

Lifetime Wool

Optimising ewe nutrition to increase farm profit

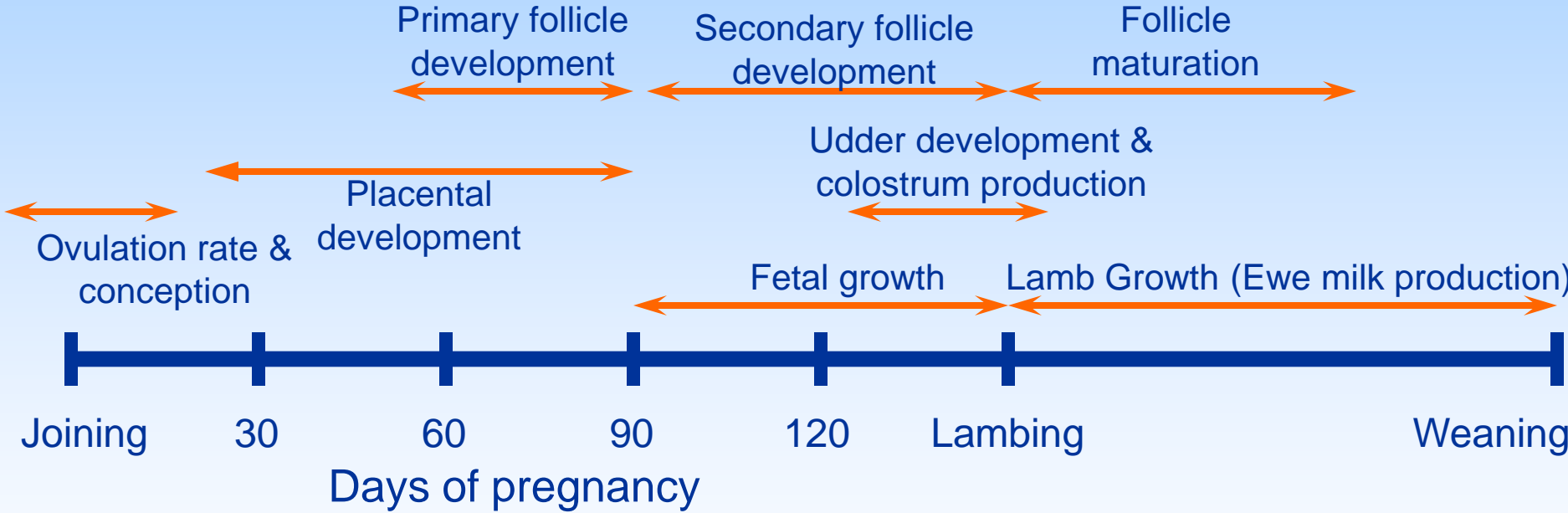
Answering the key questions

- On your farm, in your environment, with your sheep:
 - When are the critical times for ewe nutrition?
 - What are the critical targets for ewe nutrition?

Managing ewe nutrition

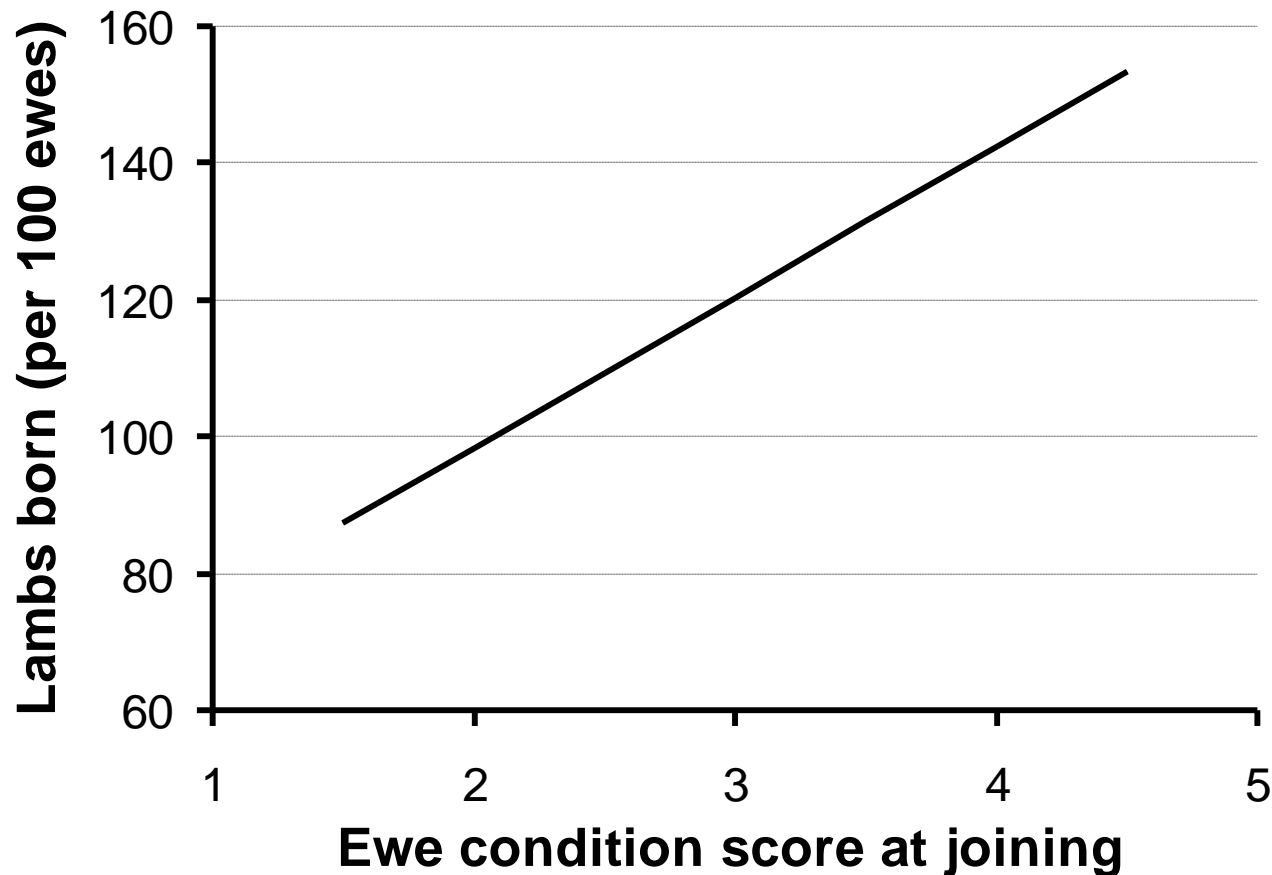
- The benefits of having ewes in the right condition:
 - Improved ewe health
 - Increased ewe wool production & tensile strength
 - Increased ewe reproduction
 - Increased lamb survival
 - Increased progeny fleece weight and decrease micron

The developing lamb: The processes ewe management can effect



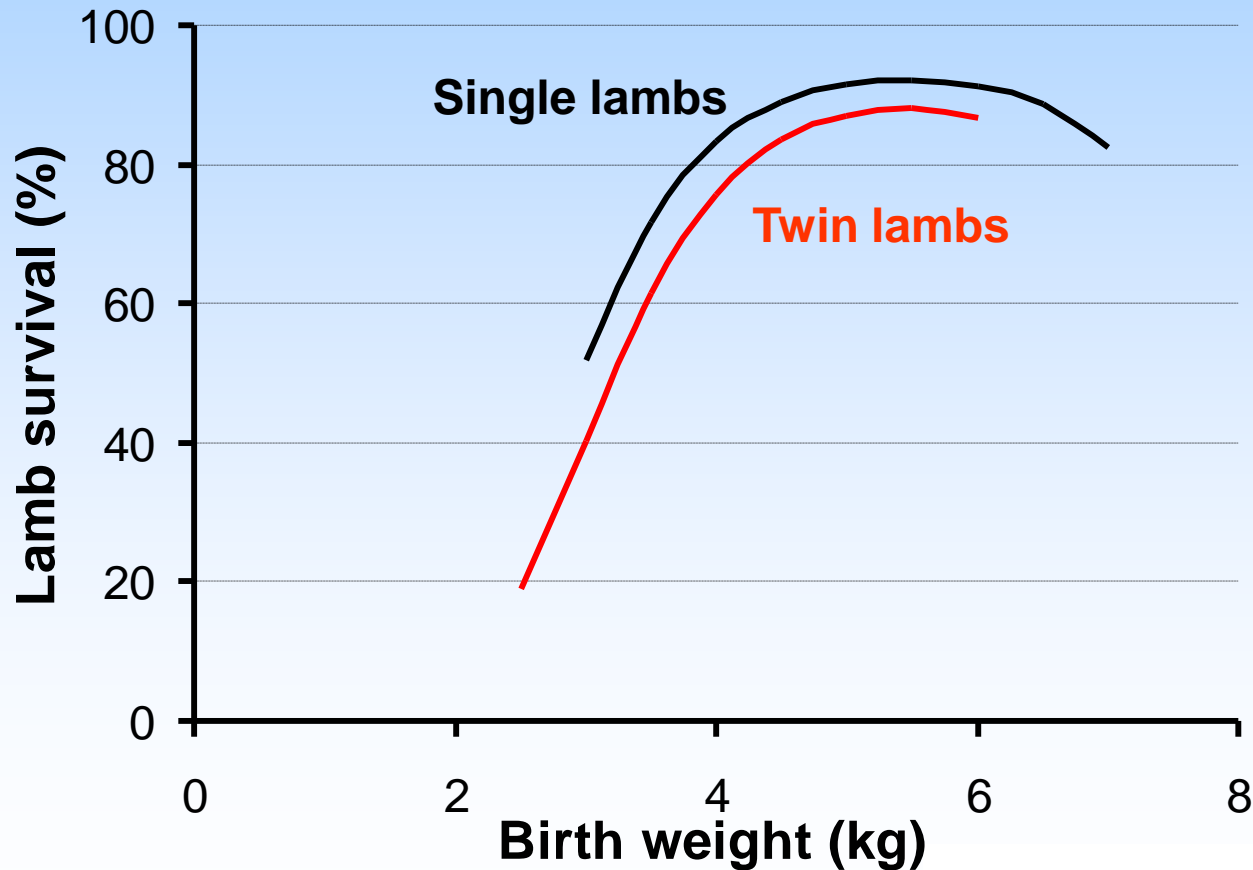
Wean more lambs

Ewe condition score at joining and number of lambs born

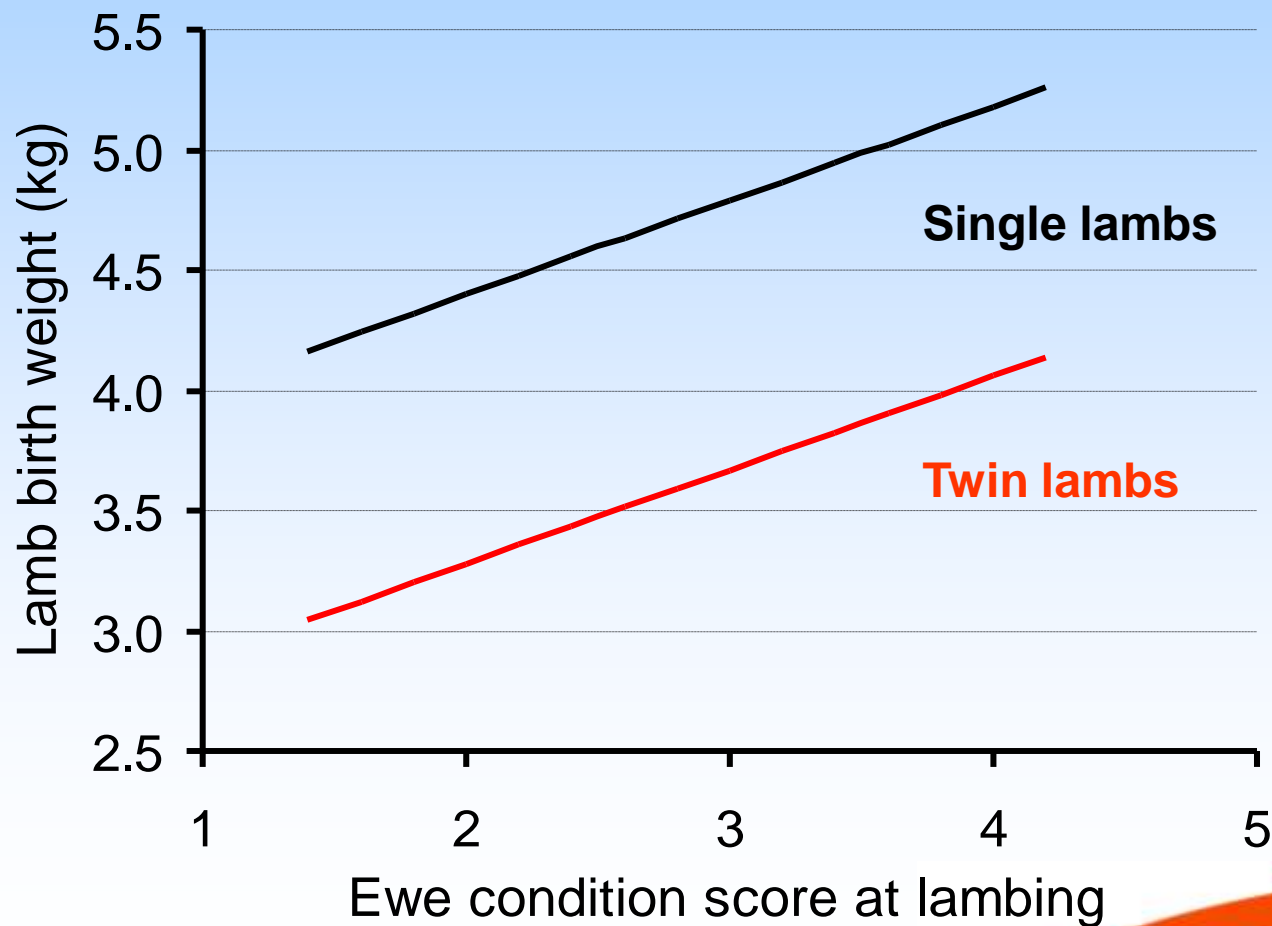


Farm/location	Low CS (< 2.7)	High CS (> 3.3)	Difference
Skipton	112	164	+ 52
Edenhope (maidens)	74	112	+ 38
Ararat	124	149	+ 25
Edenhope	78	106	+ 28
Edenhope	110	130	+ 20
Ararat	132	147	+ 15
Dunkeld	92	103	+ 11

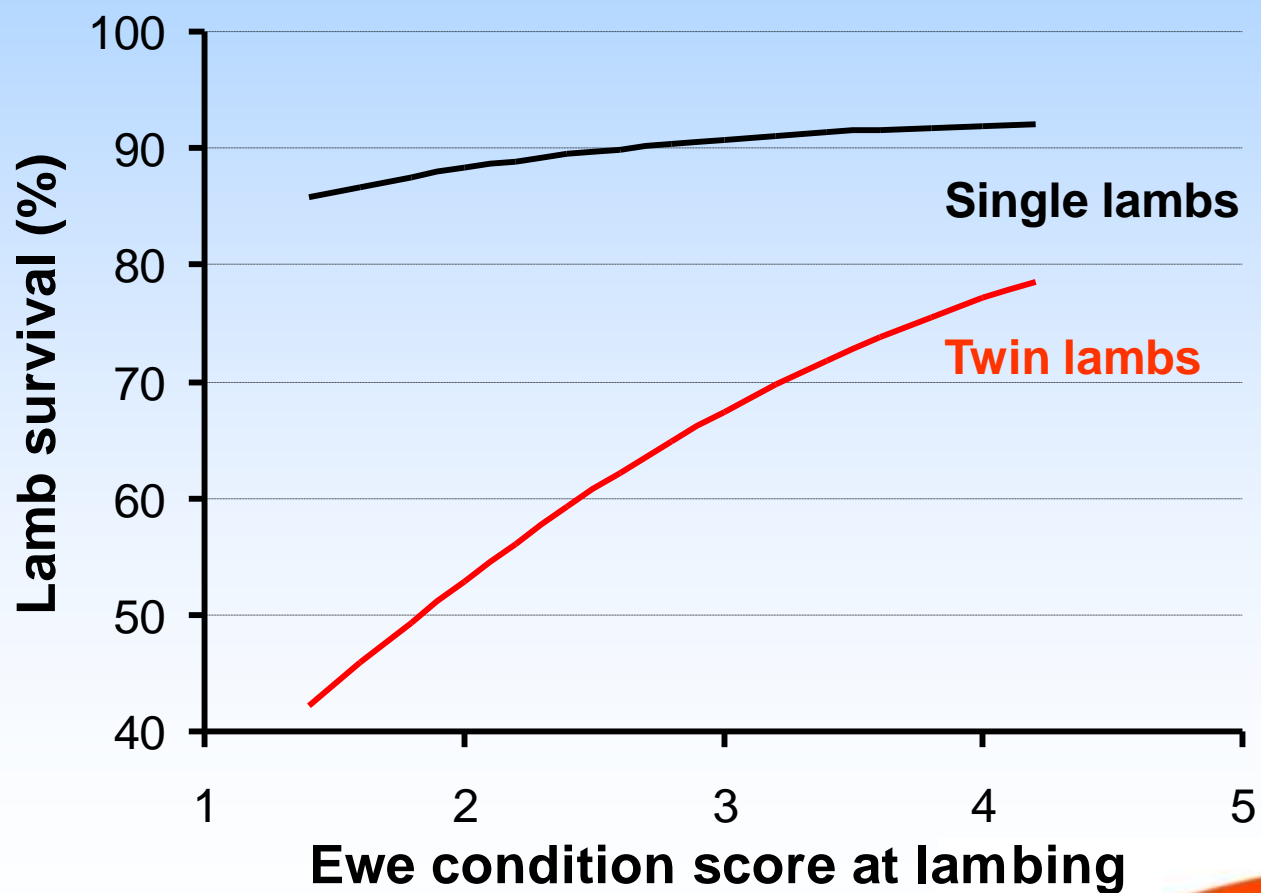
Lamb birth weight and survival



Ewes in better condition at lambing have heavier lambs



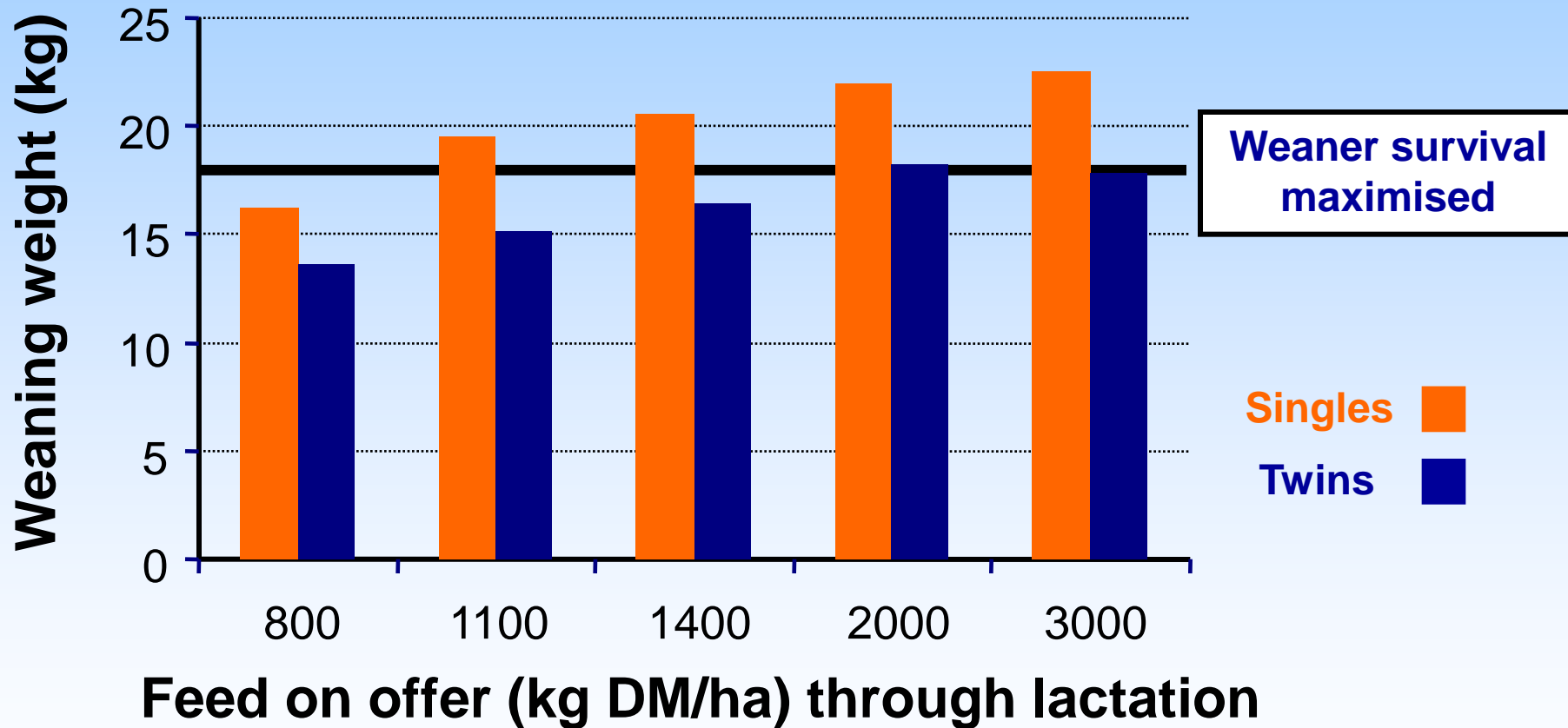
Ewe condition score at lambing and lamb survival



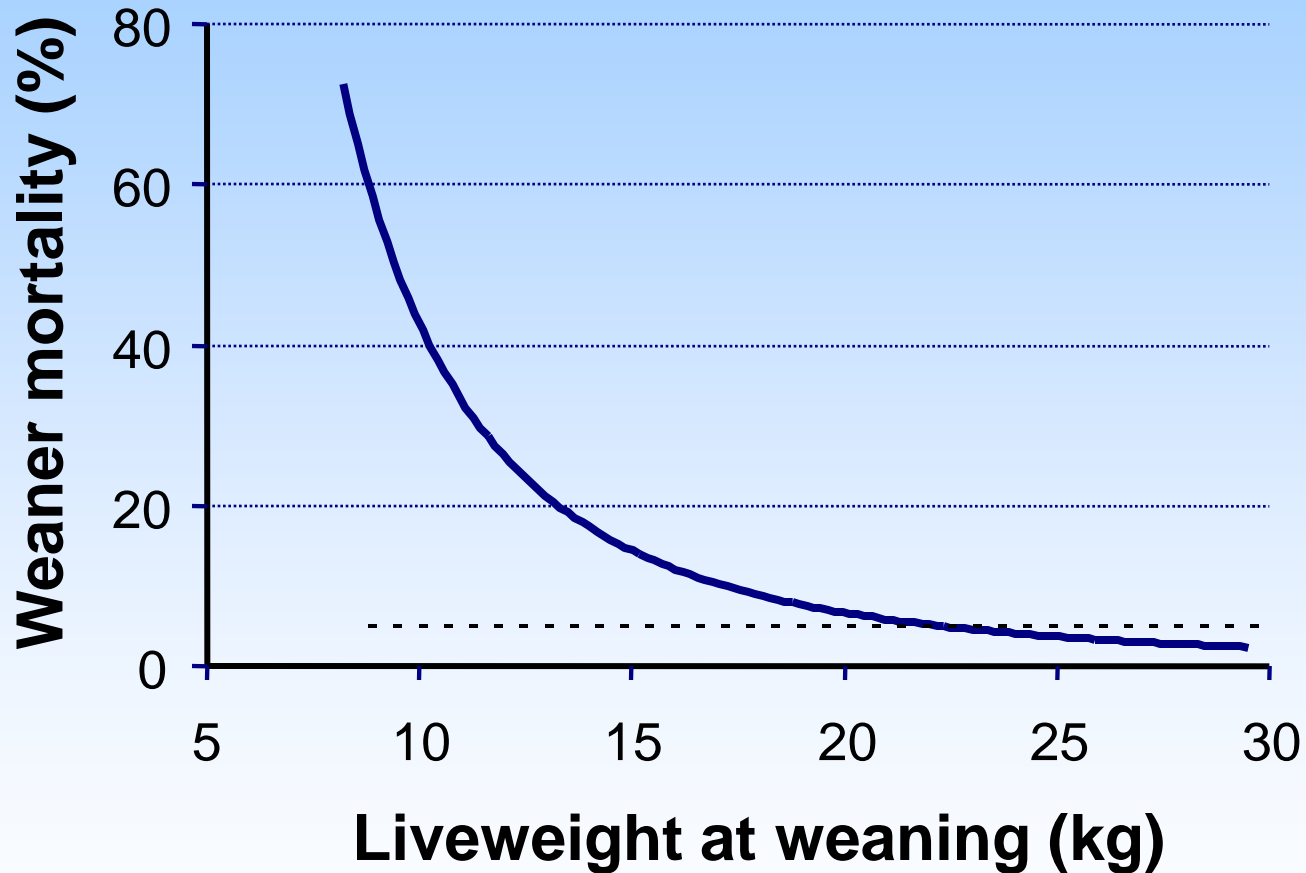
Farmer case studies

	CS at lambing	Survival of singles (%)	Survival of twins (%)
Western Victoria (4 sites)	2.2	74	38
	3.1	86	56
All states (16 sites)	2.2	83	57
	3.0	90	67

Improving ewe nutrition through lactation means better weaners

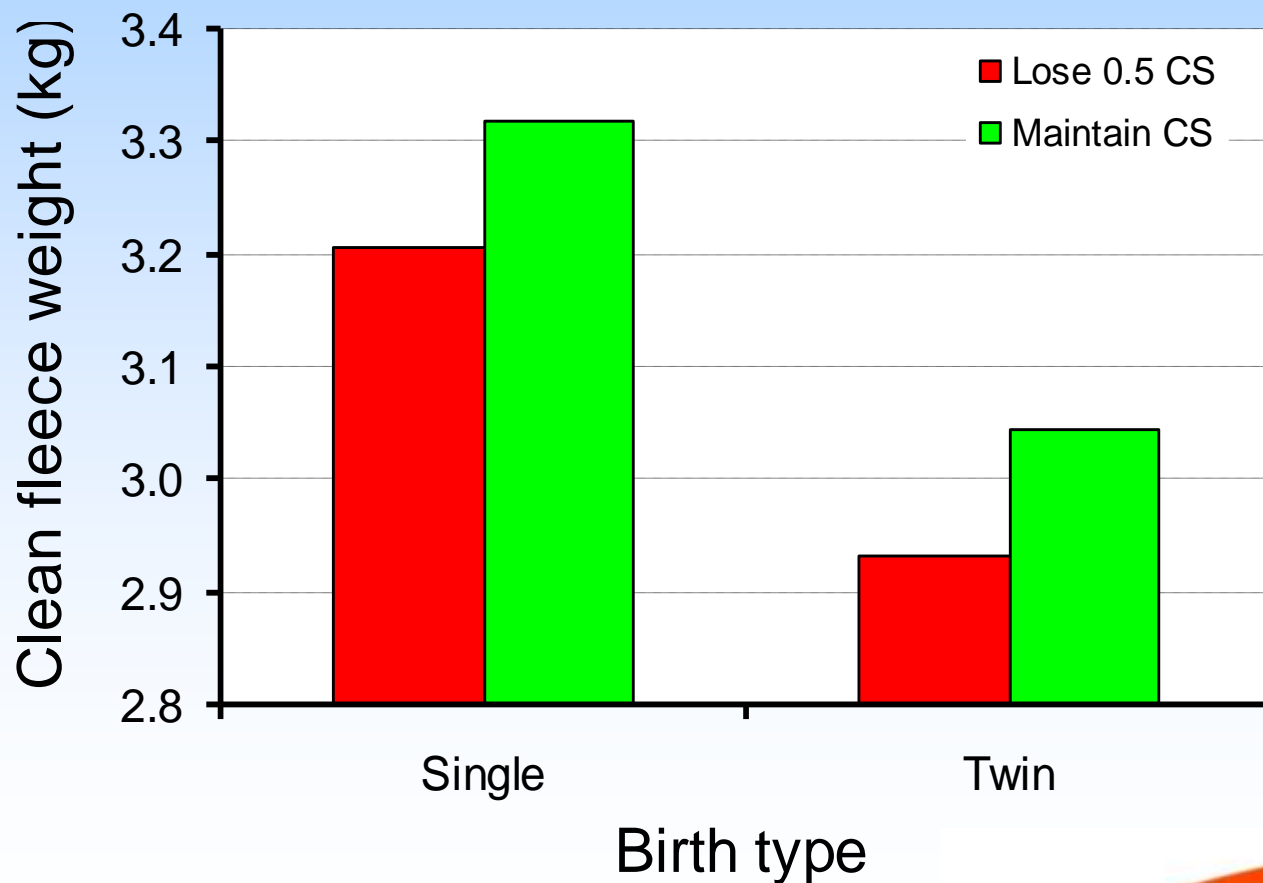


Liveweight at weaning explains 95% of differences in weaner mortality

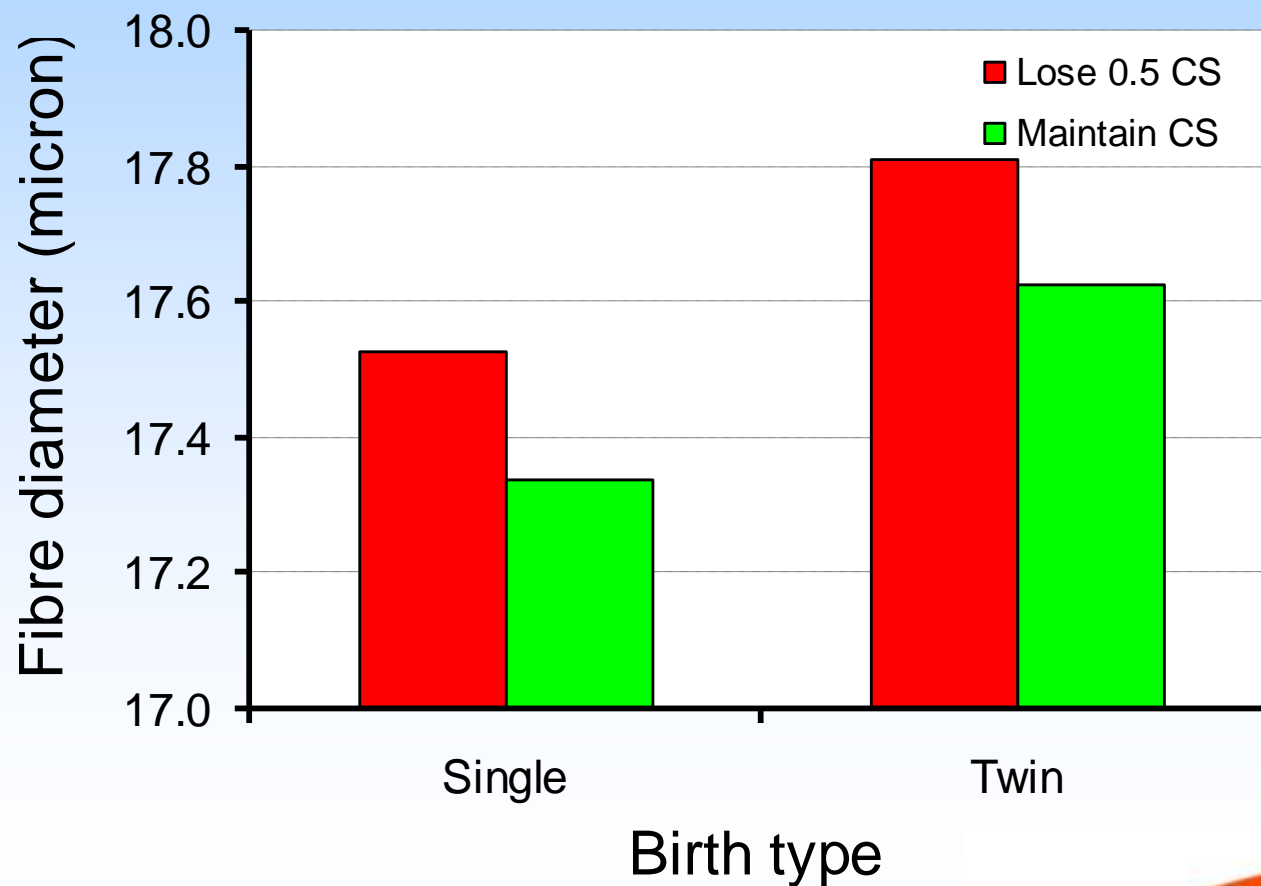


Produce more profitable progeny

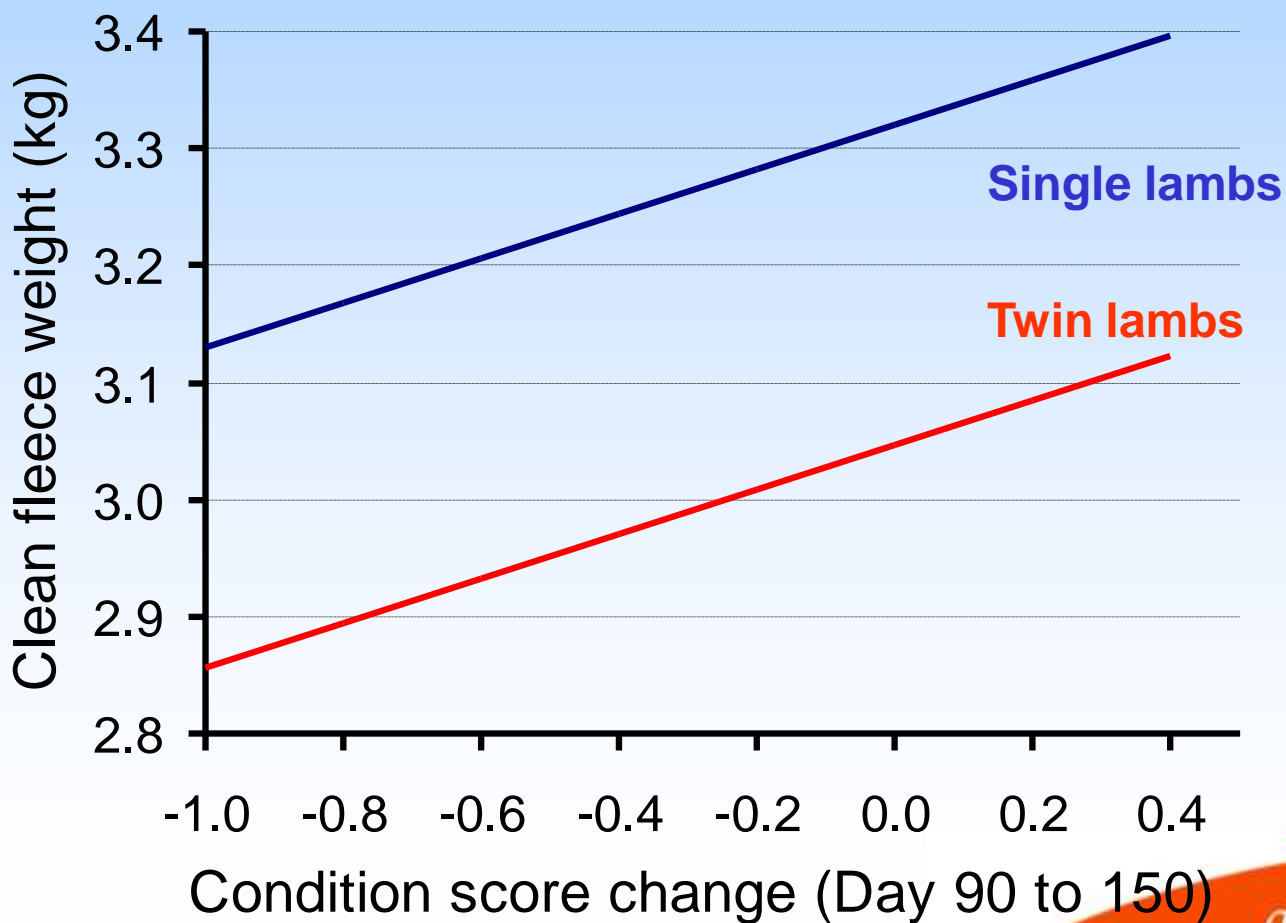
Progeny clean fleece weight is affected by ewe nutrition from early to mid-pregnancy



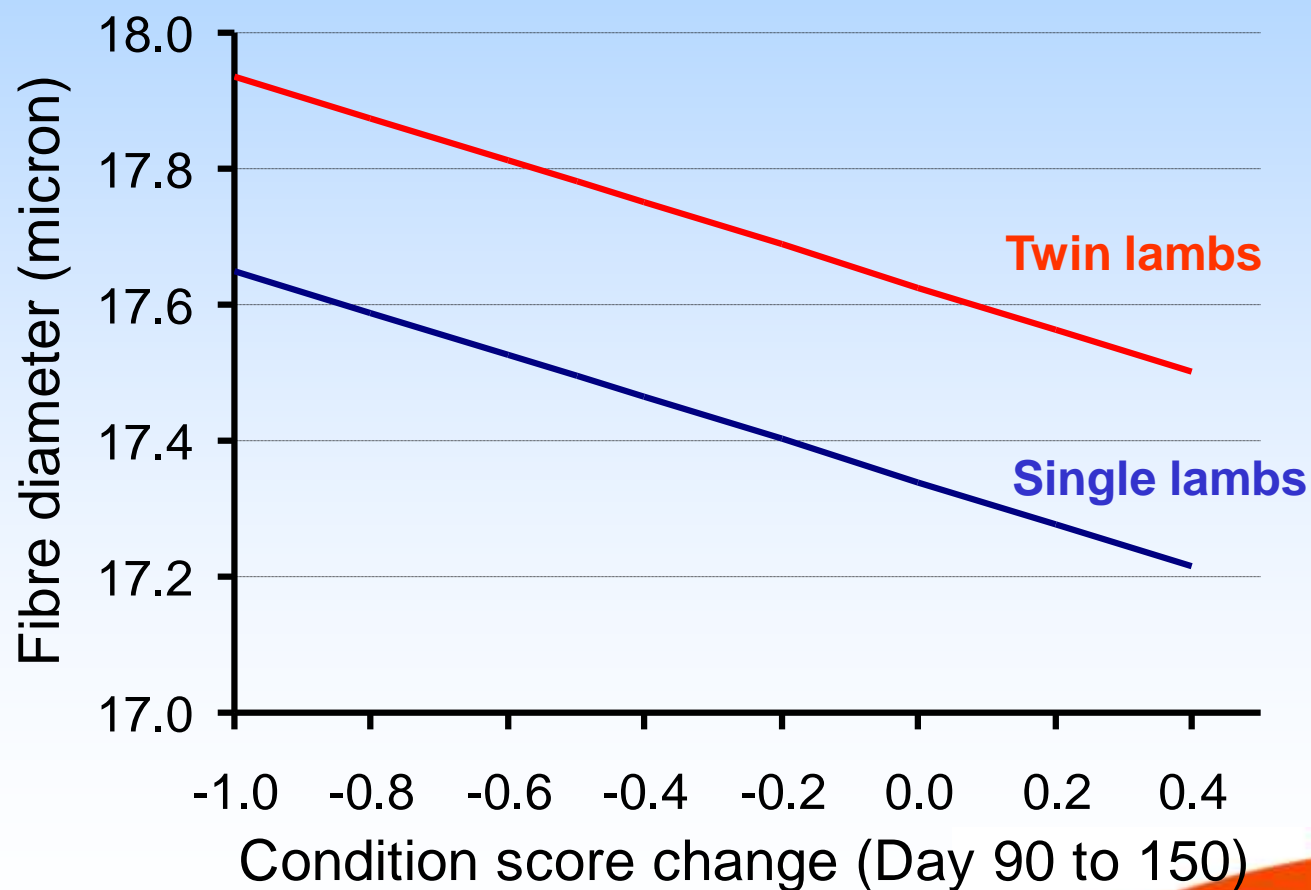
Progeny fibre diameter is affected by ewe nutrition from early to mid-pregnancy



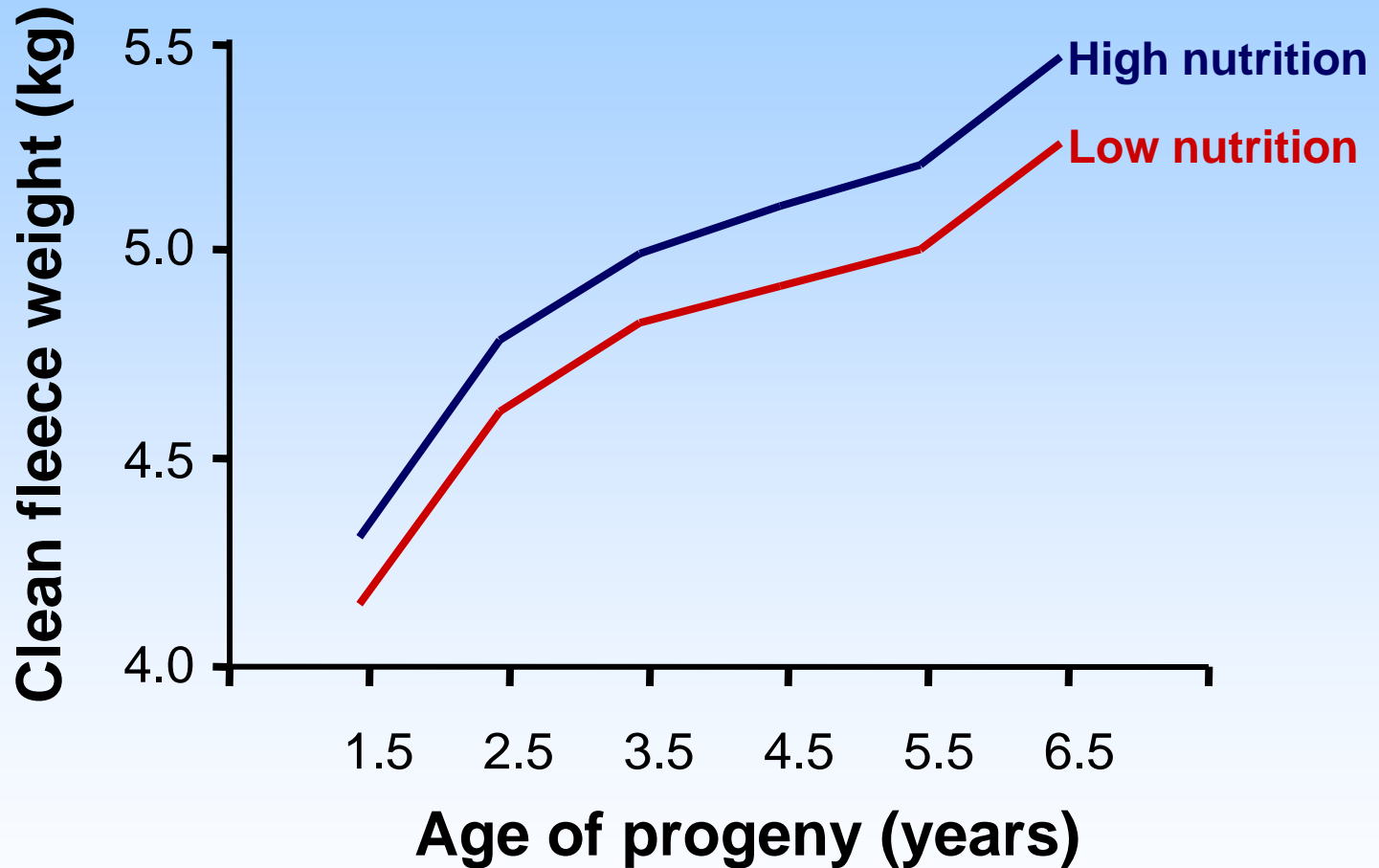
Late pregnancy nutrition effects progeny fleece weight



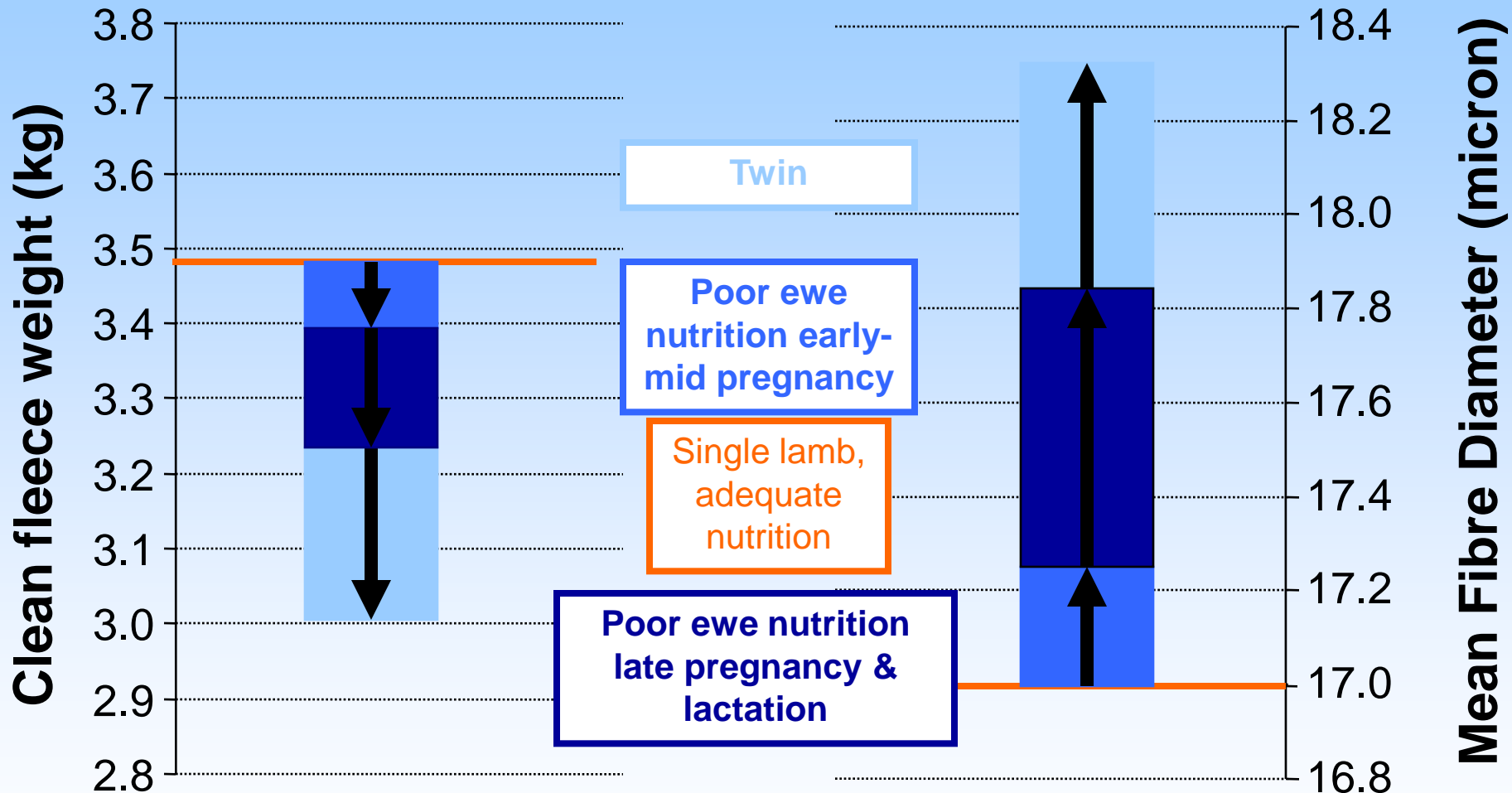
Late pregnancy nutrition effects progeny fibre diameter



The effects are permanent



Adding up the differences



Mean Fibre Diameter (micron)

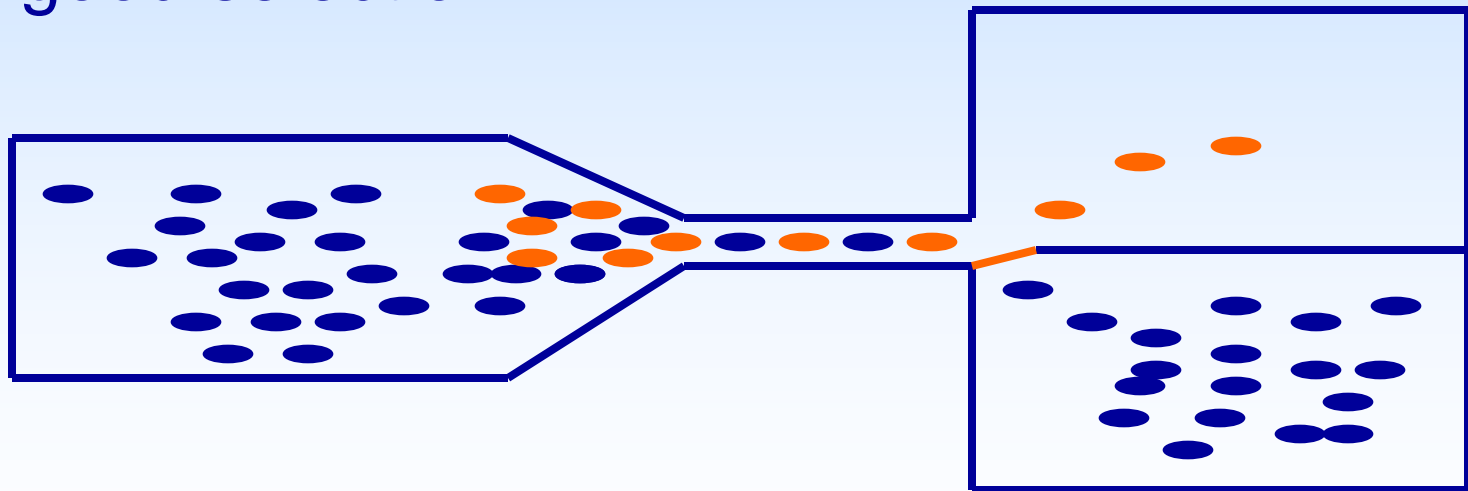
Clean fleece weight (kg)

From mobs to individuals: tailor made nutrition

- Use condition scoring to treat ewes as individuals not mobs
- Manage 'fat' and 'thin' ewes differently after weaning and in late pregnancy
- Meet the requirements of each ewe (singles and twins, fats and thins,..)

How do I monitor a mob?

- Only need to assess 50 ewes
- The 50 ewes need to be randomly selected
- Letting half the mob run through and then drafting out every second ewe until you get 50 will give a good selection



Individual sheep management

- Using condition scoring to treat ewes as individuals not mobs



Identify lighter ewes
in the race

Draft out light ewes
and manage
accordingly



Measure to manage

- **Monitoring ewes allows informed decisions**
- **Monitoring early allows timely management**
- **Get higher ewe weights and condition scores at joining by maximising weight gain on green feed post-weaning**
- **Feed early and less rather than more and late**

Economics in Lifetimewool

The role, the results and the
future

John Young

Farming Systems Analysis Service

MIDAS Results

Value of the information to farmers

- \$1 500 to \$38 000 / farm
- 40c to \$7.00/ewe, mostly \$2.00/ewe
 - Effective times of lambing
 - Growing season
 - Cereal-sheep zone
- Progeny Flc Value : Progeny Survival (50:50)

Robust recommendations

Profiles unaffected by

Wool price	+33%, -33%
FD premium	+50%, -40%
Meat price	+25%, -25%
Grain price	+100%, -25%
% ewes in flock	
Pasture type & growth	

Recommended Profiles

Lambing on green feed

- moderate condition loss from joining to day 90, provided the condition can be regained prior to lambing on green feed
- aim for Condition Score 3 at joining

Recommended Profiles

Lambing on dry feed

- Maintenance or moderate condition loss from joining to day 90
- maintenance from day 90 to lambing
- aim for Condition Score 3 at joining

‘Lifetime Ewe Management’

- Nationally accredited training course based on key outcomes from **lifetimewool**
- *‘If the hand will forget, show me and I may remember, involve me and I will understand’.*
- 4 producers per group – self formed & interactive
- 6 sessions per year x 2 years – facilitated by local consultant

• Demonstrated to work

What's in LTEM for producers

- Training in condition scoring, pasture assessments and feed budgeting
- More targeted ewe management to optimise stocking rates and manage risks
- More efficient utilisation of pasture and supplements
- Improved ewe reproductive rates, progeny survival and productivity
- Opportunities to learn from other sheep producers

Measure to manage

- Producers can benefit from knowing the condition score of their ewes
- This allows producers to make decisions about their productivity and manage risk to avoid “disasters”
- Condition of ewes at lambing drives productivity & how ewes got to that condition is important for profitability
 - Late lambing flocks are more profitable and have different optimum condition score targets

Format for each group meeting

- All producers visit each farm
- Trickle-feed results from lifestimewool relative to stage of reproductive cycle
- ‘Hands-on’ activities
 - Condition scoring (CS) 50 ewes/mob [recorded in A5 booklet]
 - Assessment of Feed On Offer (FOO) in target mob paddock
 - Individual producers setting CS targets for next period based on understanding of the impacts of CS on ewe and progeny performance, feed resources available and associated costs.
 - Calculating a CS budget using feed budget tools.

The program works – VIC ‘pilot’

	Mean
Structure of meetings	4.6
Timing of meetings	4.4
Quality of facilitator	4.6
Was information useful	4.8
Was information easily understood	4.4



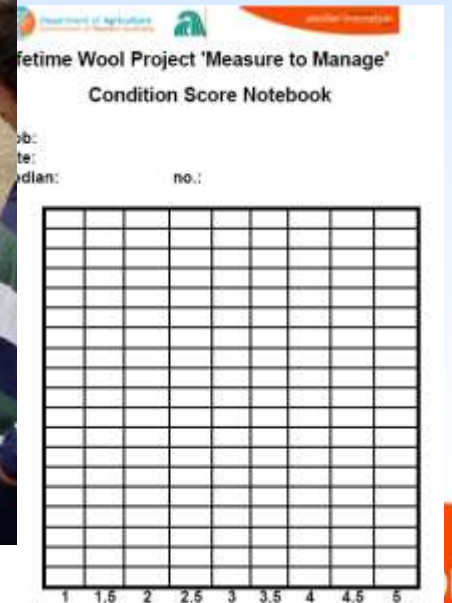
Skills changes

- Pasture assessment skills improved from 2.8 to 4.2 (Ave. scores: Scale 1-5)



Skills changes

- Condition score assessment skills improved from 2.2 to 4.2



Skills changes

- Feed budget assessment skills improved from 2.5 to 4.2



Practice changes

- 85 flocks (450,000 ewes) in VIC 'pilot' (2004 and 2005)
 - 10% increase in weaning rate compared to long term average (83 vs. 73%)
 - 50% decrease in ewe mortality (2.1% vs. 4%)
 - >\$20,000 per farm increase in value of production

Practice changes

- >90% participating farmers changed practice within 12 months
 - increase in the use of supplements
 - separating 'fats' and 'thins' between weaning and joining or during pregnancy
 - shortening of joining periods
 - pregnancy scanning and preferential management of twins

“Lifetime Ewe Management has allowed us to realize the full potential of our sheep and pasture enterprise through the use of a “measure to manage” philosophy”