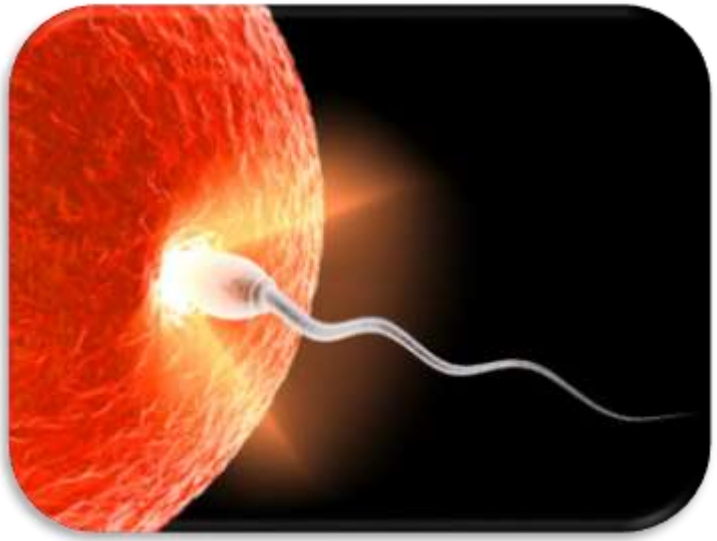
# INCREASING LAMB SURVIVAL


## MURRAY LONG

CLEAR VIEW CONSULTANCY

# CONCEPTION AND SURVIVAL

## EFFECT OF A 10% INCREASE



GROSS MARGIN ($/Ha)

+1.8 - 6.2 %

+3.6 - 12.1%

Source: MLA/AWI report McEachern et al 2008.

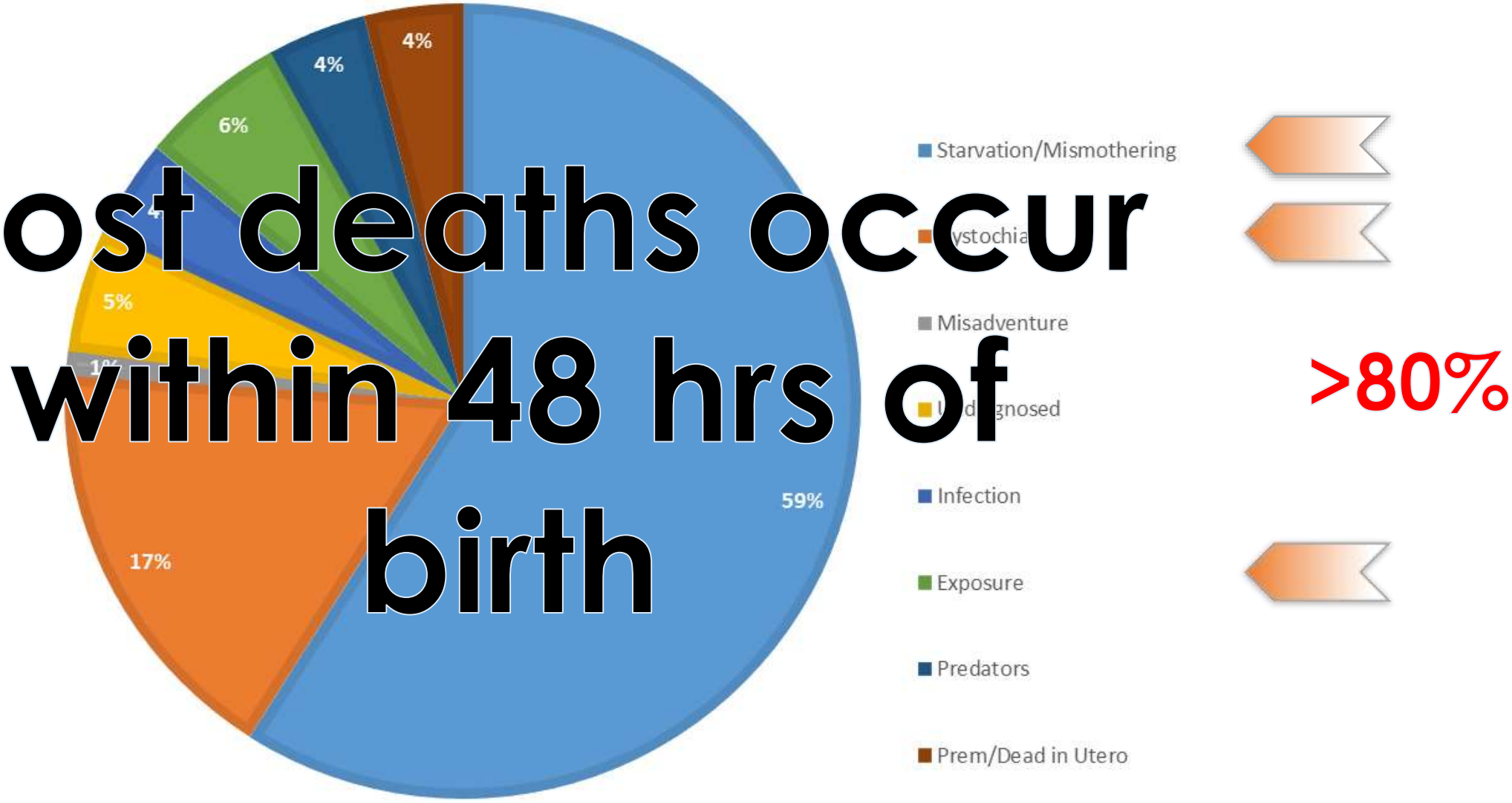
# NATIONAL AVERAGES

- 40.6 MILLION EWES
- Av 130% CONCEPTION
- 60-90% MARKING RATES

**15 FT DEEP**

**X 45**

# CAUSES OF LAMB MORTALITY

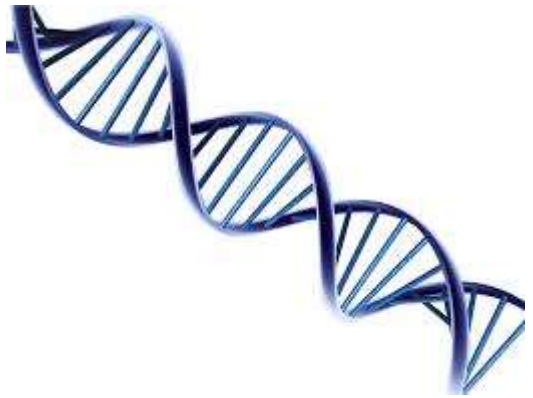



**Most deaths occur within 48 hrs of birth**

**>80%**

# SOLUTIONS

- GENETICS



- MANAGEMENT

# GENETICS

- BREED/GENES

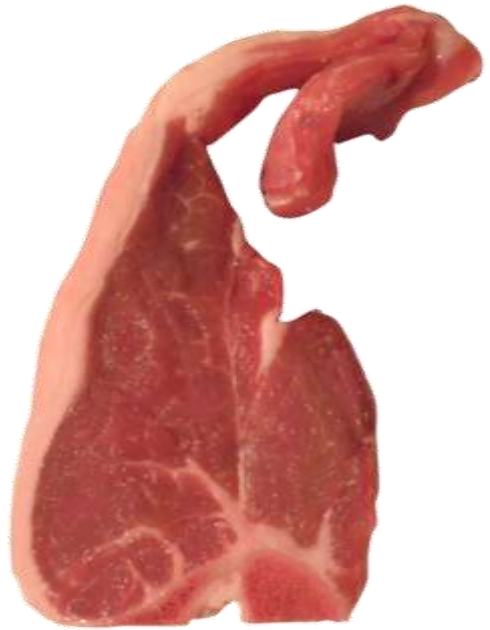
- GENETIC MAKE-UP

LAMBPLAN ASBV

MERINOSELECT ASBV

# INCREASING SURVIVAL WITH ASBV's

HIGHER GROWTH, MORE MUSCLE and FAT = MORE LAMBS

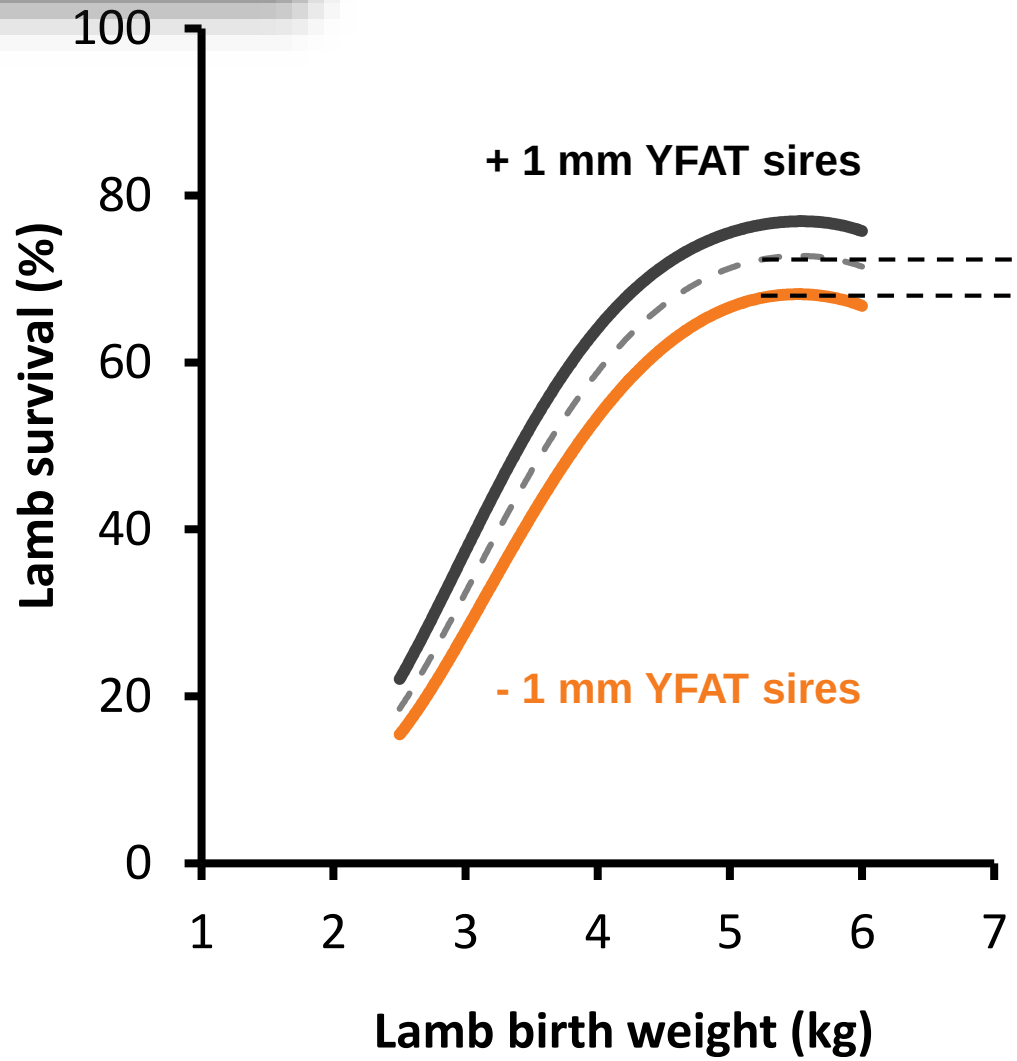


per unit; **8%** + **6%** + **25%**

**GENETIC FAT IS AN EXCELLENT GENETIC INSURANCE POLICY…**

**NOT A SELECTION CRITERIA TO MORE LAMBS**

# MORE LAMBS..
# ALIVE TO WEANING




**Genetic fat protects twin born lambs**

**1 mm YFAT = 5% lambs**

**Higher lamb survival from high fat sires in the Sheep CRC INF (genetic corr. +0.34)**

# IN A TOUGH YEAR

## 2009 - EWES SCANNED WITH 163% LAMBS IN UTERO

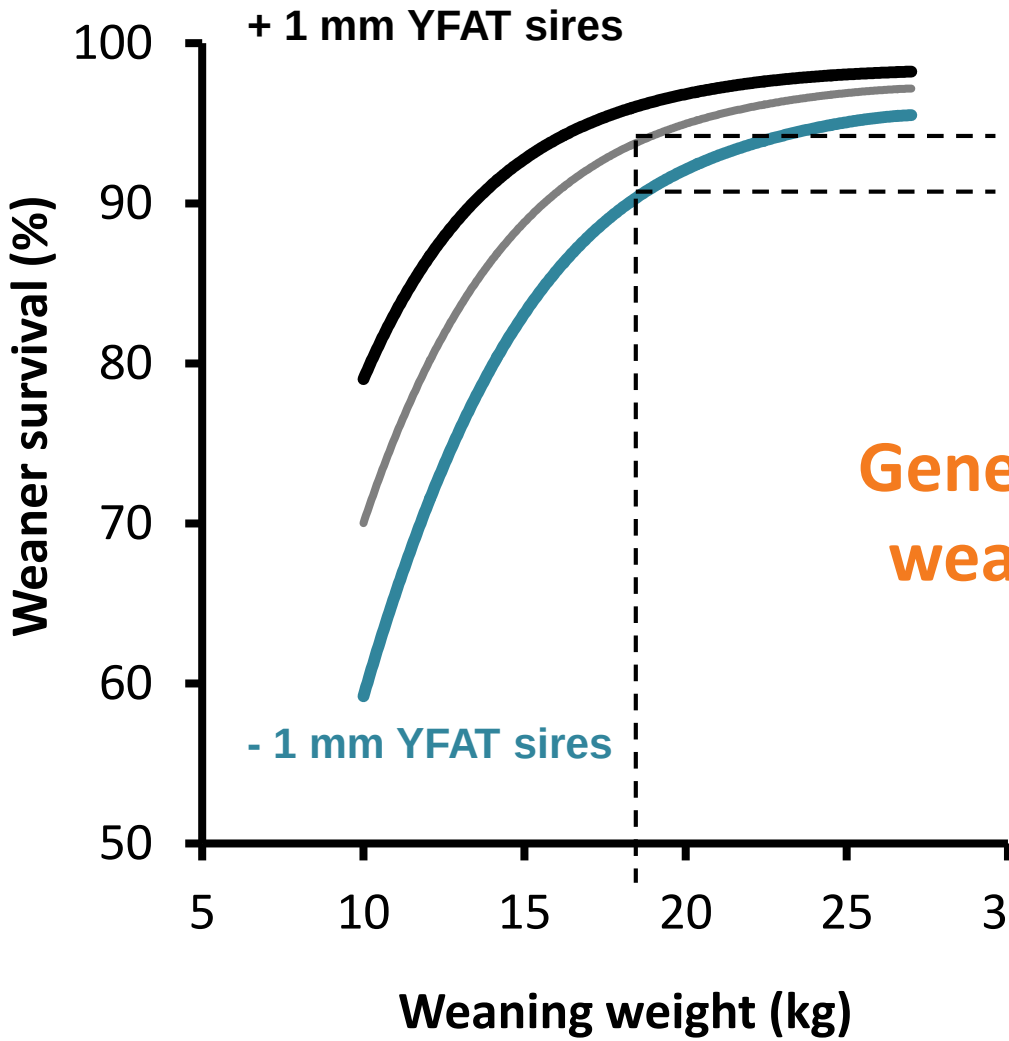
**SIRES WITH ASBV's LEANER THAN -0.6**

**75% SURVIVAL**

**SIRES WITH ASBV's FATTER THAN -0.6**

**87% SURVIVAL**

# MORE LAMBS SURVIVE AFTER WEANING

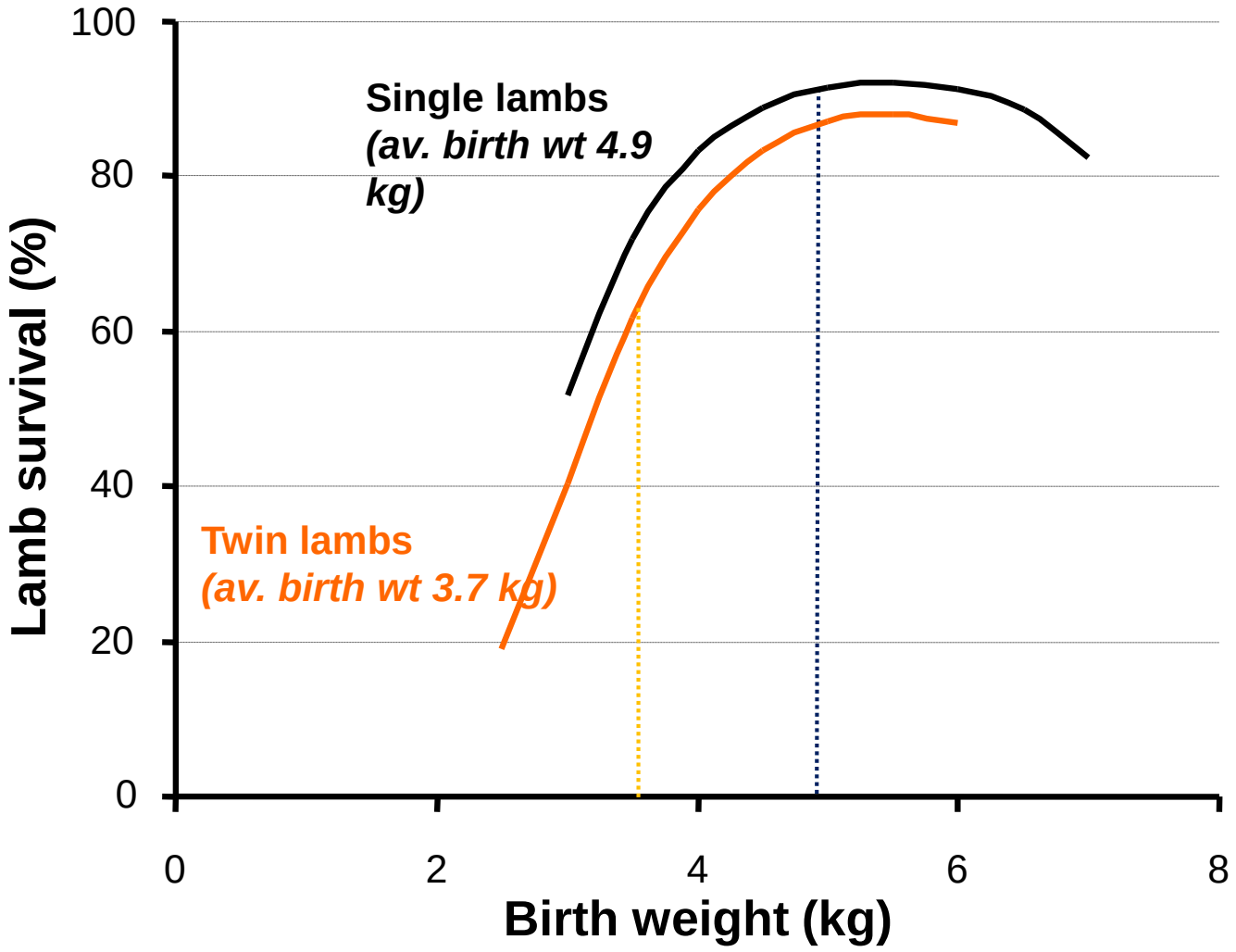



**1 mm YFAT = 4% greater weaner survival at 18kg**

**Genetic fat reduces weaner mortality**

bred well fed well

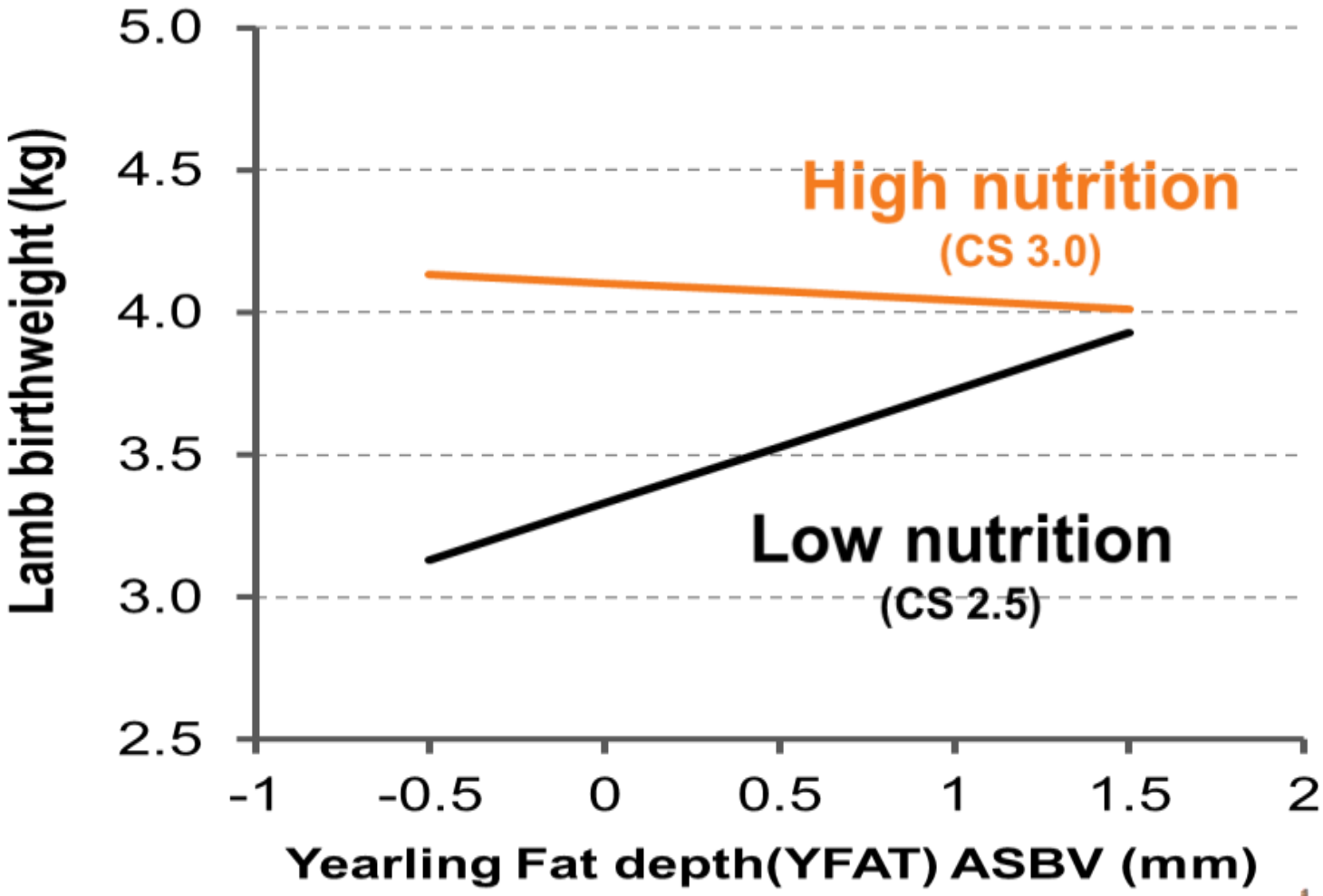
# LAMB BIRTH WEIGHT DRIVES SURVIVAL




70% OF LAMB SURVIVAL DRIVEN BY LAMB BIRTHWEIGHT

bred well fed well

# GENETIC FAT AND BIRTH WEIGHT



# GENETIC FAT

CONCEPTION RATES

EWE RECOVERY

FEED EFFICIENCY

LAMB BIRTH WEIGHTS

LAMB RESILIENCE

= $$$$$$

# LAMB BIRTH WEIGHT & DYSTOCIA

| Sire group | Birthwt | Growth (PWWT) | PFAT (post weaning fat) | PEMD (eye muscle depth) |
|---|---|---|---|---|
| Lambplan | 0.36 | 14.2 | -0.15 | 1.4 |
| Non Lambplan | Unknown | Unknown | Unknown | Unknown |

**2010 – Dennis & Geoff Hogan Glen Innes NSW**

NSW GOVERNMENT Department of Primary Industries

Source: Brent McLeod & Ashley White

# BIRTH WEIGH – DYSTOCIA?

| LAMBPLAN ASBV | | UNKNOWN |
|---|---|---|
| 0.36 | | ? |
| 0.7% | LAMB ASSISTS | 2.6% |
| 0.7% | EWE DEATHS | 2.7% |

NSW GOVERNMENT Department of Primary Industries

Source: Brent McLeod & Ashley White

# MANAGEMENT

- SCANNING

- CONDITION SCORE

- FLOCK SIZE

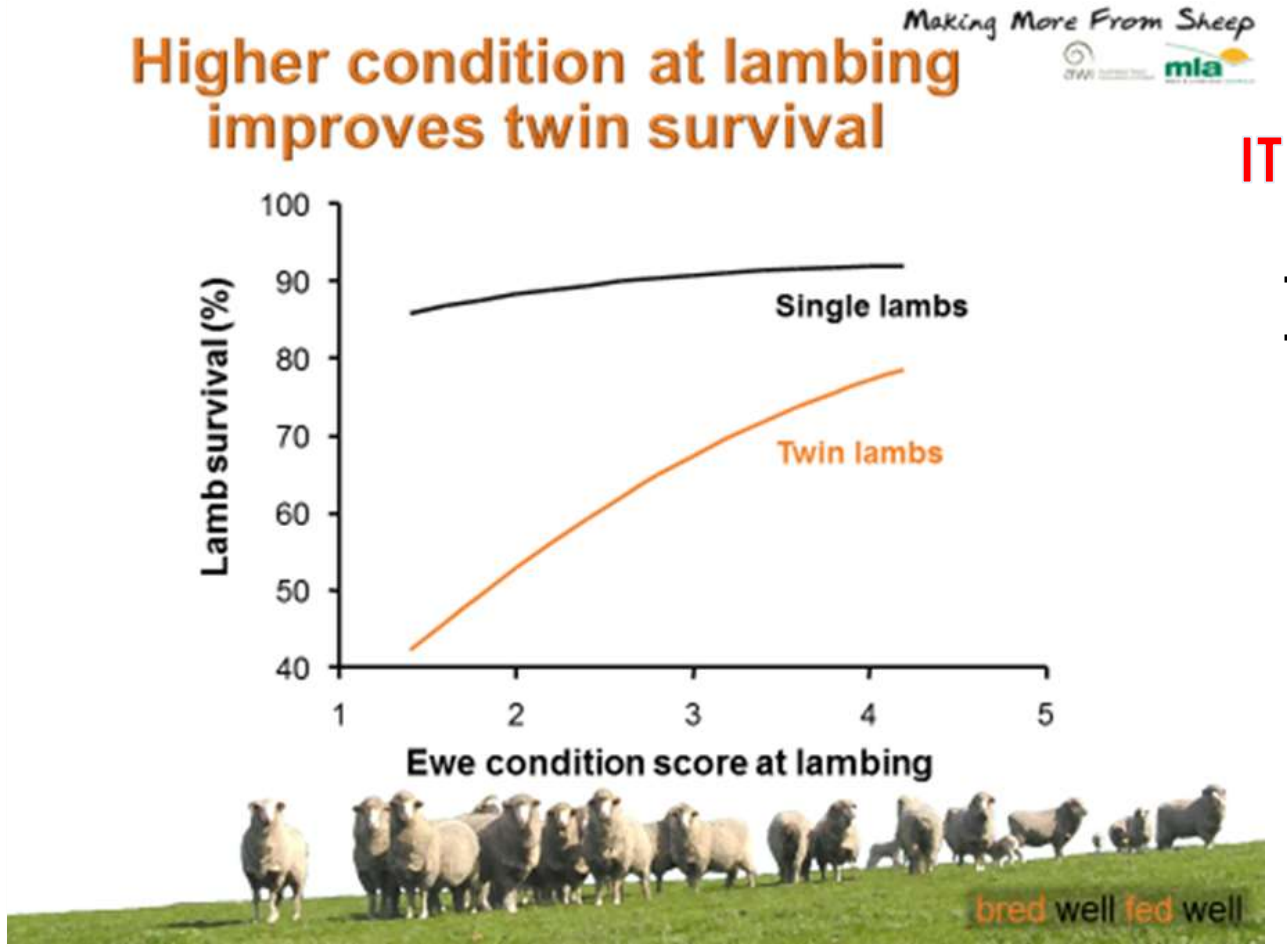
- SHELTERING

# SCANNING FOR MULTIPLES

- SCAN 40 DAYS AFTER RAM REMOVAL
- IDENTIFY MULTIPLES AND SEGREGATE
- 70% FOETUS GROWTH IN LAST TRIMESTER
- RULE OF THUMB - TWINS +25%
  - TRIPLETS +45%
- MULTIPLES NEED HIGH ENERGY
- DIFFICULT TO OVER-FEED MULTIPLE BEARERS

# CONDITION SCORE

** CONDITION SCORE AT LAMBING IS THE MOST CRITICAL CONSIDERATION **




## IT IS NOT A LAST MINUTE DECISION

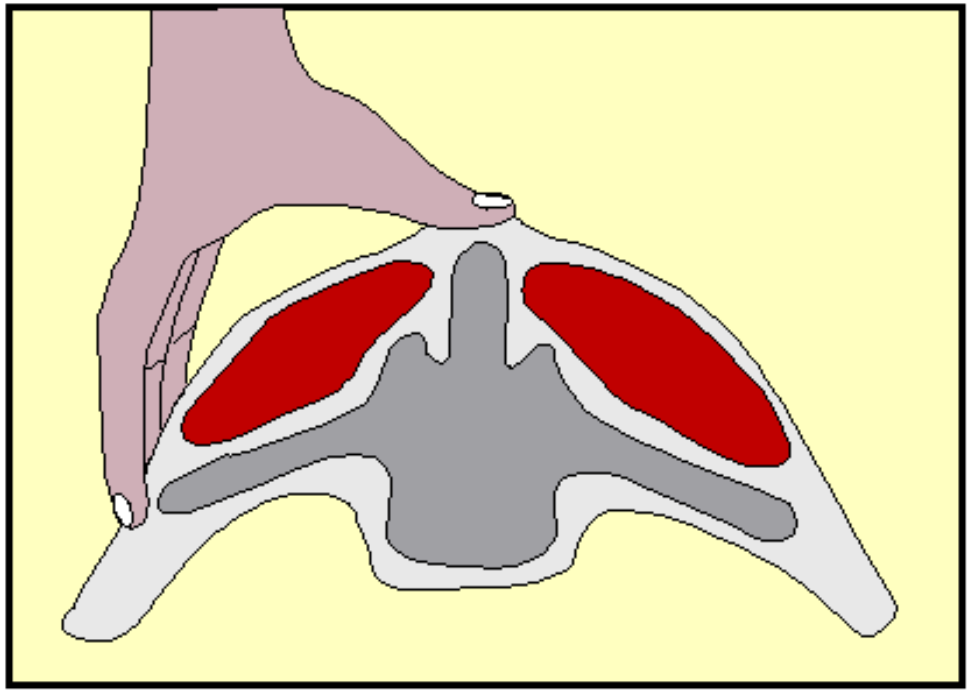
**To prevent 1 kg wt loss ~ 3 kg grain**
**To increase 1 kg bodyweight ~ 7 kg grain**

**10 Kg loss in ewe resulted in 0.8 Kg lower Bwt**
**10 Kg gain only gave 0.5 Kg gain in Bwt**

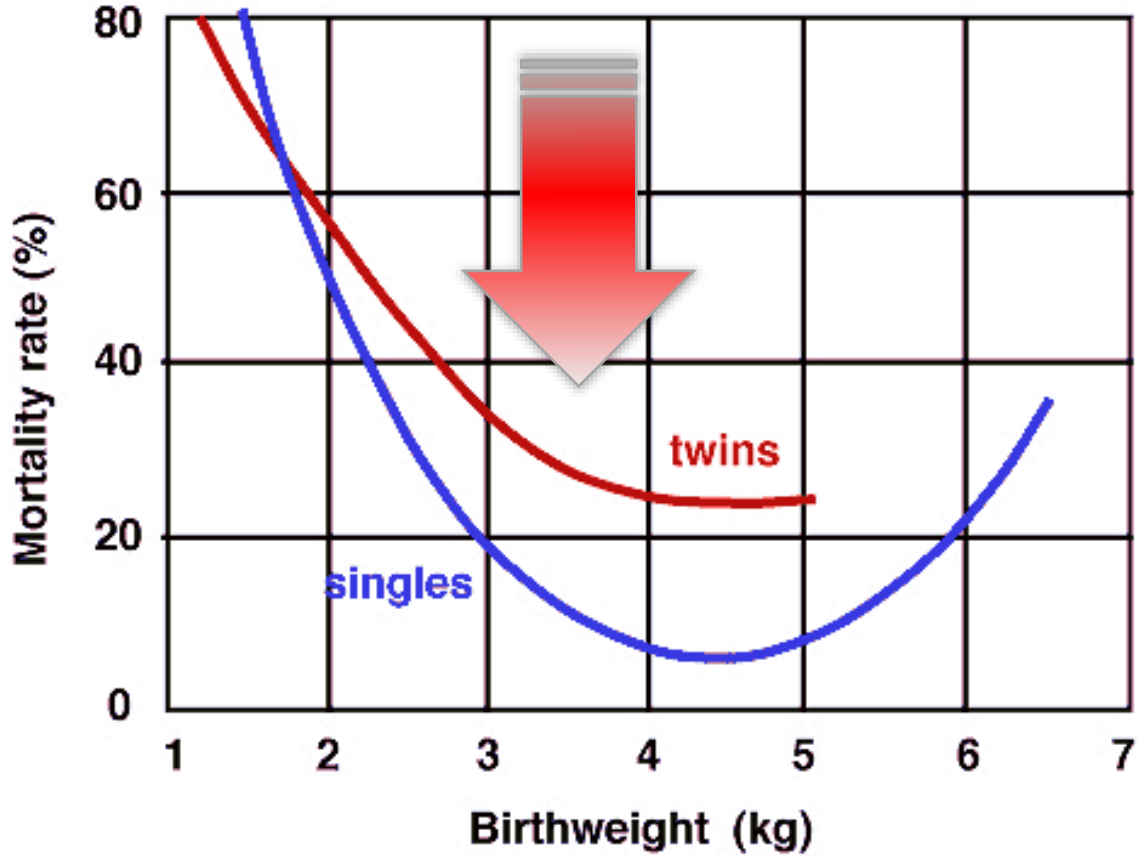
**Feeding to maintain weight will pay**
**Feeding to increase weight will not pay**

**NUTRITION IS CRITICAL**

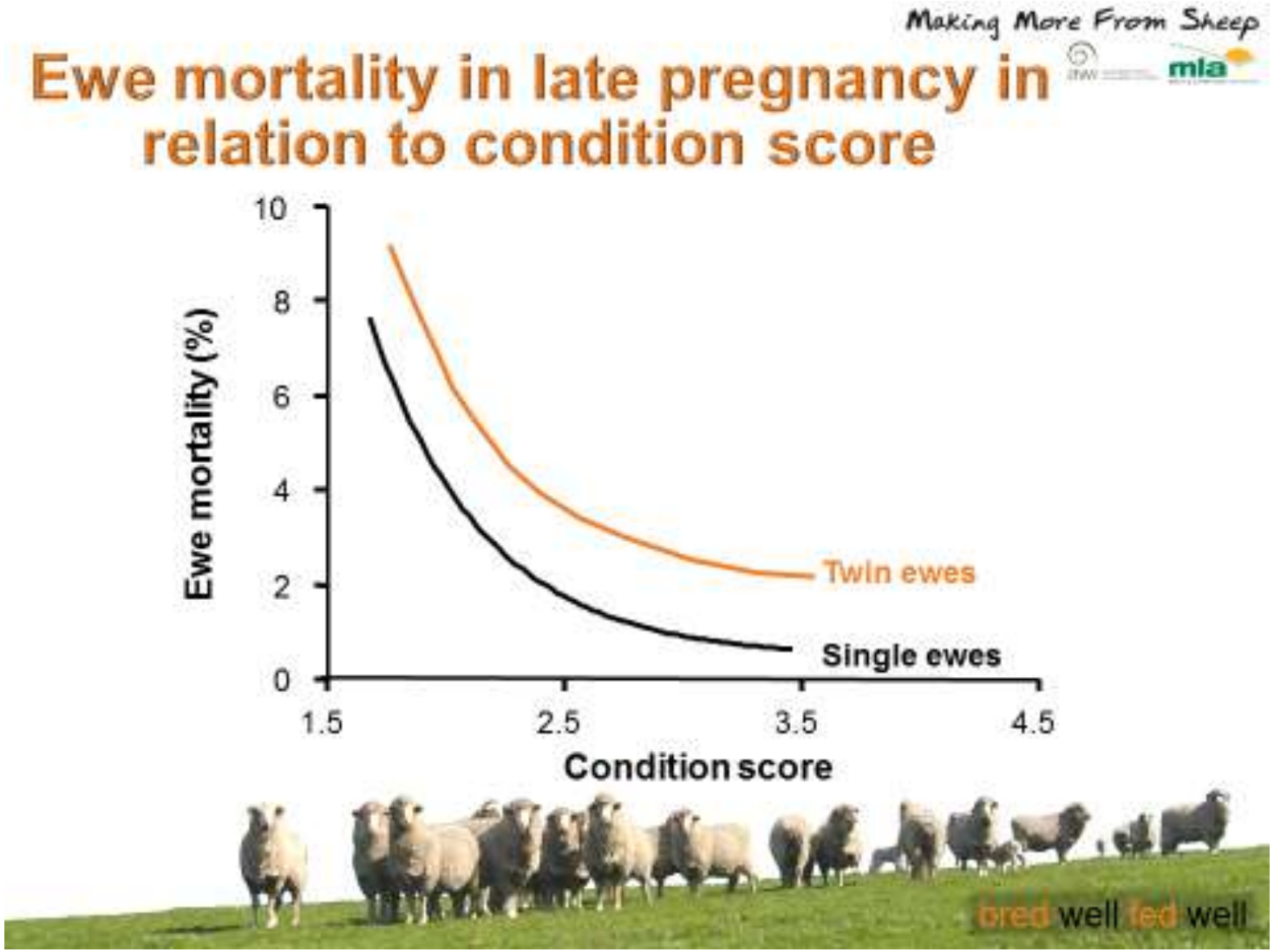
# CONDITION SCORE



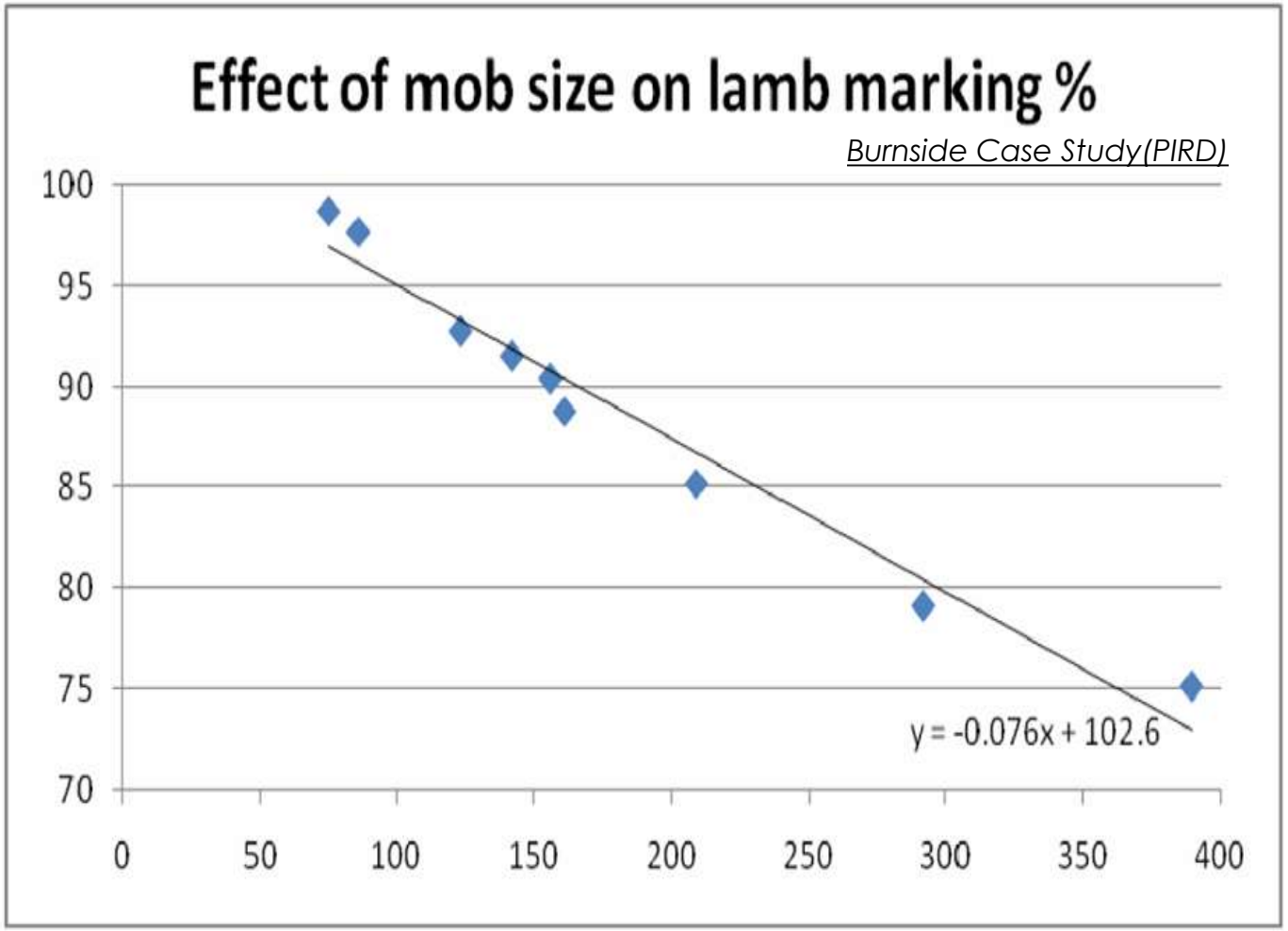
- CONDITION SCORE – NOT BODY WEIGHT
- BIRTH WEIGHT DRIVES LAMB SURVIVAL
- CONDITION SCORE AFFECTS EWE MORTALITY



# EWE MORTALITY



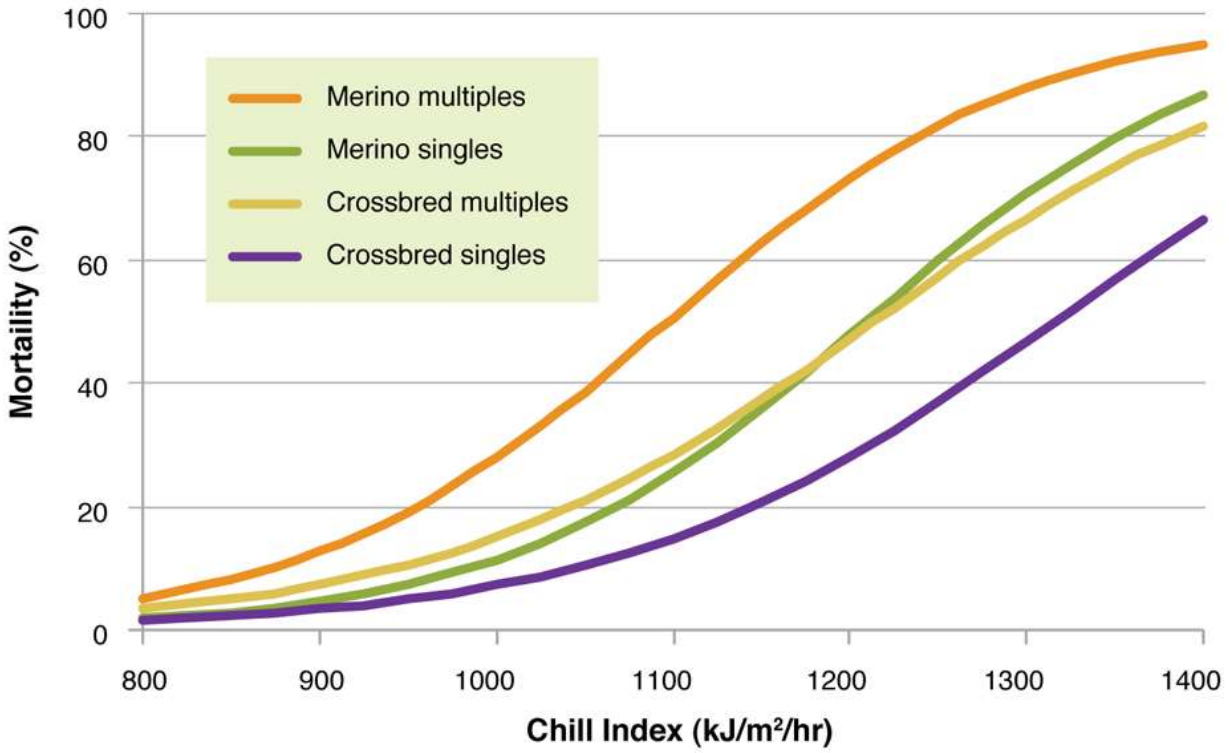
# FLOCK SIZE




| | |
|---|---|
| SINGLES - MATURE EWES | 400 |
| SINGLES – MAIDEN EWES | 300 |
| MULTIPLES – MATURE EWES | 200 |
| MULTIPLES – MAIDEN EWES | 150 |

# SHELTER

- SHELTERING CAN REDUCE MORTALITY BY UP TO 40%
- GREATER BENEFIT WITH MULTIPLES IN BAD WEATHER
- LAMBS WITH SHELTER HAVE HIGHER WEANING WEIGHTS



# EFFECT ON SURVIVAL

## EFFECT OF SHELTER ON LAMB SURVIVAL AT HAMILTON

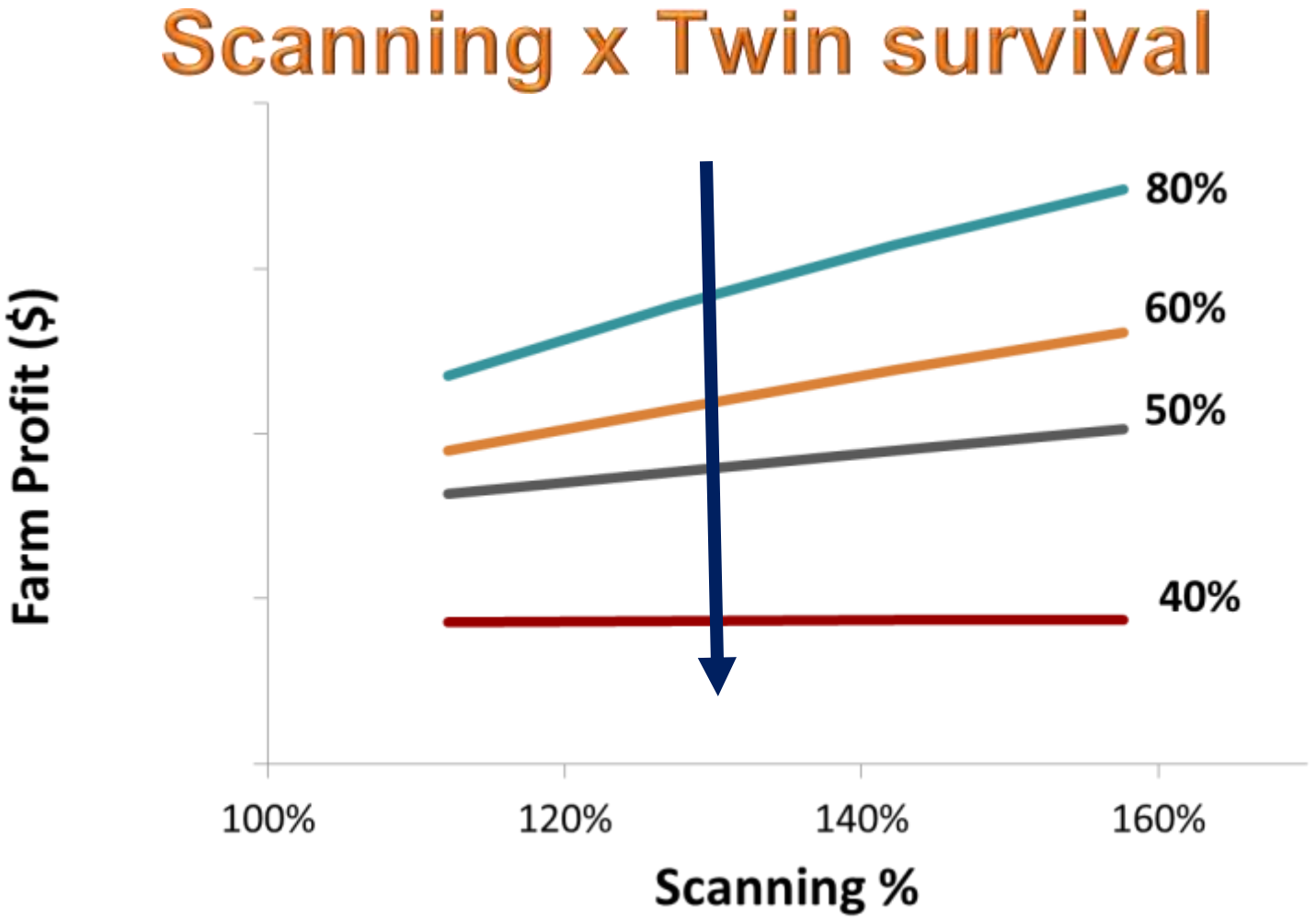
**Behrendt and Friend (2010)**

| SURVIVAL | WITH SHELTER | WITHOUT SHELTER |
|---|---|---|
| SINGLE LAMBS | 82% | 78% |
| TWIN LAMBS | 87% | 76% |
| TRIPLET LAMBS | 96% | 50% |

# BENCHMARKS

- 90% IN SINGLES
- 75-85% IN MULTIPLES

# I'M HAPPY WITH A HEALTHY SINGLE !



# ONE IS NOT ENOUGH!

$$
profit

40mill
ewes