

# Rationing the Suckler Cow for Improved Efficiency

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## Agenda

- Feed Terminology
- Protein and Energy Balance
- Body Condition Scoring
- Rationing – the basics
- FeedByte





## Feed Terminology



## What does a ruminant need?



- Protein
- Energy
- Mineral
- Vitamins
- Water
- Fibre



## Dry Matter (DM)



- A measure of what is not water
- Important to know: to compare feeds and know what you are feeding, to understand how much feed you have in store; to know how much feed you will need



## Metabolisable Energy (ME MJ/kg DM)



- A measure of the usable energy available to the animal when fed



## Crude Protein (CP%)



- A measure of the protein content (but not of the protein quality)
- Includes **ERDP** (Effective Rumen Degradable Protein) and **DUP** (Digestible Undegradable Protein)
- The animal needs Metabolisable Protein (MP). Normally this comes from microbial protein but at times of high demand (suckler cows late pregnancy) we may need to supplement with DUP

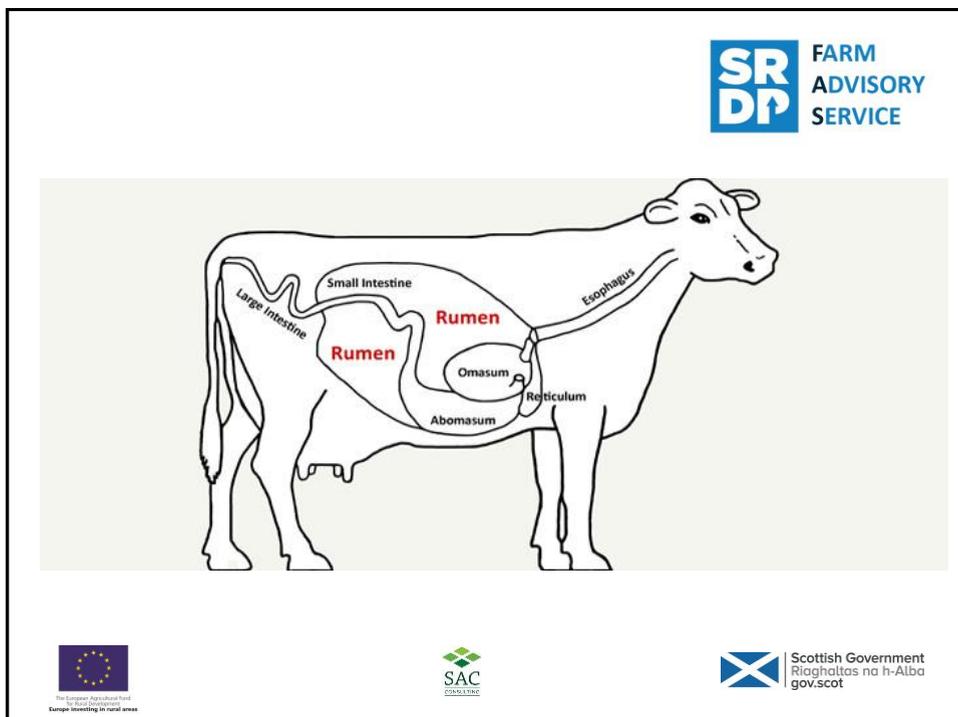


## Microbial Protein



- **Effective Rumen Degradable Protein (ERDP)** is the protein captured by rumen bugs
- **Fermentable Metabolisable Energy (FME)** is the energy for rumen bugs





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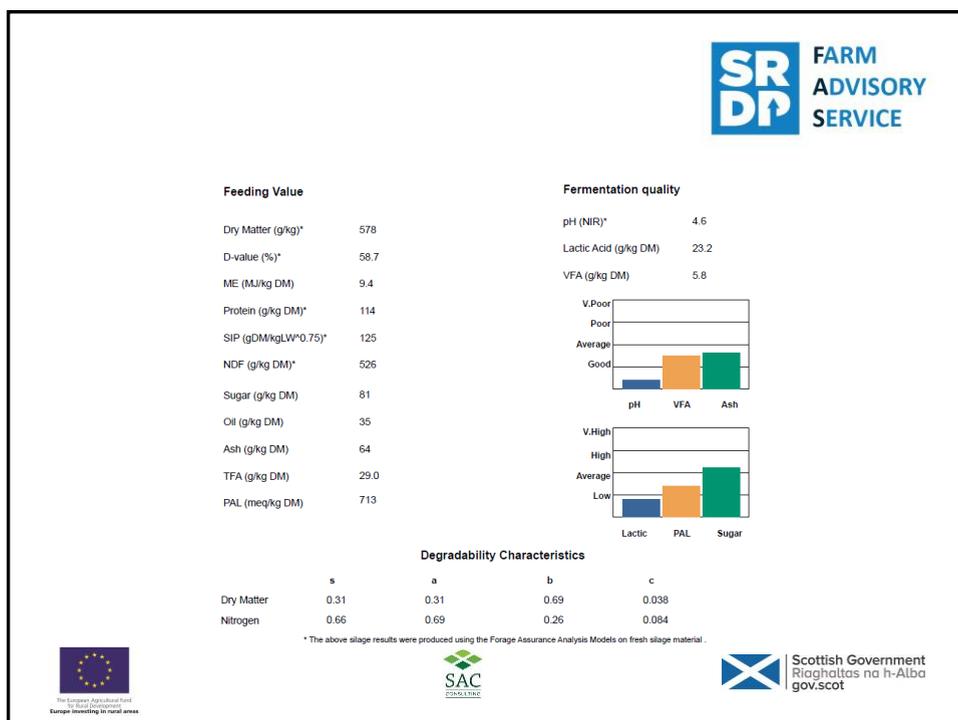
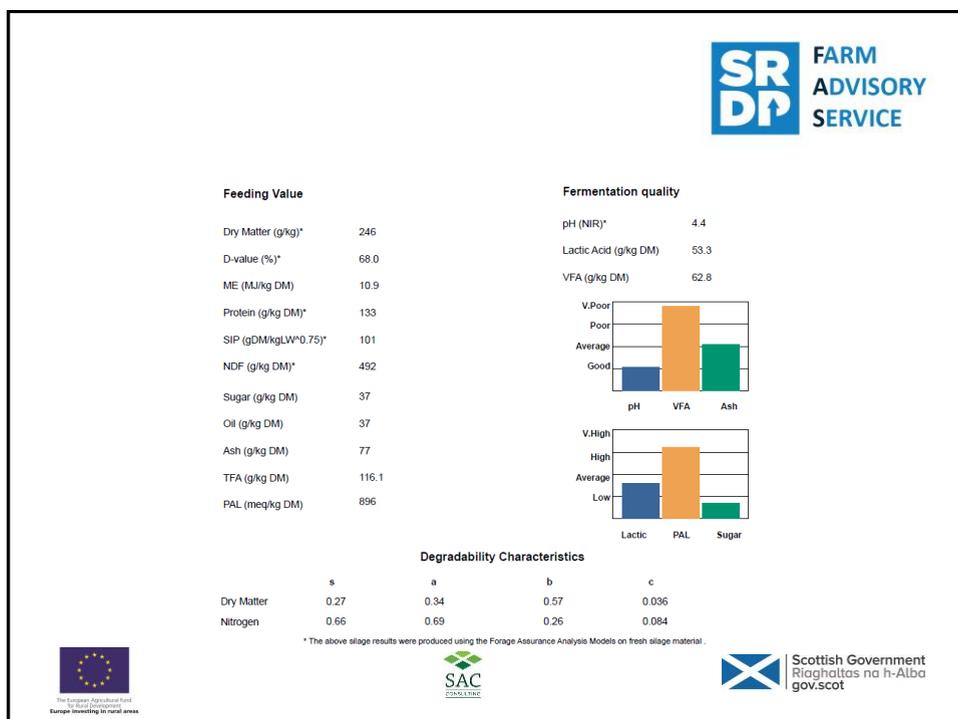
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## Dry Matter Matters!



How do you know you are feeding enough silage?

Example: 10kg of dry matter of silage to satisfy a cow

- Wettest silage (21% DM) = **48kg** fresh weight
- Driest Silage (63% DM) = **16kg** fresh weight



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## Nutrition and feeding of suckler COWS



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## Feeding Suckler Cows



### OBJECTIVES

- Produce viable calf at birth & weaning
- Maintain cow health
- Maximize reproductive efficiency
- High calf growth rates - (milk)
- Least cost
- **DRIVEN BY CONDITION SCORE**



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- **The Benefits of Cow Condition Scoring - Part 1**
- [https://www.youtube.com/watch?v=i\\_vlJ39ZARs](https://www.youtube.com/watch?v=i_vlJ39ZARs)
- **The Benefits of Cow Condition Scoring – Part 2**
- <https://www.youtube.com/watch?v=uzLbEEboKJA>



# Managing Body Condition



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3

WINTER

SUMMER

Expensive Feed

Cheaper Grazing



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# Importance of groups



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## Grouping at start of winter



- Cow condition

**1 diet**

<b>Fat</b>	<b>Thin</b>
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**Overfed**

**Underfed**

Average silage to appetite for 650kg dry cow would gain 0.75kg/day – 1.3cs over 150 days



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## Grouping at start of winter



**Feed**

**Less**

**Same**

**More**

<b>Fat</b>	<b>Average</b>	<b>Thin</b>
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**Same total feed/day**



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## Cow Energy Requirements



- Depends on cow weight, breed, lactation, pregnancy, body condition
- Maintenance Roughly 10% of LW +5MJ

Weight (kg)	ME (MJ)
550	60
650	70
750	80

Do you know what your cows weigh?



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## Thin Cows Close to Calving



- Give them the best forage available
- Avoid overloading with concentrates
- If cows are losing excessive weight near to end of pregnancy:-
  - could she be carrying twins? Twins will increase ME requirement by 20-25MJ/d near end of pregnancy
  - feed issues (access)
  - other vet issues



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## Fat Cows Near Calving



- Can still be losing a bit of weight up to calving
- Meet protein and mineral requirements
- Avoid 'starvation' diets for over fat cows
- Ideally take condition off fat cows gradually early in pregnancy



## Feeding Suckler Cows Rules of Thumb



### Maintenance

**10% of LW +5MJ**

Out wintered cattle Require 10-15% more energy to keep warm

<b><u>Pregnancy</u></b>	<b>16 weeks</b>	<b>~2 MJ ME/day</b>
	<b>12 weeks</b>	<b>~ 6 MJ ME/day</b>
	<b>8 weeks</b>	<b>~ 12MJ ME/day</b>
	<b>4weeks</b>	<b>~ 23 MJ ME/day</b>
<b><u>Milk</u></b>		<b>~5 MJ ME/kg milk</b>
<b><u>DM Intake</u></b>		<b>~2.5% of live weight</b>
<b>650 kg cow</b>		<b>11-13 kg DM/day</b>



## Rules of thumb Cow Protein Requirements



Silage ME (MJ/kg DM)	Min CP in silage(%DM)	Silage	Straw
		kg/d	
9	11	27	2.5
10	13	20	4.5
11	16	15	6



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## Take Home Messages



- Get your forage analysed, know what you've got (quality & quantity)
- Use this information to plan feeding to make the most from your forages and buy in the best matched supplementary feeds
- Prioritise animals & match what you've got to those that need it most
- Group cows if possible and feed according to condition (and re-assess cows half way through winter) to prevent cows losing/gaining excessive condition over winter



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