

Cattle - Opportunities to Improve Margins

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“For some cattle’s genetics, a prolonged store period risks producing large frames that do not help finishers hit weight limits and specification.

This is broadly being reflected in the store ring. The differential between 6-12 month and 18-24 month old store steers was only £135/head by the middle of March and has seldom been so narrow.

Finishers can have more management control of the younger animal.”

“The store trade began to stabilise in April and the 3-week rolling average prices for both 6-12 and 12-18 month old steers edged up at the beginning of May to £857.50/head and £917.75/head, respectively.”

As buyers look for smaller cattle to go the grass the difference is down to £60.25, not much to show for a lot of extra keep.

Euro Grid



FAT CLASS

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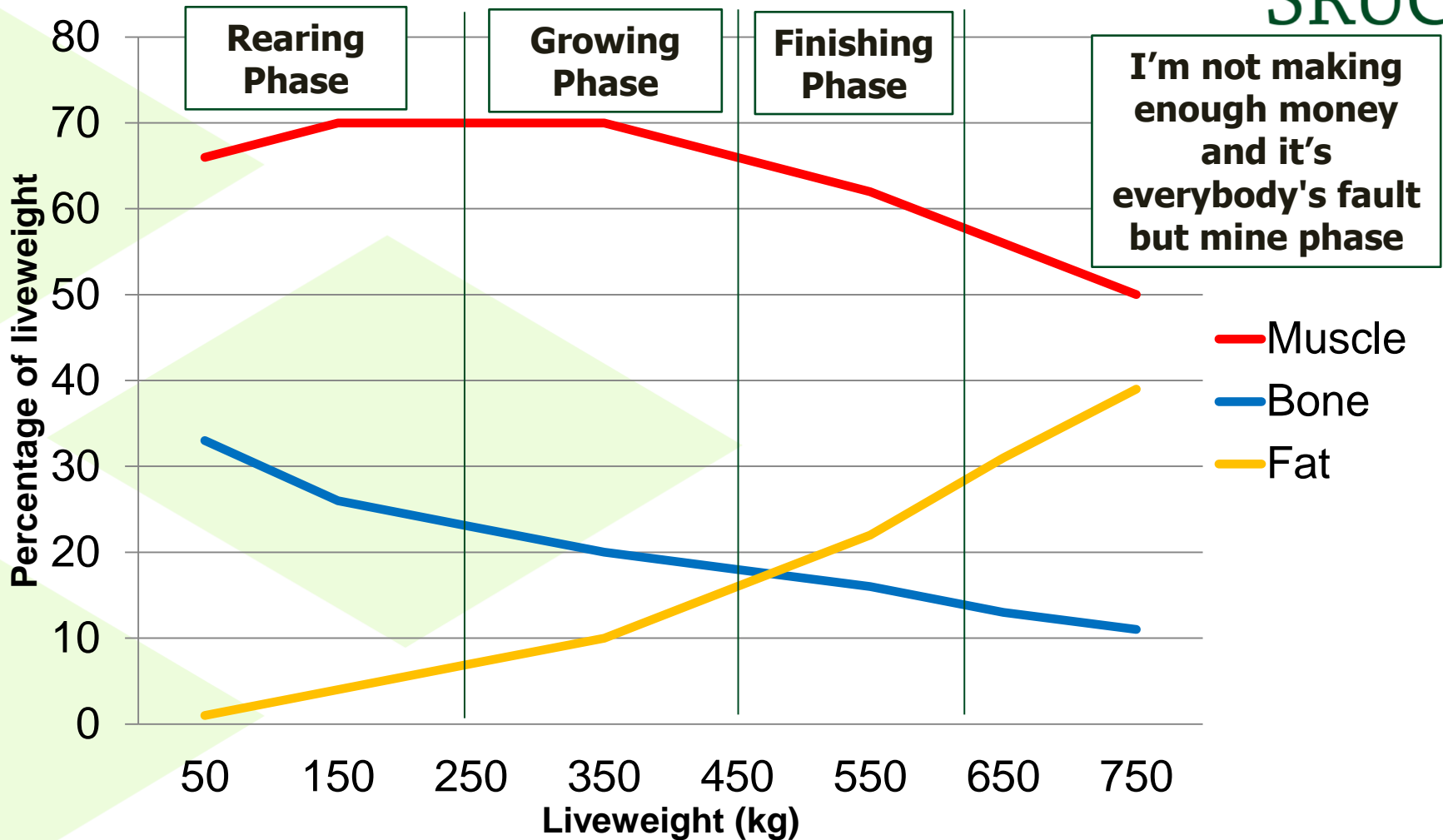
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Maximise



Minimise

Animal Growth Tissue Deposition



Source : Alberta Feedlot Management Guide 2000

3 Distinct Phases



- Rearing
 - From birth to after weaning and covers the period of milk feeding and rumen development
- Growing
 - From a fully developed ruminant through developing height and length of body frame, depending on breeds and systems this can take up to 15 months
- Finishing
 - A short sharp period of maximum weight gain to allow well grown animals to maximise meat yield and optimise fat cover

Growing

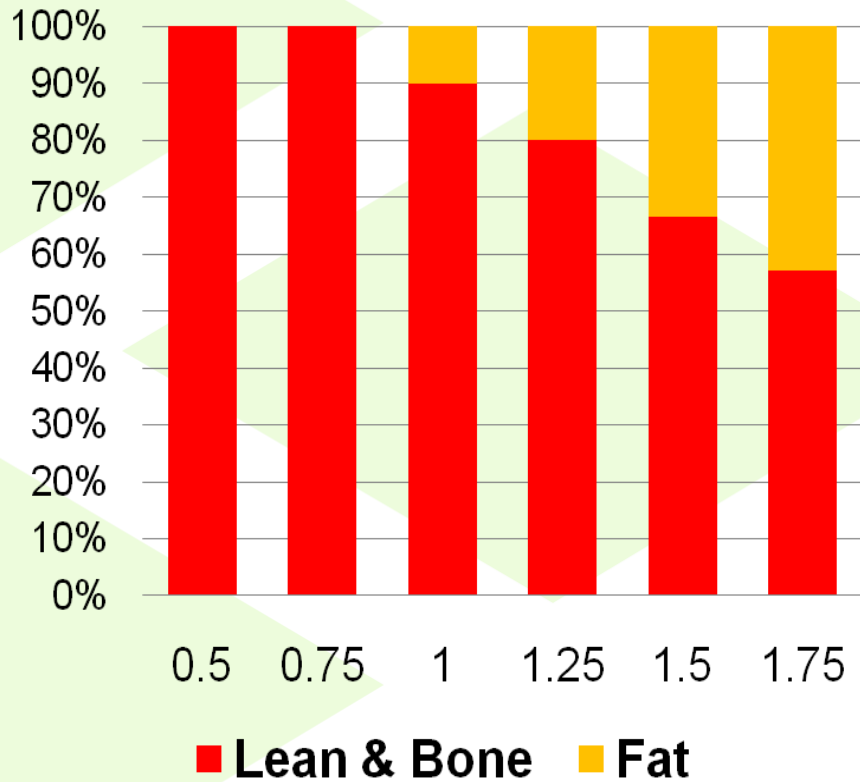


- From about 200 kg to ready for finish
- Continuous growth without fat deposition
 - 0.7 to 1.2 kg/DLWG depending on breed
 - Most Charolais types can grow at 1.2 without laying down fat
 - Most Angus or Hereford types will lay down some fat at 1 kg DLWG
 - Most other cattle fit somewhere in between

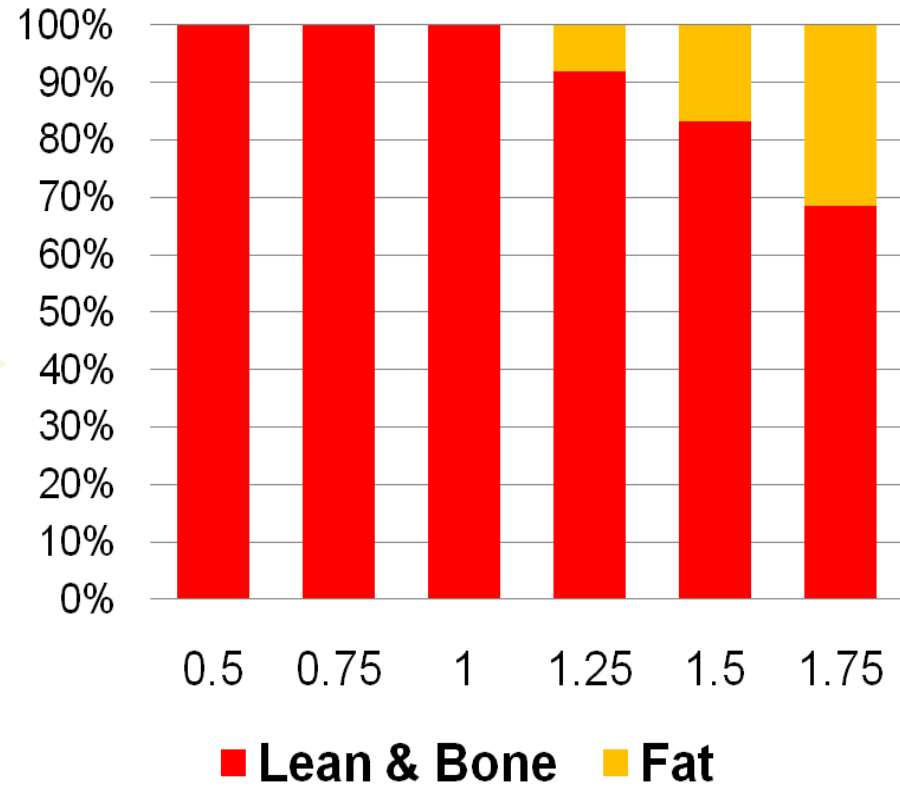
Daily Growth Rates



Early Maturing Type



Late Maturing Type



Feeding for Growth



- Ideally forage based diets which replicate good grazing
- Low starch, moderate protein and high fibre
- Plus minerals to build skeleton
 - Grazing, Grass Silage, Pea Silage, Lupicalage®, Urea Treated Wholecrop, Straw
 - Rapeseed Meal, Maize Gluten, Distillery Co-Products
 - Ca, P, Mg, Se, Co and whatever else is short

Growing Ration Specification



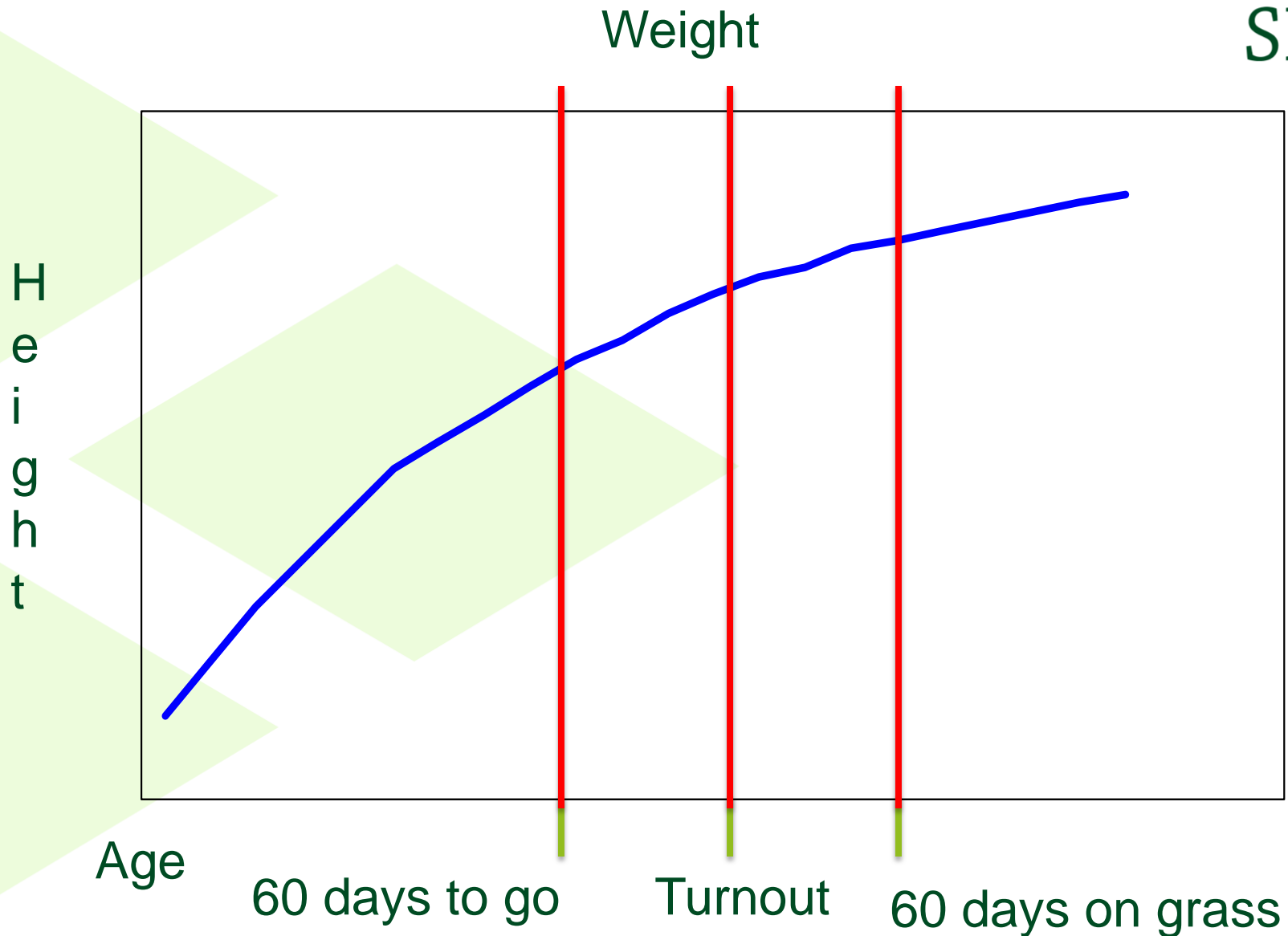
- Target gain 0.8 - 1.2 Kg/day
- 40-80 % Dry Matter
- 15% Crude Protein
- 10.7-11 MJ/Kg DM ME
- >35% NDF
- <3% Fat
- <30% Starch and Sugar
- 0.8% Calcium

Compensatory Gain

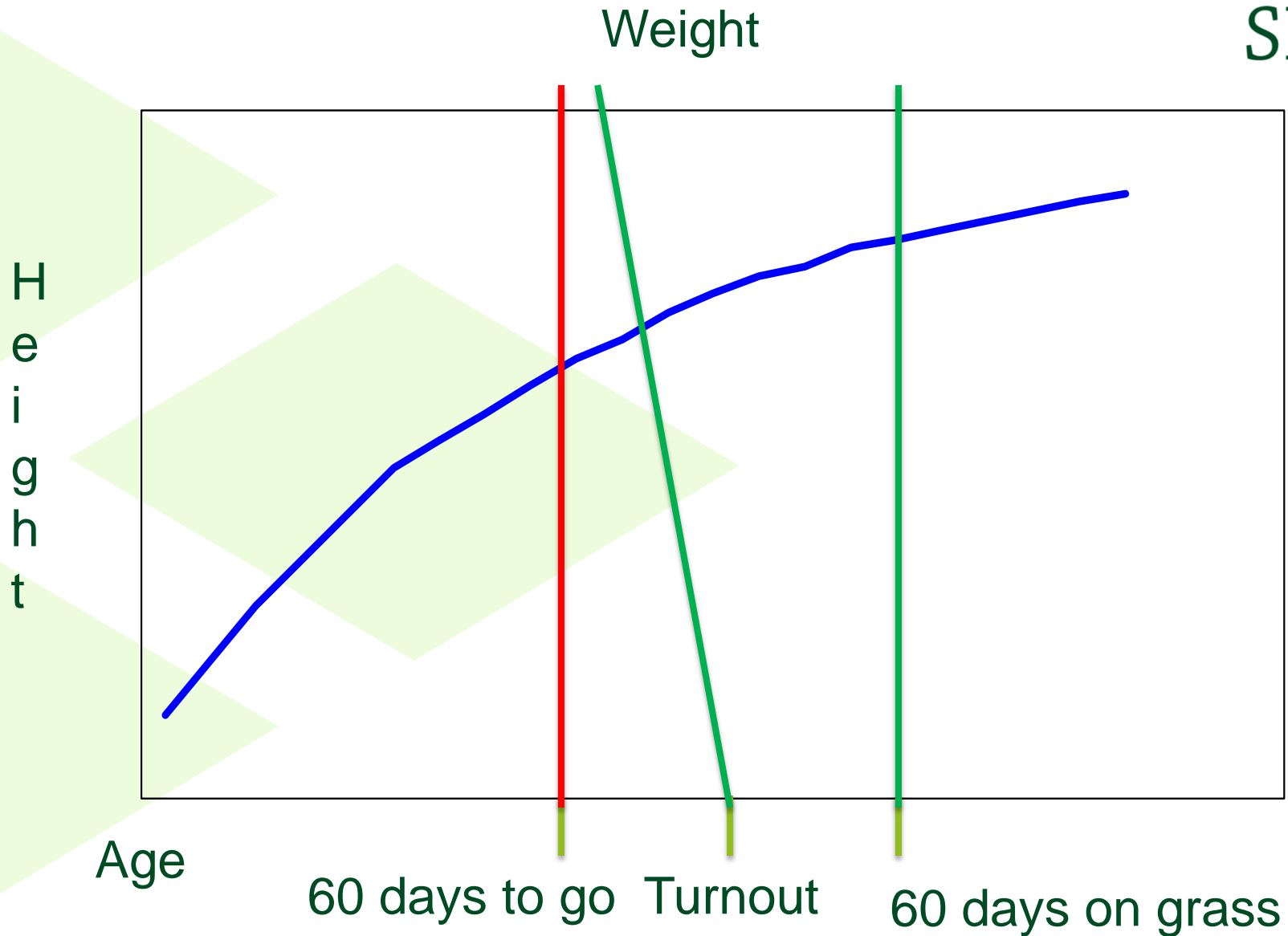


- Effective short term measure in keeping cattle
 - Reduce feed rate of expensive concentrates a month or so before turnout
 - Cattle make up lost performance on cheap grass after turnout
- Not suitable for cattle being prepared for sale
 - Weight pays
- Not suitable as a long term measure
 - Grazing seasons are too unpredictable to make up a lot of lost performance

Animal Growth Curves



Animal Growth Curves



Finishing



- Target daily gains of over 1.4 kg in all classes of stock
- Length of time spent on ration determines level of fat cover
- High nutrient dense rations, high in energy particularly from starch
 - Grazing, grass silage, maize silage, cereal wholecrop
 - Cereals, bread, biscuit meal, breakfast cereal blends
 - Potatoes, fodderbeet other root crops
 - Molasses, beet pulp, distillers grains, maize gluten
 - Field beans, soya bean meal
 - Vitamins and micro minerals

Rumen Health



- Avoid acidosis
 - Feeding management
 - Don't let them get hungry
 - Keep fresh feed in front of them
 - Maintain particle size on barley, wheat and oats
 - Crimped not shattered
- Maintain some fibre in ration
 - 10 to 15% long fibre in dry matter
 - 20 to 25% neutral digestible fibre (NDF) in dry matter
- Maximise intakes

Finishing Ration Specification



- Target Daily Gain >1.4 Kg/day
- 50-80% Dry Matter
- 13-15% Crude Protein
 - (high daily gains respond to DUP, 0.25 kg soya/day can be paid for by an extra 0.05kg DLWG)
- 12.5 MJ/Kg DM ME
- 25% NDF
- <4% Fat
- >35% Starch and Sugar
- 0.6% Calcium

Factors affecting FCE



- Animal Health

- Worm Burden
- Laminitis
- Disease

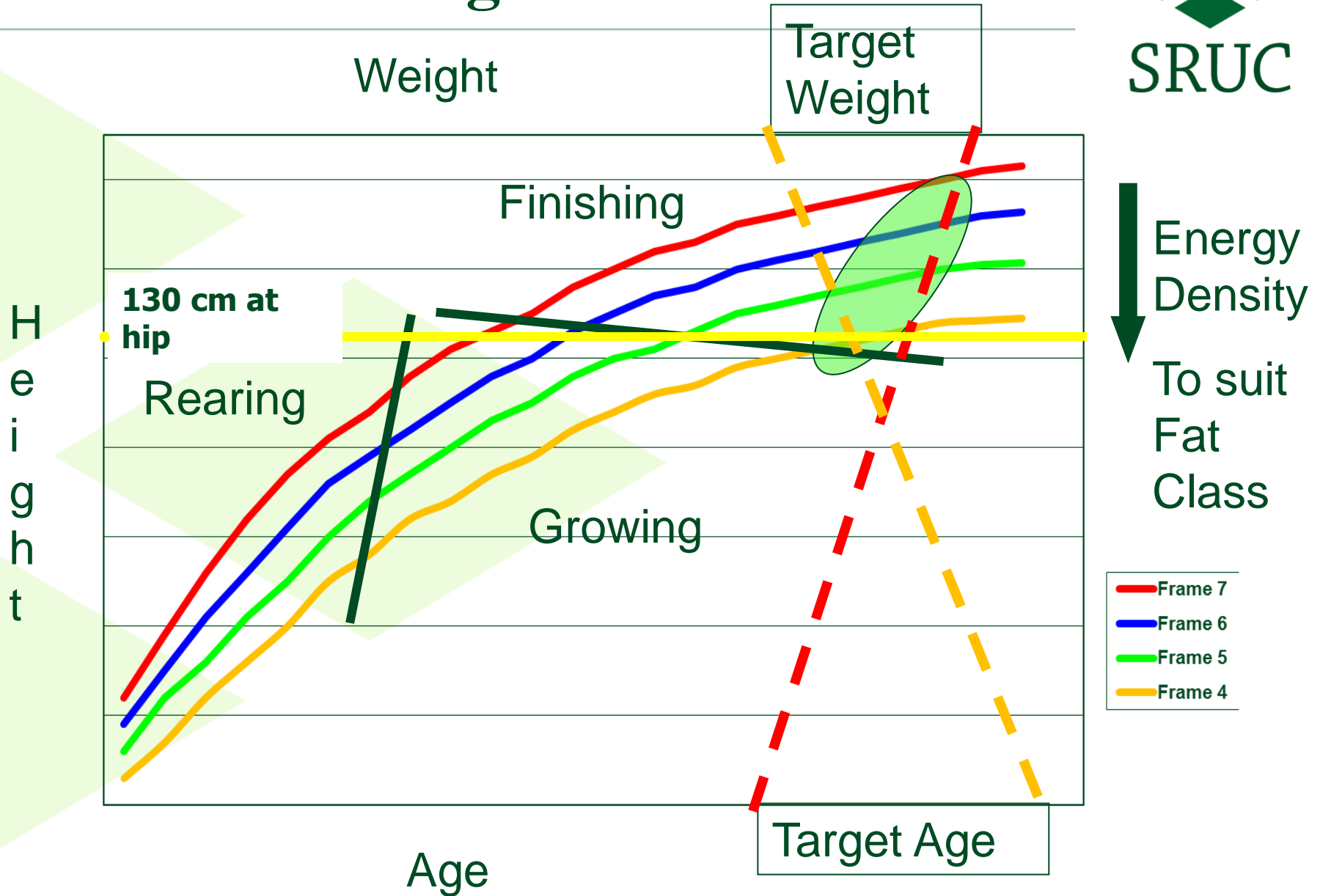
- Nutrition

- Structural Fibre
- Energy – Starch & Digestible Fibre
- Protein
- Minerals
- Presentation

- Stress

- Pen Density
- Mixed Sizes
- Dry Bed
- Access to feed and water
- Air Quality

When to Change Ration



System Performance Targets



- **REARING**

Maximise 200 day weights in all cattle

- **GROWING**

Focus on controlled, continuous frame growth from 200 days until moving to finishing ration

- **FINISHING**

Short, sharp period of maximum weight gain





RISING TO THE CHALLENGES

TUESDAY 17TH MAY AT AIRTH CASTLE, NEAR FALKIRK

A BEEF AND SHEEP INDUSTRY CONFERENCE

 @qmscotland