

Ultrasound results

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Our talk

- Interpreting ultrasound scan

- Changes in composition

- Illustrating the opportunity

- Summing up

Loin eye area

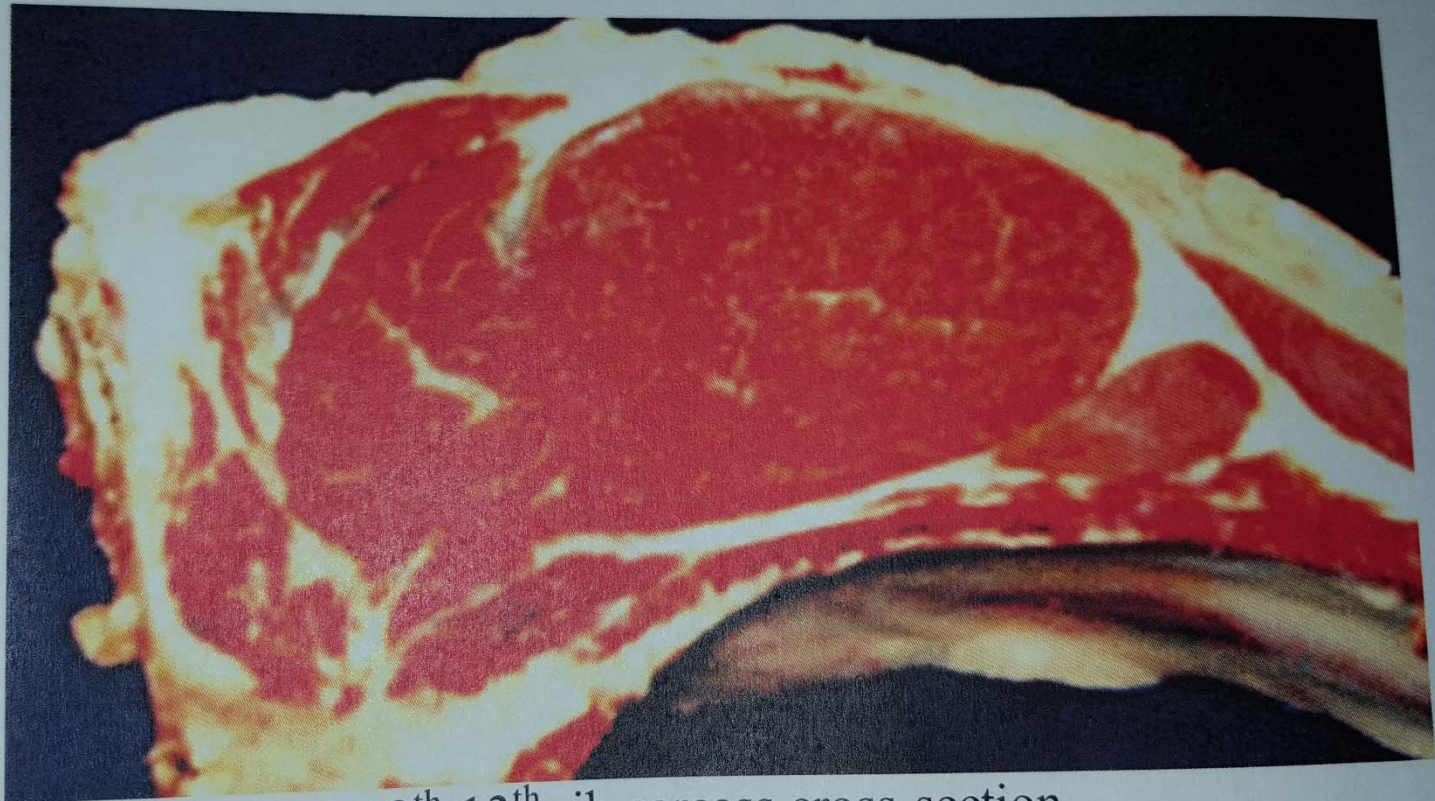
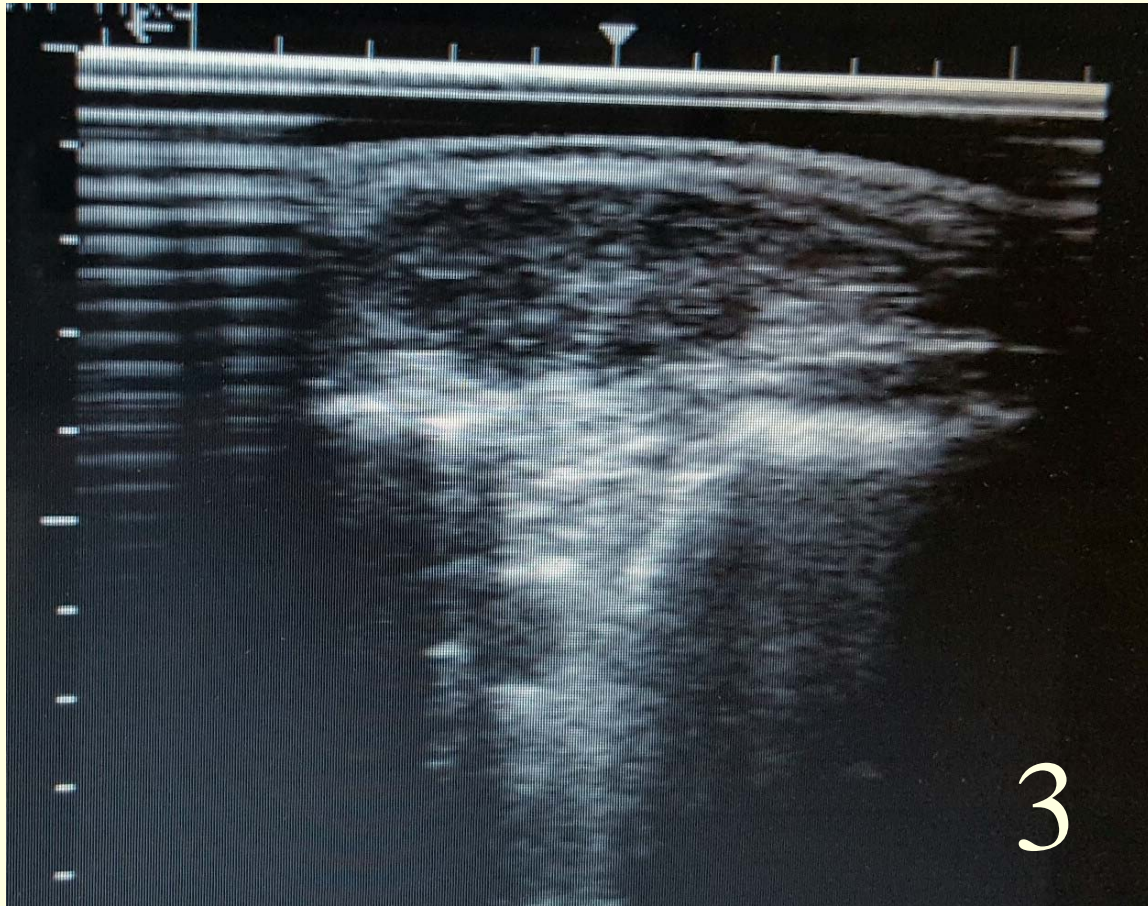
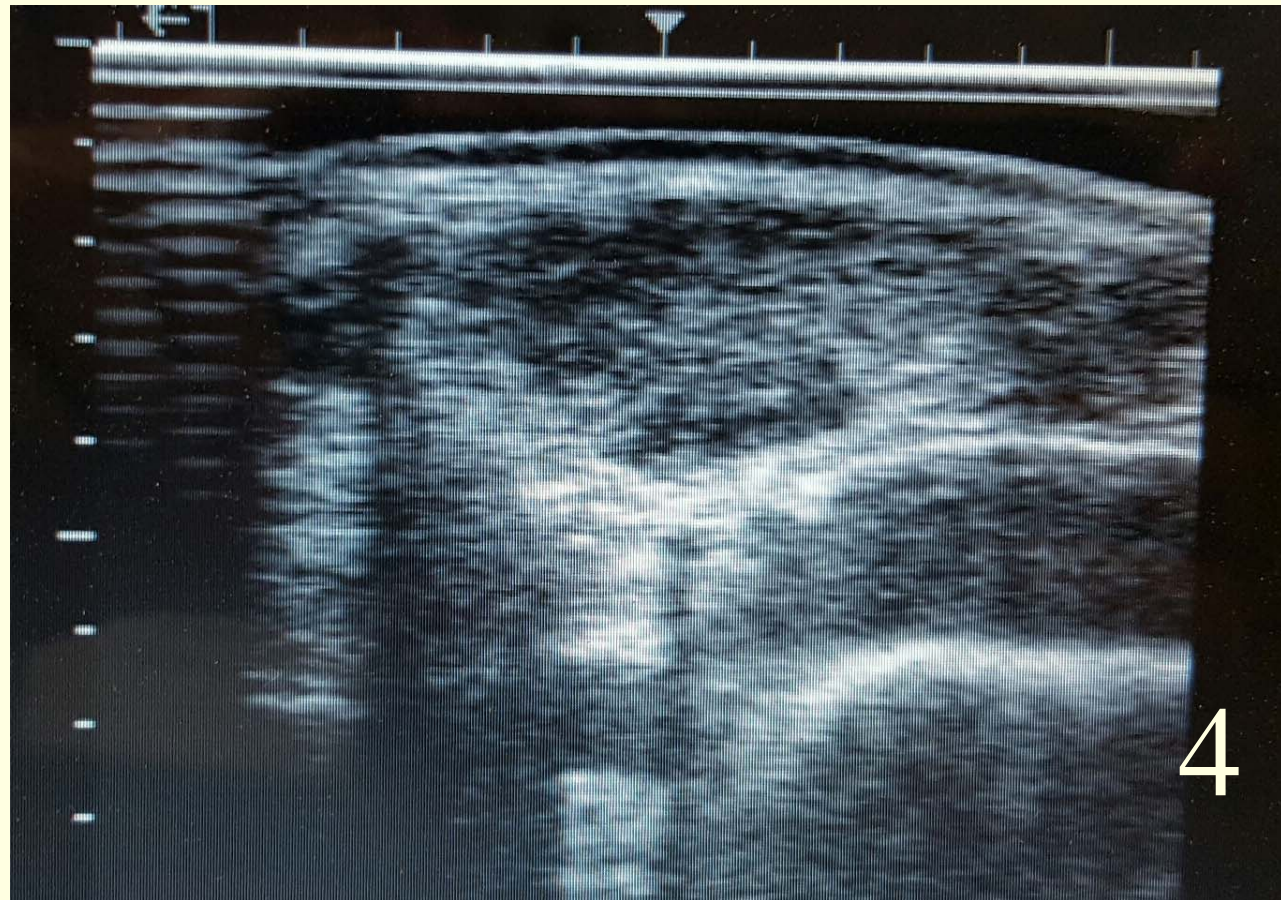


Figure 1A. 12th-13th rib carcass cross-section

Loin eye area



Loin eye area

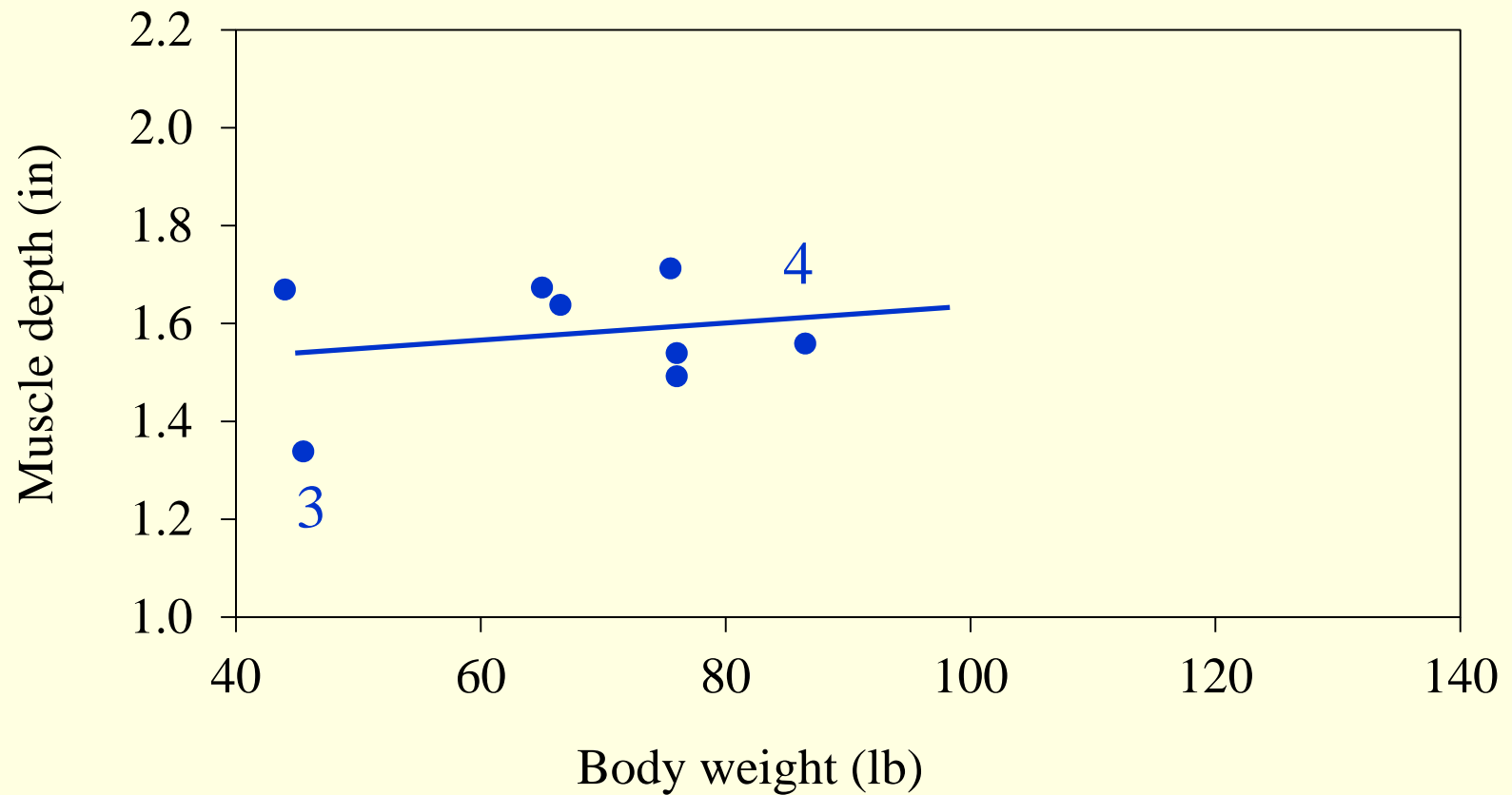


Changes in composition



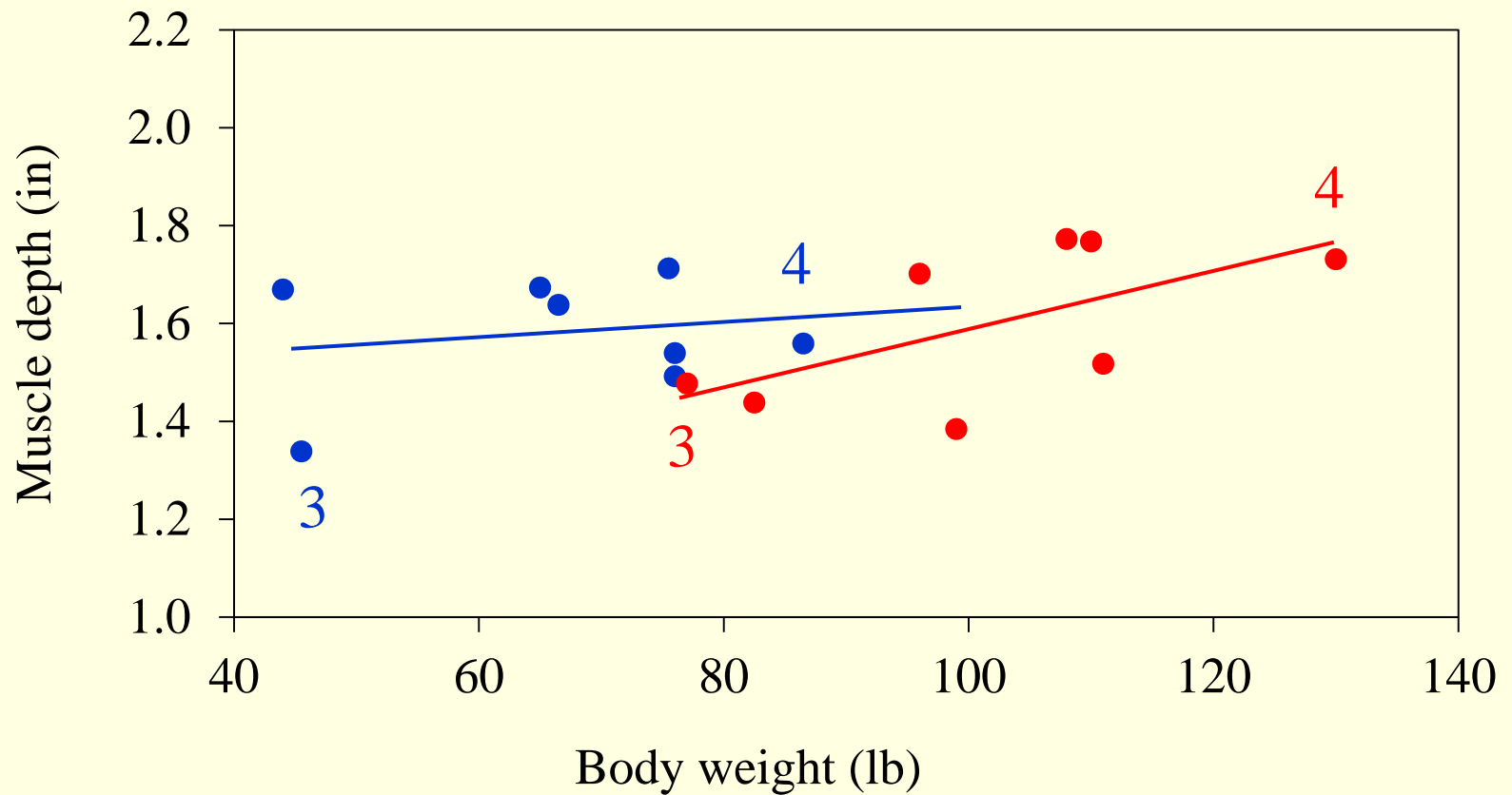
Muscle depth vs. body weight

Muscle depth vs. body weight



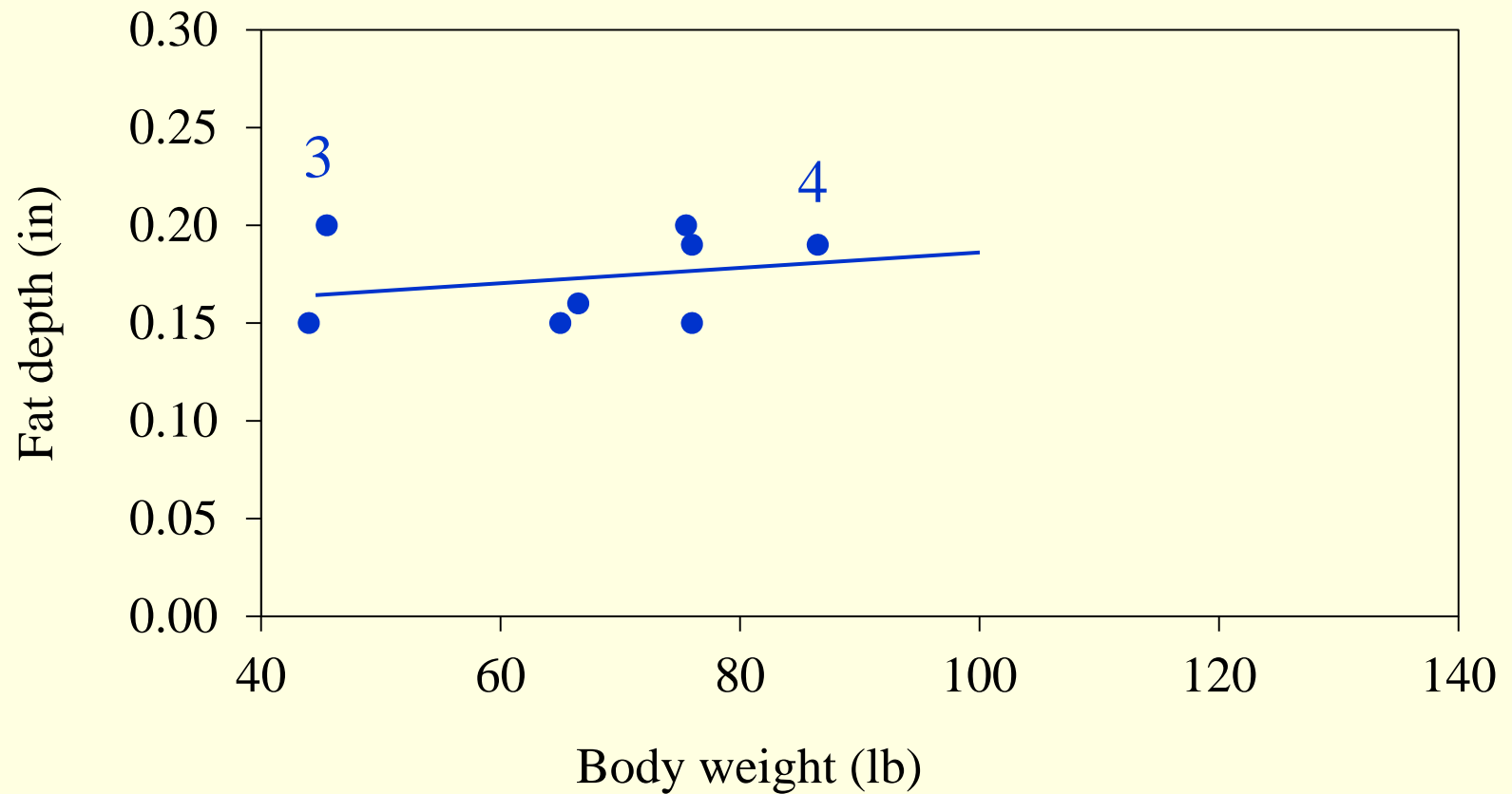
Muscle depth vs. body weight

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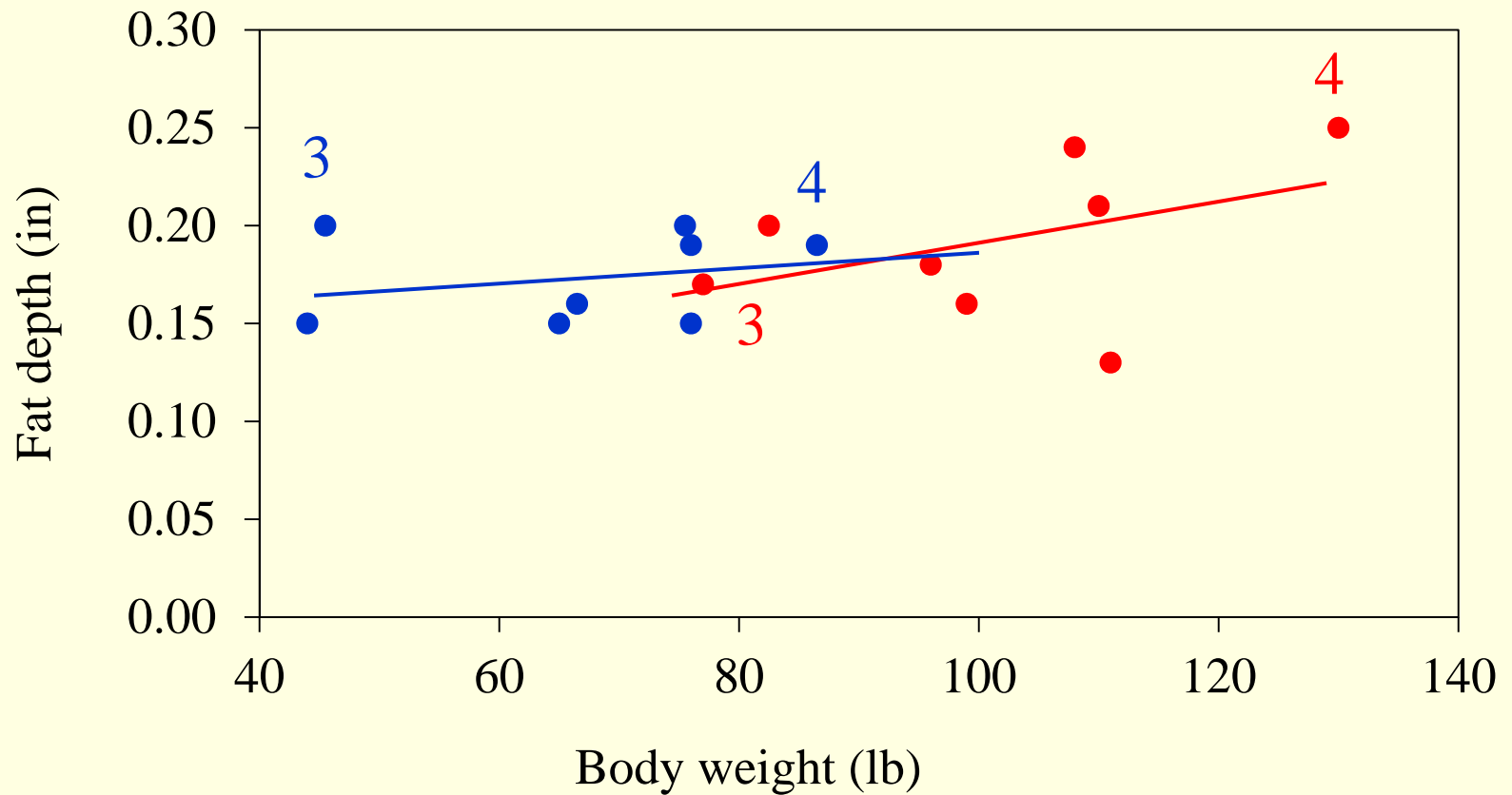
Fat depth vs. body weight

Fat depth vs. body weight



Fat depth vs. body weight

Fat depth vs. body weight



Today's figures

Order	BW (lb)	Rank	Muscle depth (in)	Rank
1	111.0	2	1.52	5
2	108.0	4	1.77	1
3	77.0	8	1.48	6
4	130.0	1	1.73	3
5	110.0	3	1.77	2
6	99.0	5	1.38	8
7	82.5	7	1.44	7
8	96.0	6	1.70	4

Illustrating the opportunity



United Kingdom example

■ United Kingdom

- Lean growth index
- Developed by Scottish Agricultural College
 - Began 1989



In 9 years, 1 kg increase in lean weight in 20 kg carcass (+ 5%)

■ Selection goal

- Increase lean carcass weight (+3)
- Little change in carcass fat weight (-1)

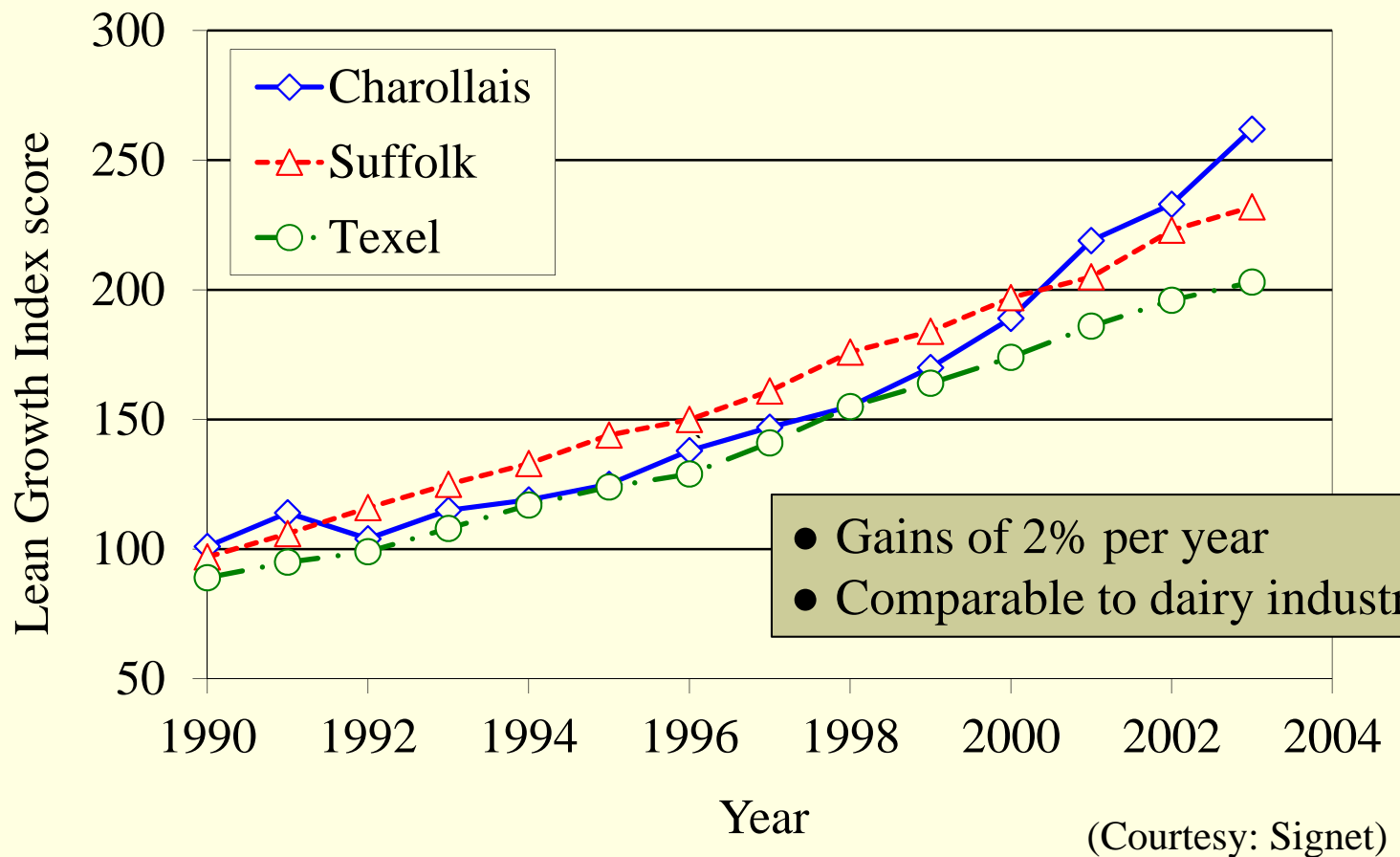
■ Selection criteria

- Live weight (+)
- Muscle depth (+)
- Fat depth (-)

(Simm and Dingwall, 1989; Lewis et al., 2002; Simm et al., 2002)

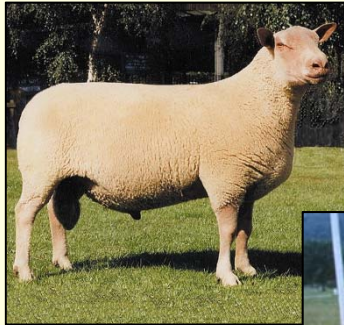
United Kingdom example

■ Gains in industry schemes



United Kingdom example

Terminal sire breeds



Crossbred ewe breeds



United Kingdom example

- Effects on marketable output
 - Comparison of crossbred lambs sired by high *versus* low index terminal sires
 - 6,400 lambs sired by 90 rams
 - Rams differed by 200 index points
 - Benefits
 - 0.56 kg heavier cold carcass weight
 - 0.47 kg more saleable meat yield (1000 carcasses)
 - £353 (US\$ 463) extra retail value per high index ram over its lifetime

(Lewis et al., 2006., Márquez et al., 2012;
Márquez et al., 2013a,b; Márquez et al., 2015)

Summing up

- Ultrasonic scanning can be used effectively to improve carcass composition
- It will improve profitability

Thank you



Questions?

