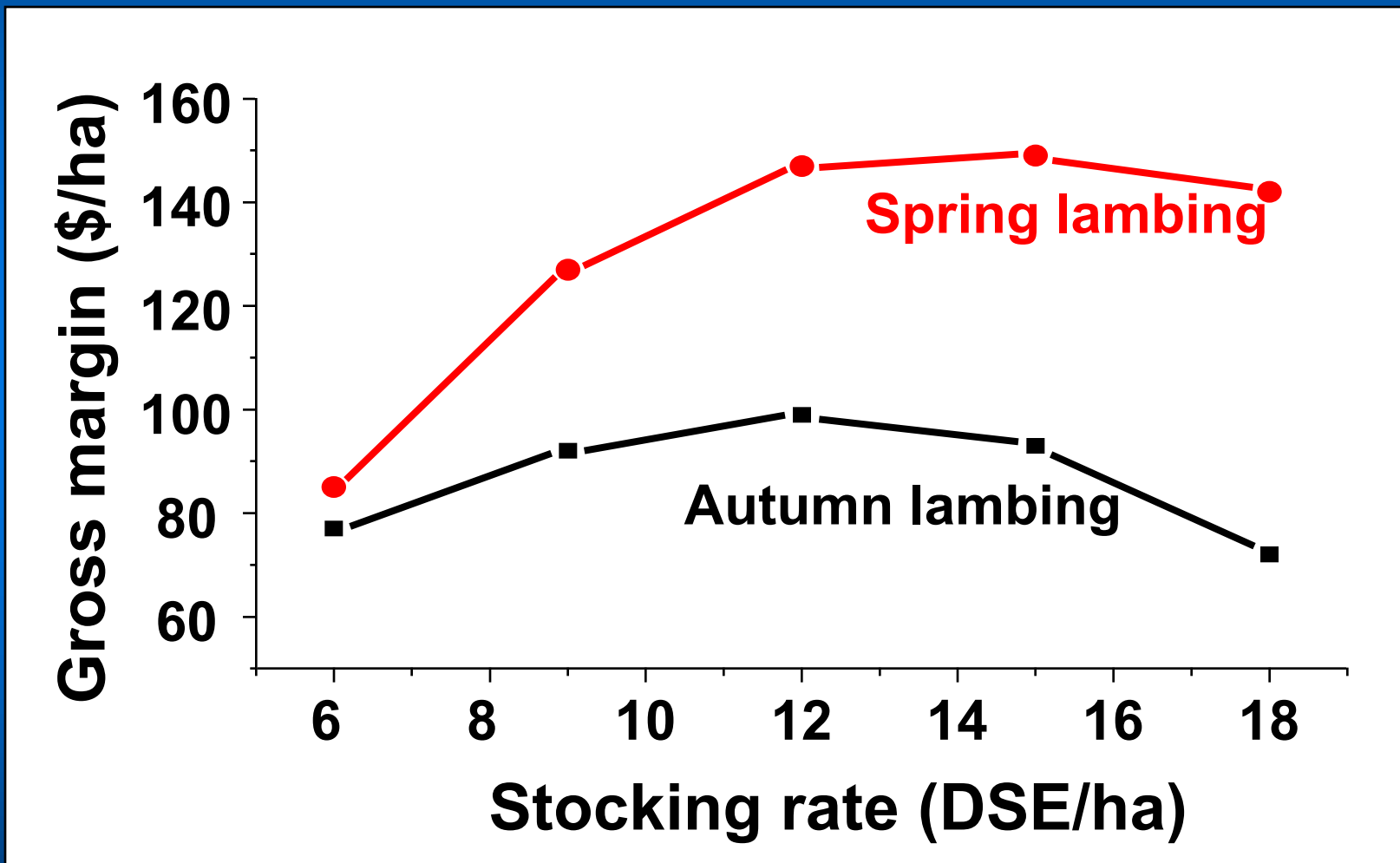


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Spring vs autumn lambing

Mediterranean environment/Staple strength NOT included



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Strategies to minimise the influence of physiological state of staple strength

- **Later lambing +ve**
 - potential higher stocking rates and overall productivity and/or
 - decreased supplementary feeding
- **Later lambing -ve**
 - smaller weaners
 - increased management of weaners (e.g. grass seeds, parasites, stress)

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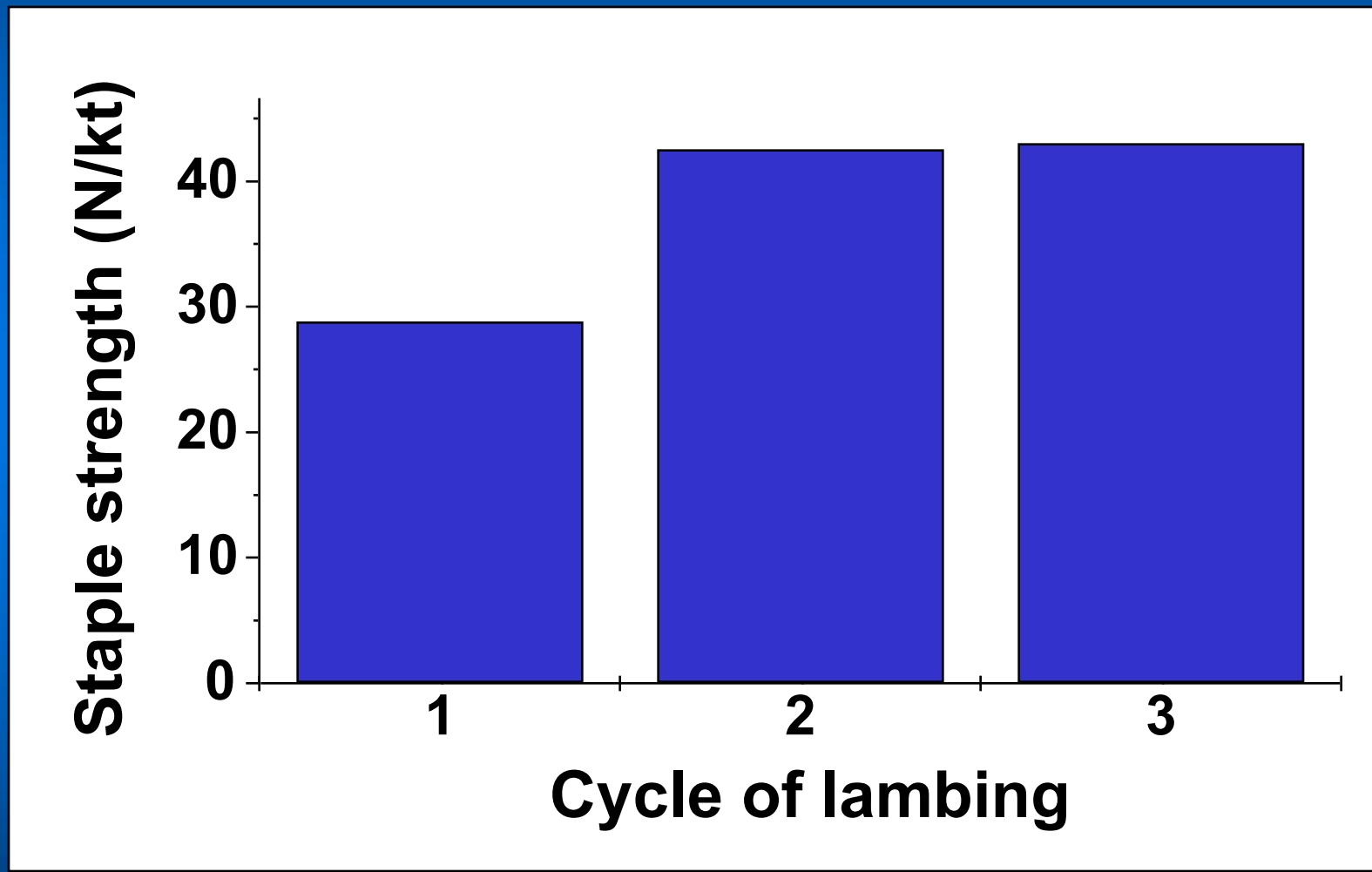
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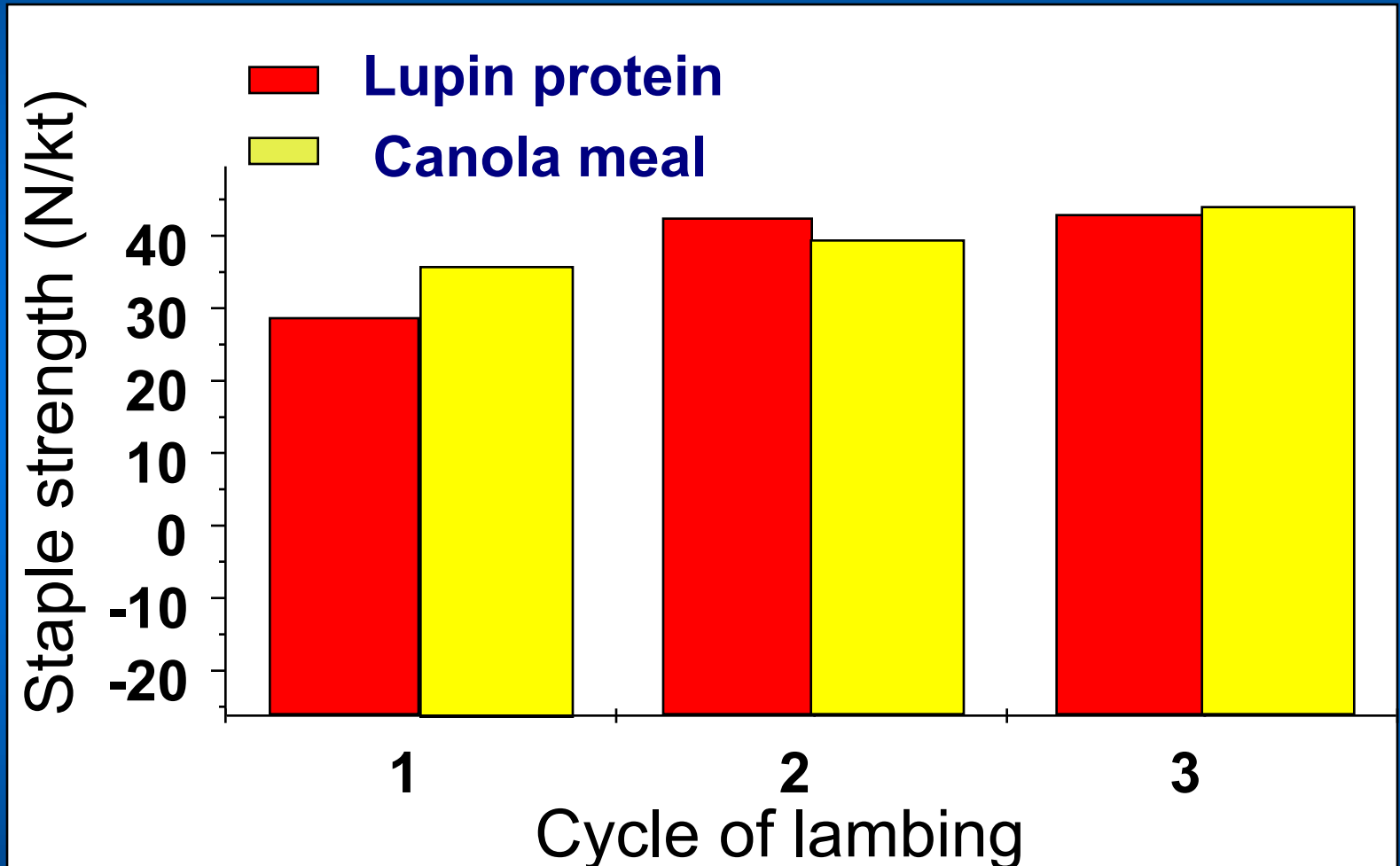
Effect of lambing cycle on staple strength



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Type of supplement and staple strength



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David Masters

Source: Masters and Mata (1998)



Survey of commercial flocks

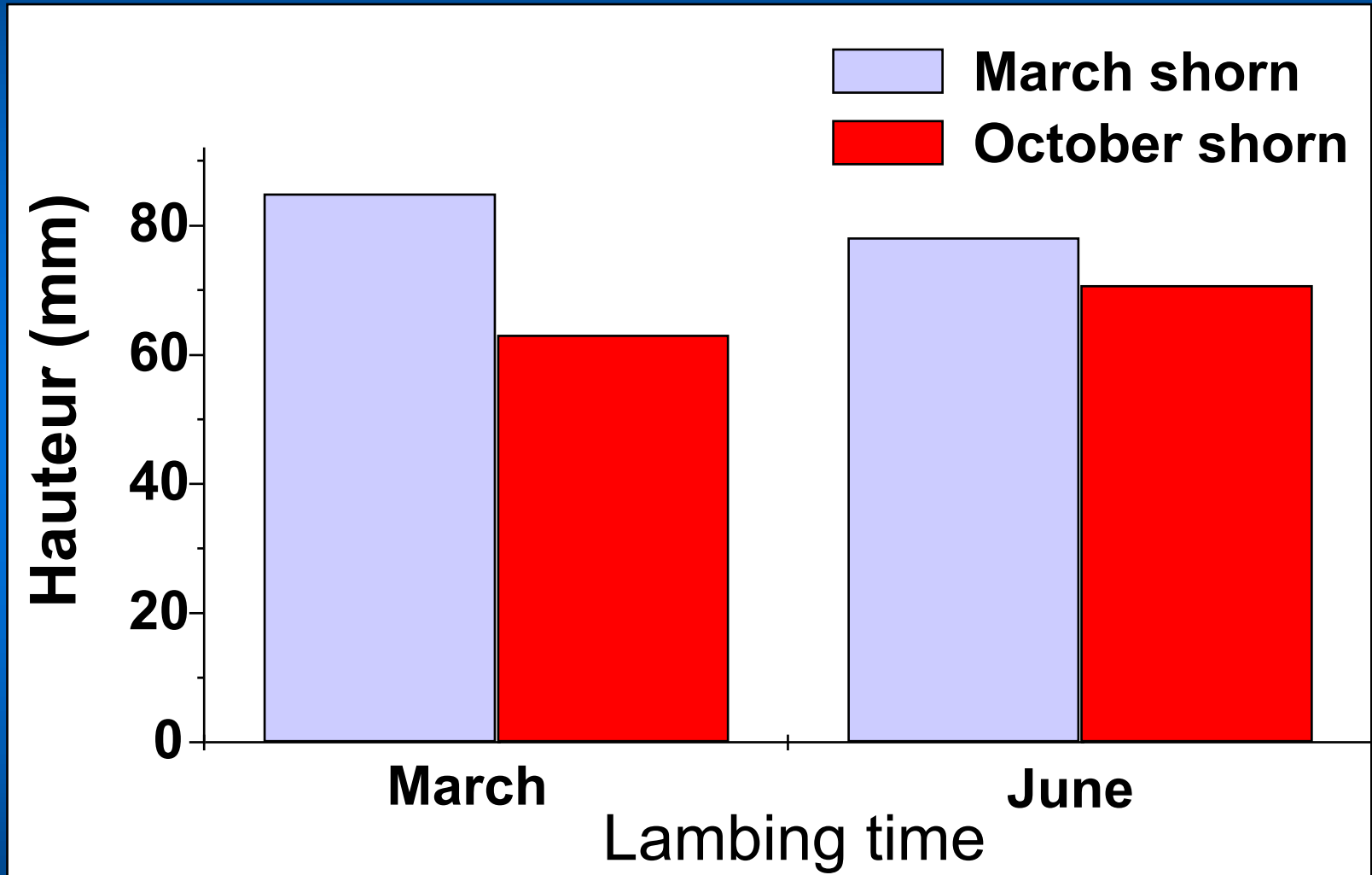
	Reared twins	Reared single
Clean fleece wt	3.7 kg	3.8 kg
Fibre diameter	22.8 μm	22.9 μm
Staple length	100 mm	102 mm
Staple strength	31 N/Ktex	34 N/Ktex

Why are the differences so small?

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Effect of time of shearing on Hauteur



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The main points

- **Reproducing ewes grow**
 - less wool
 - finer fibre diameter
 - shorter staples
- **Staple strength is often lower in reproducing ewes but:**
 - time of lambing is important
 - feeding protected proteins may increase wool growth and staple strength
 - shearing near the weakest point in the wool will decrease the negative impact of low staple strength on processing quality

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