

# Finishing, Feed and Facts!

Karen Stewart

North Ayrshire Monitor Farm, 30<sup>th</sup> January 2019

*SAC Consulting is a division of SRUC*

*Leading the way in Agriculture and Rural Research, Education and Consulting*

# Girtridge Cattle Feeding



Feed	475kg 1.3kg/day	600kg 1.5kg/day	SHO X HIGH 1kg/day?
Pit silage (50/50 1 <sup>st</sup> and 2 <sup>nd</sup> cut) (£15/t)	12kg	12kg	Ad lib
Propcorned bruised barley (£188/t)	6kg	8.5kg	4kg
Hi pro soya meal (£360/t)	0.5kg	0.5kg	0.5kg
Stockmol 20 (£172/t)	0.5kg	0.5kg	0.5kg
Intensive mineral (£371/t)	0.1kg	0.1kg	0.1kg
Cost per day	£1.61	£2.08	£1.27
Cost per kg gain	£1.20	£1.40	£1.27

# Weighing in

---

- Summer growth 0.5kg average
- Winter growth 1kg average

However.....

Starting weights – accuracy – some are mart weights, averages etc

Time period between weighing varies (some last weighed Oct some Nov)

224 complete sets of weights (taking outlying figures out)

**9% > 1.5kg/day**

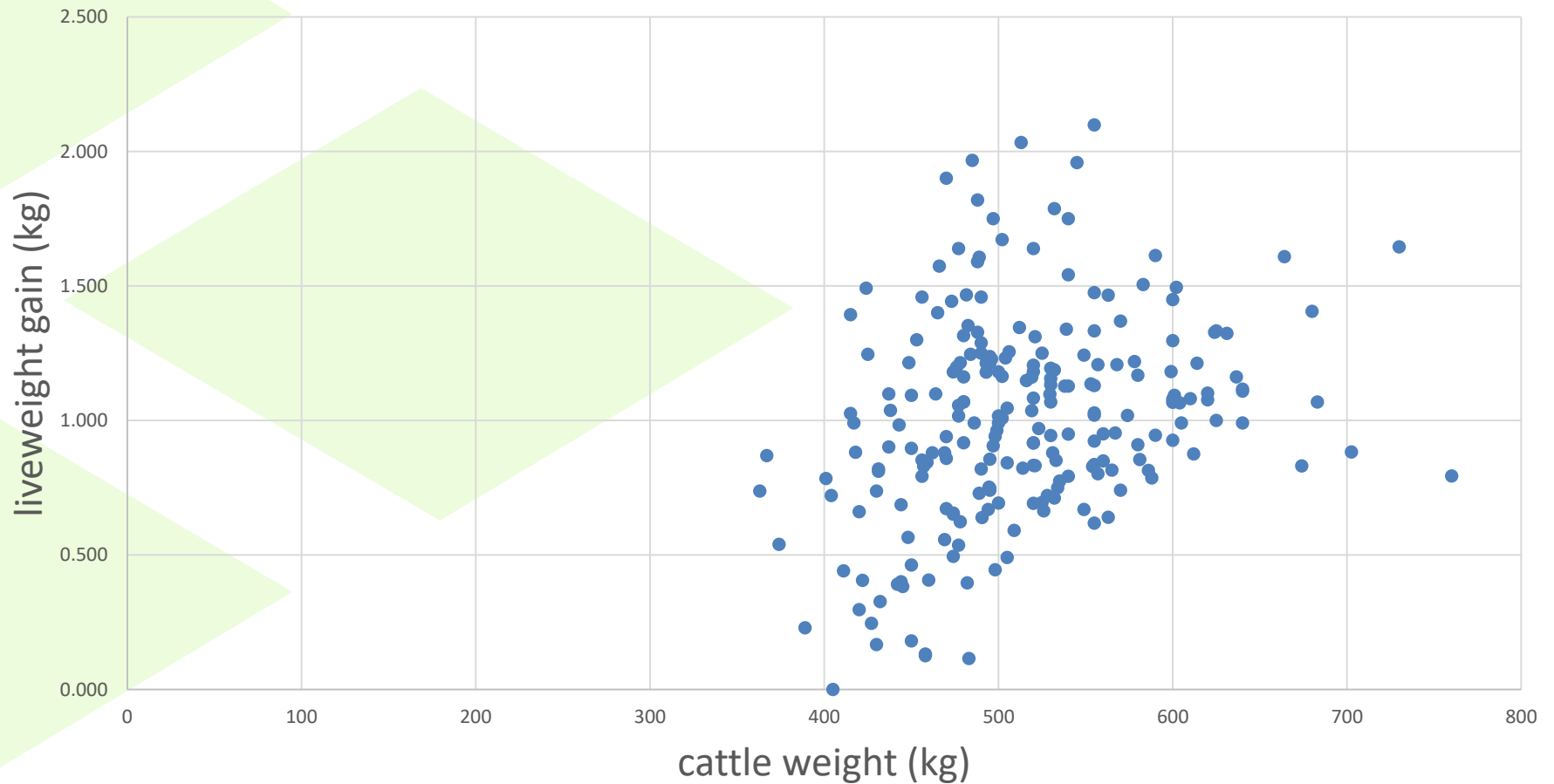
**45% 1-1.5kg/day**

**29% 0.7-1kg/day**

**17% < 0.7kg/day**

# Weights of cattle on farm

## Weights of cattle and winter liveweight gain



# Rules of Thumb – Finishing cattle

---

## TYPE OF FEED

- Keep energy density of the ration above 12MJ/kgDM
- Starch above 25%
- Protein in overall ration around 130g/kgDM (13%)
- Different breeds respond differently (continental Vs natives)
- You are feeding a ruminant – they need fibre!

## PRESENTATION OF FEED

- Keep ration appetising to keep intakes up
- Access to feed
- Water supply

BALANCE ENERGY, PROTEIN, LONG ROUGHAGE

MANAGE ACID LOAD

MINERALS

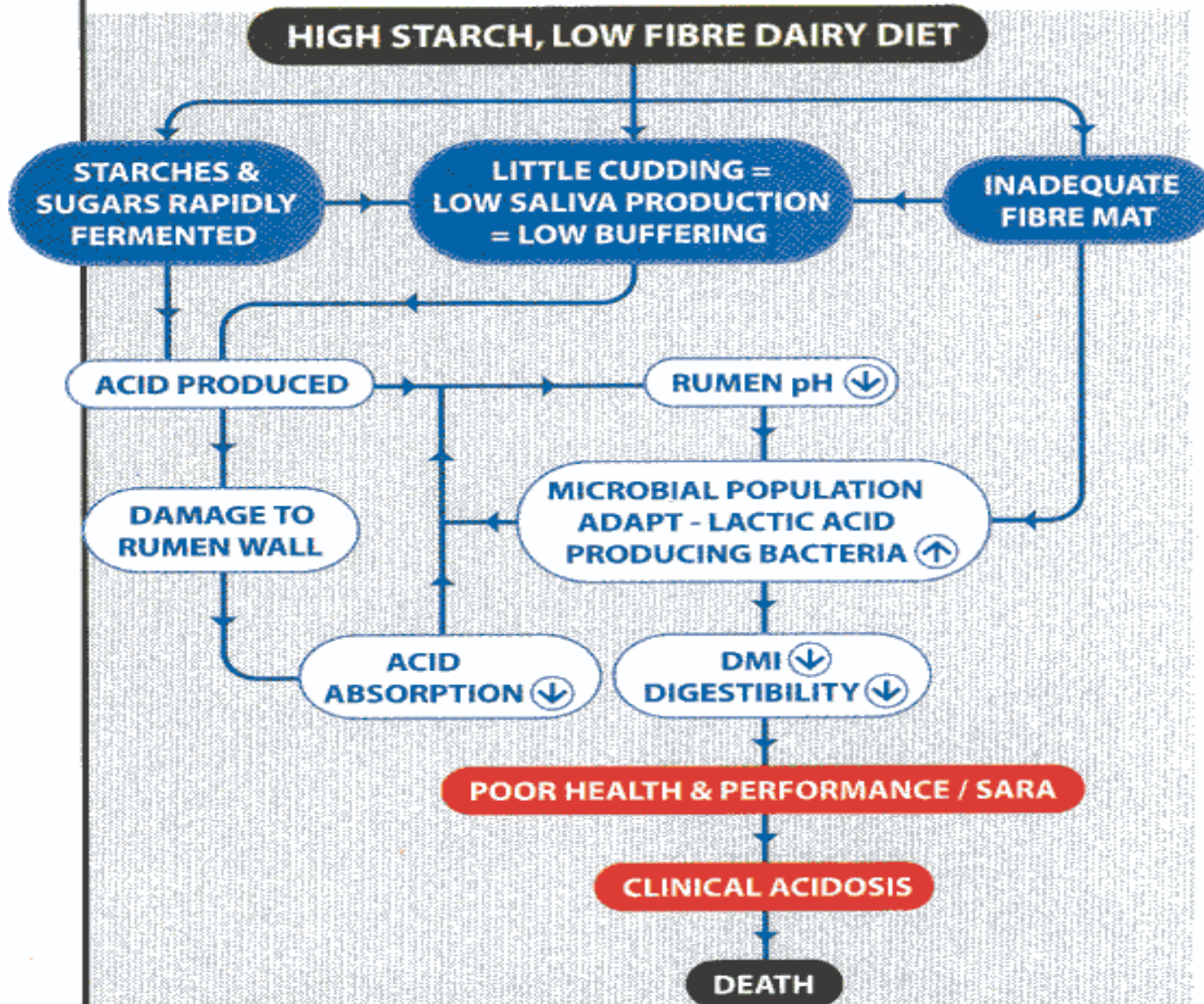
# Rumen Acidosis – Dietary Causes

---

- Overfeeding starch – cereals, biscuit, bread, tatties
  - but can happen on very acidic, highly fermented grass silage
- Diets too low in forage
- Feeding large meals of cereals etc. infrequent feeds
- Gorging on concentrates after a period off them
- Too rapid introduction to concentrates (barley beef)
- Lack of rumen adaptation

# Rumen Acidosis - Summary


Flowchart illustrating the factors involved in acidosis



g

al

# Type of feeds for finishing cattle

<b>Carbohydrate fermentation</b>	<b>Fibres</b>	<b>Starch</b>	<b>Sugars</b>
	Straw	Cracked cereals	Molasses
	Low D-value silage	Crimped cereals	
	Soya hulls	Biscuit blends	
	Palm kernel	Potatoes	
	High D-value silage	Rolled cereals	
	Sugar beet pulp	Ground cereals	
	<b>slow</b>		
	<b>fast</b>		
	<b>Protein degradation</b>	<b>Digestible undegradable protein (DUP)</b>	<b>Effective rumen degradable protein (ERDP)</b>
Prairie meal (maize gluten feed)		Distillers grains	Rapeseed meal
Soyabean meal		Beans	Pot ale syrup
Lupins		Peas	Feed grade urea



# Dung of finishing cattle

What the manure looks like	Possible dietary causes (not disease)
Loose manure	<ul style="list-style-type: none"><li>■ High protein (total or soluble); pasture</li><li>■ Insufficient fibre in ration</li></ul>
Diarrhoea	<ul style="list-style-type: none"><li>■ Spoiled, mouldy feed or silage</li><li>■ Ruminal acidosis</li></ul>
Foamy manure or mucin casts (pieces of gut lining that indicate gut damage)	<ul style="list-style-type: none"><li>■ Ruminal acidosis</li><li>■ Increased hindgut fermentation</li></ul>
Large particles, undigested feed	<ul style="list-style-type: none"><li>■ Not enough long fibre/forage</li><li>■ Cattle fed a total mixed ration (TMR) may be sorting feed</li><li>■ Ruminal acidosis</li></ul>
Manure variable in a feeding group	<ul style="list-style-type: none"><li>■ Cattle are sorting feed; feeding slowly</li><li>■ Dominant cattle in the group eating more concentrate</li><li>■ Spoiled, mouldy feed or silage</li></ul>
Very dry dung	<ul style="list-style-type: none"><li>■ Diet is too low in protein, potential risk of the rumen stopping working</li><li>■ Reduced water intake</li></ul>

# Current Feed Prices for Finishers



Maize and Soya look good value forward, Rape and distillers less so

Feed	Current Price (£)	Relative value (£)
Biscuit meal	193	265
Bread Waste	Sold out	165
Maize	193 (ground)	207
Barley	188 (dry, whole)	-
SBP	218 (some imported £210)	186
Soya Hulls	158	175
Rapemeal	235	-
Hi pro soya	308	304
Maize Distillers Meal (US)	218	260
Stockmol 20 (10t)	191	141
Regupro 38 (10t)	183	174

**Prices for North Ayrshire full artics delivered Monday 28<sup>th</sup> January. Source: KW**

# Labelling of Compounds



Example label:-

## Beef Nuts

A complementary compound feeding stuff for beef cattle

Directions for use:- To be fed with silage or grass or other roughage. All raw materials used in this feed are from a non-genetically modified source (max 1%)

Oil (B) 3.7%                      Protein 15%                      Fibre 7.9%                      Ash 6.6%

Vit A 8000iu/kg              Vit D3 2000iu/kg              Vit E 40iu/kg (expressed as ALPHA TOCOPHEROL ACETATE)

Copper 35mg/kg (From Copper Sulphate) Selenium 0.25mg/kg

Ingredients used in descending order by weight are:- **Barley, Distillers Dark Grains (barley), Wheatfeed**, Sugar Beet Pulp, Malt Residuals, Distillers Dark Grains (maize), molasses, Calcium Carbonate, Trace Elements + Vitamin Supplements, Sodium Chloride

=====

This feedstuff contains added Copper DO NOT FEED TO SHEEP

=====

Best Before/Vitamins present until 09/11/2012 Manufactured 92days before the “best before” date indicated. Berry Farm Feeds Ltd, 1000kg nett weight Store in cool dry place. UFAS cert end 30.04.13

# Energy of ingredients

Energy of common ingredients in compound feeds

ME  
MJ/kg  
DM

