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Farm Introduction

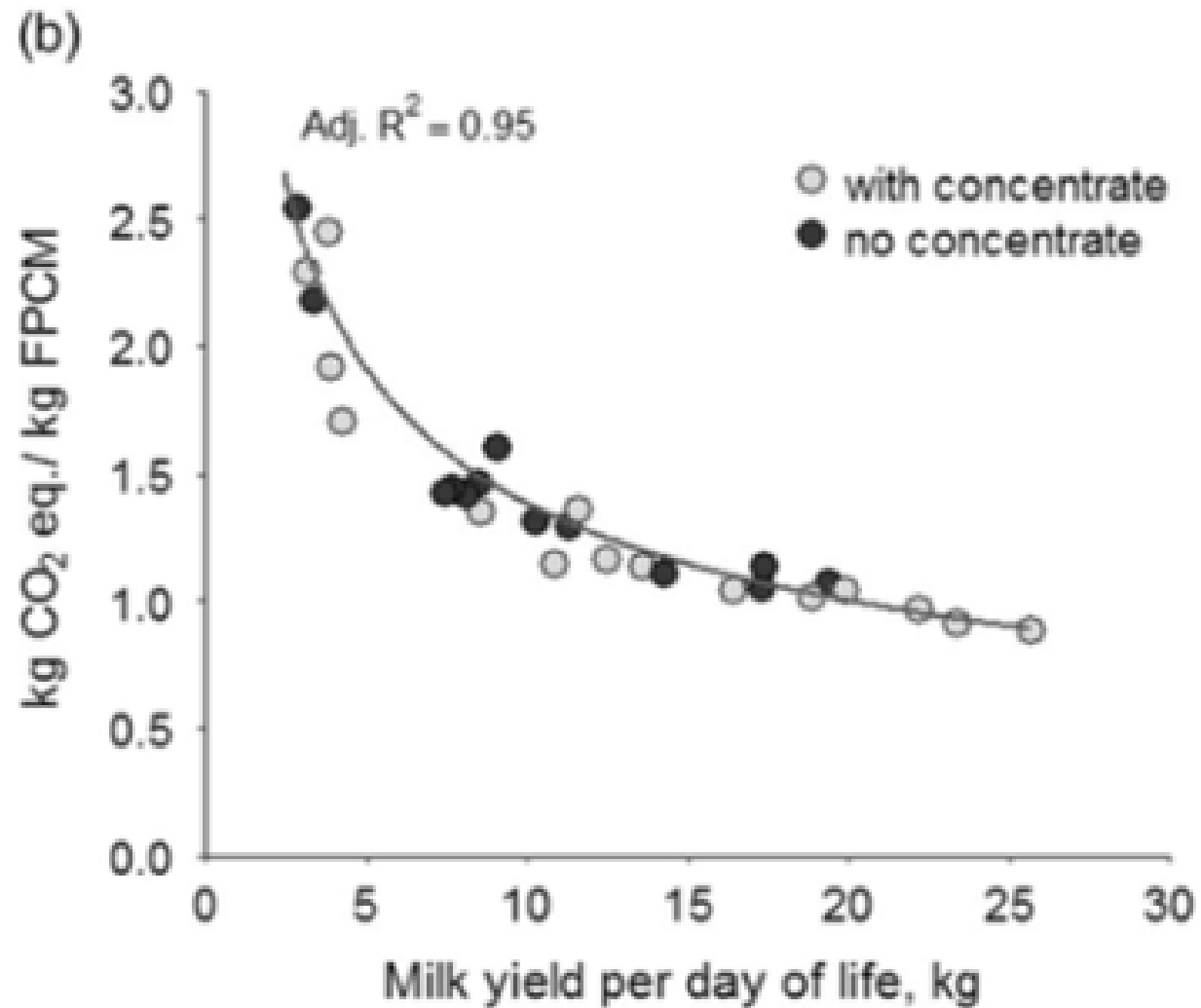
- Partnership with parents
- 150 Holstein herd
- Calving Sept- Feb
- 10,900L 4.30%BF 3.35%Pro
- 2x daily milking
- Grazing Apr- Oct
- 2 labour units
- Rearing 35 replacements
- 210 a.c. (25 a.c. maize, 25 a.c. winter cereals)



KPI's linked to profitability

	Target	Farm
IOFC	>£9	£10.33
% heifers calved at 23- 25 months (90% mature bodyweight)	>90%	90%
Replacement rate	20%	23%
Years in production	5 lactations	4.4 lactations
Lifetime milk production	>50,000L	48,000L
Lifetime daily yield	>20 L/day	20.5L/day

LDY & CO₂ eq



Agenda

1

Transition Cow

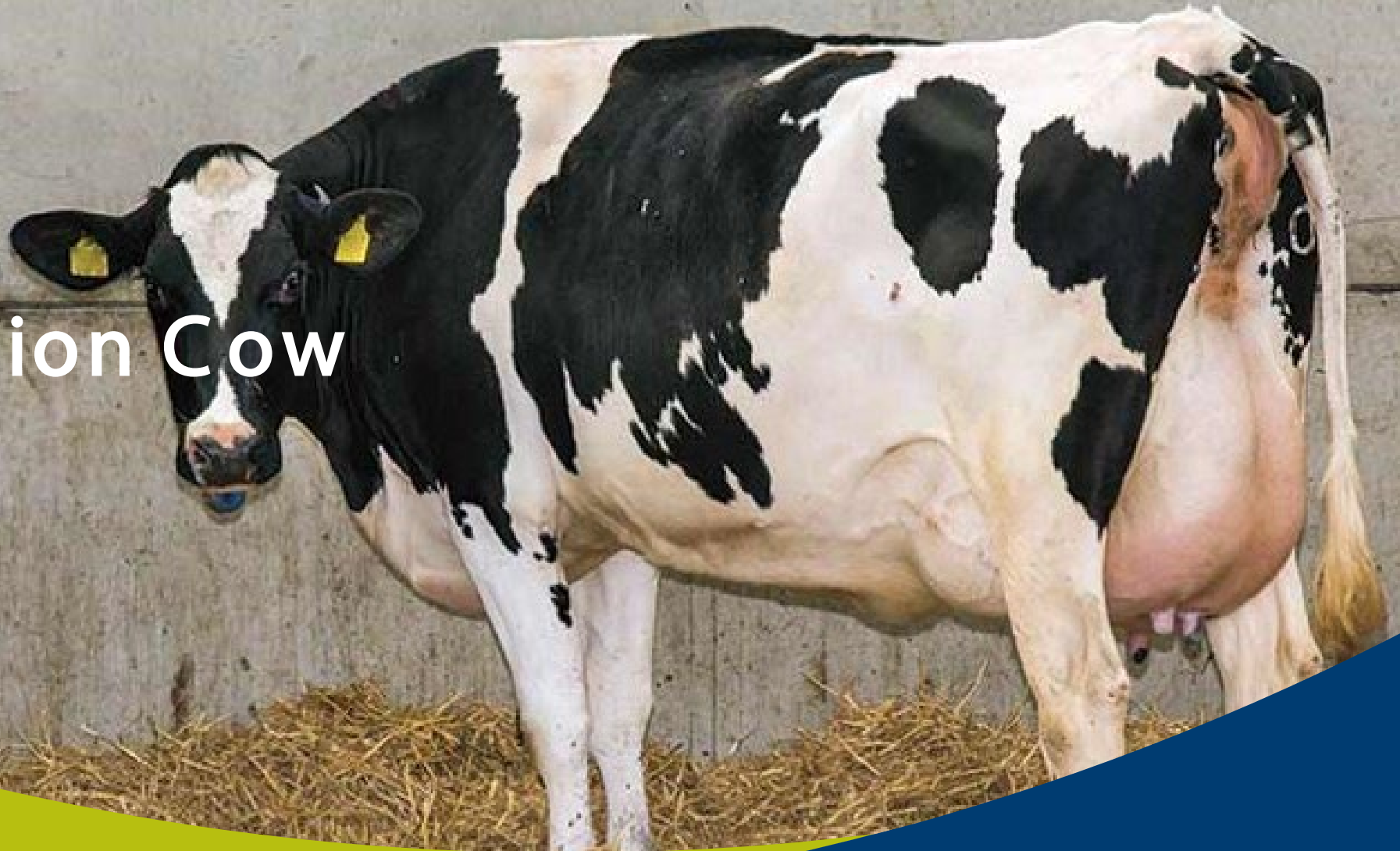
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Optimising lactation performance

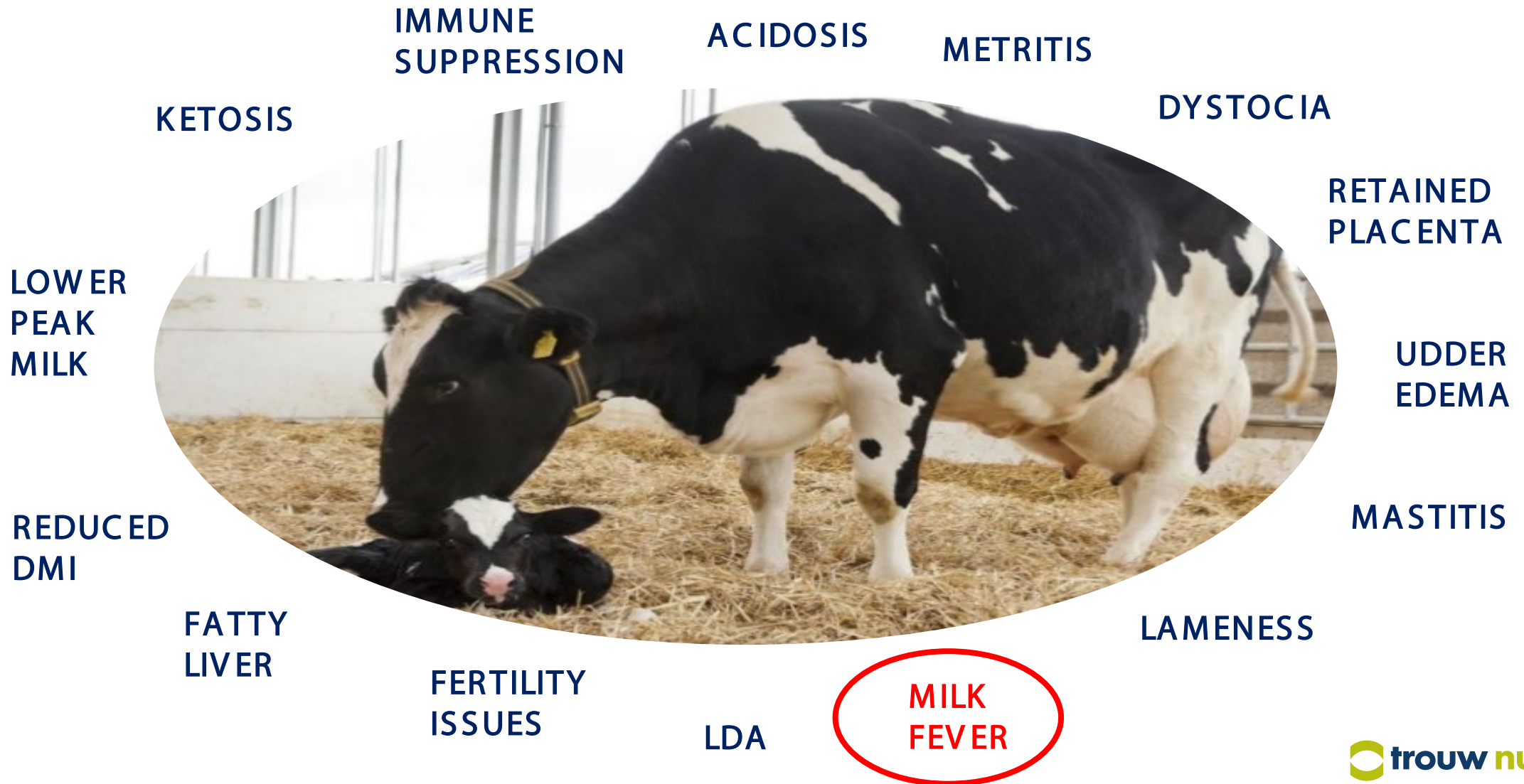
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Health & Fertility

1. Transition Cow



Milk Fever – The ‘Gateway’ Disease



Far-off (30 days)

2 focus points:

1. Controlled Energy - 90- 100MJ

- Standing hay – grown out 2nd cut
- Dry cow silage

2. Rumen fill

- 'Bulkiness' of diet

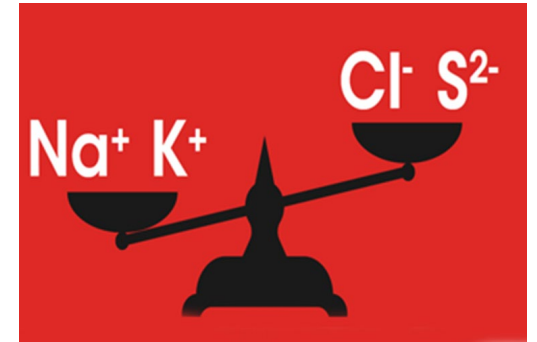


Close-up (30 days)

3 focus points:

1. Milk Fever Prevention - DCAB

- Acidifying the blood which allows cow to mobilise calcium from her bones
- Use of anionic salts e.g. magnesium chloride



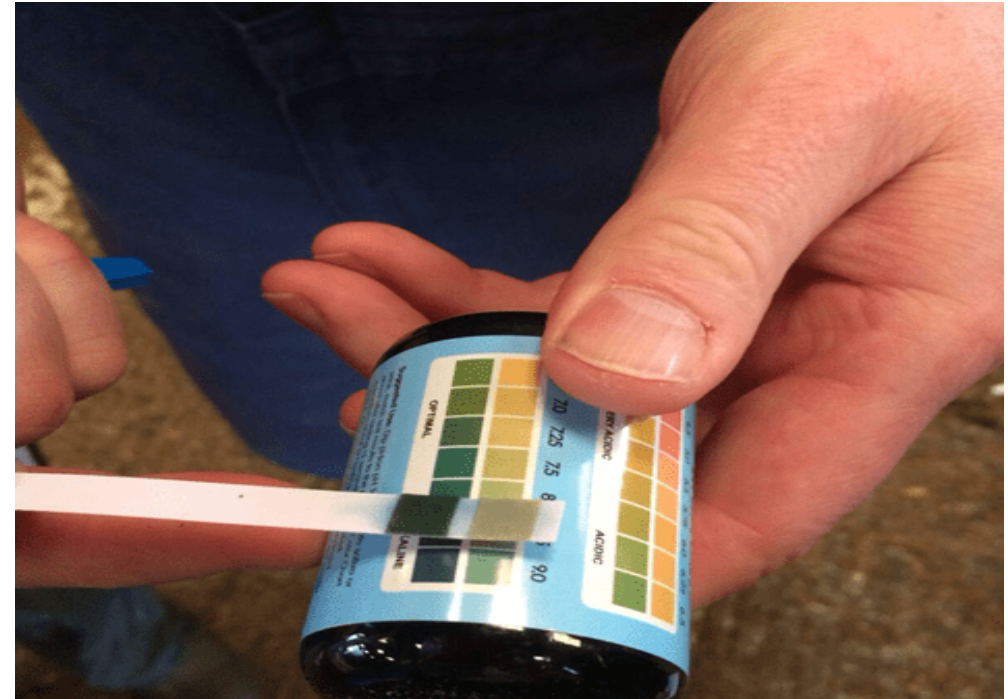
2. Controlled Energy – 110- 130 MJ

3. Rumen Fill



Checking Urine pH

- Urine pH can be checked using test strips
- 3 days after diet change/on diet
- Normal is pH 8
- Partial DCAB 6.8- 7.5
- Full DCAB 5.9- 6.8



Making Dry Cow Silage



- Aim for under 1.5% potassium (<150 DCAB)
- Cut two/three weeks after heading
- Low K index fields
- No slurry and straight N fertilizer
- Approx. 1 bale/ cow for close-up period



Analysis

Analysis (Dry Matter)	Unit	Result	Low	High
Dry Matter	%	39.0		
Protein	%	7.9		
D Value	%	62.6		
ME	MJ/kg	10.0		
pH		3.8		
Ammonia N as % Total N	%	5.5		
Sugars	%	3.3		
Ash	%	5.1		
NDF	%	58.8		
Digestible NDF	%	62.0		
ADF	%	37.0		
Lignin	g/kg	49.2		
Oil B	%	2.1		
VFA's	g/kg	19.9		
Lactic Acid	g/kg	47.4		
Intake	g/kg	90.6		

Protein: s= 0.58; a= 0.68; b= 0.23; c=0.079 Dry Matter: s= 0.27; a= 0.34; b= 0.57; c=0.038

Crude Fibre: 32.9%

Major Minerals (DM Basis)	Unit	Result	Low
Calcium	%	0.55	
Phosphorus	%	0.23	
Magnesium	%	0.09	
Sodium	%	0.23	
Potassium	%	1.17	
Chloride	%	0.33	
Sulphur	%	0.20	
CAB	meq/kg	180	

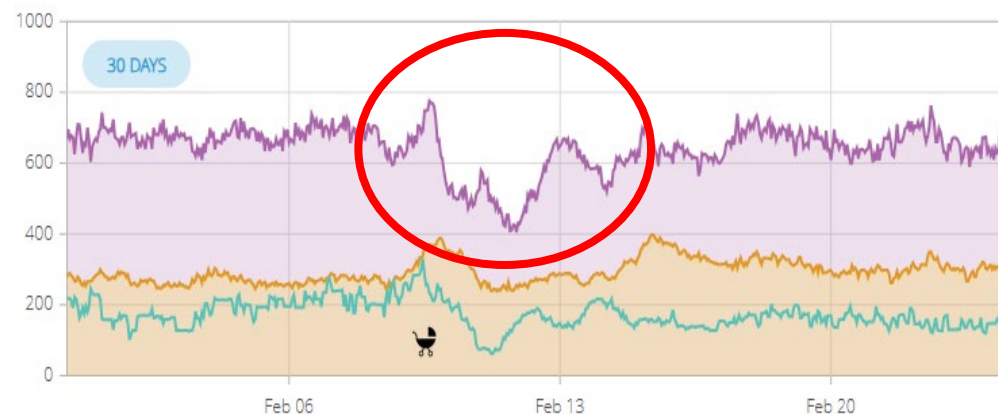
Close-up Diet

	Kg/head	
'Chopped' straw	3- 4	
Dry cow silage	20- 25	
Blend (28%CP)	3- 4	Soya Protected soya Rape Maize Wheat Minerals Ammonium Chloride <i>Yeast</i> <i>Toxin binder</i> <i>Protected Choline</i> <i>Protected</i> <i>Methionine</i>
Mag Chloride	0.1- 0.25	

	Target	Farm
CP	13- 15 %	13
MP	>1200g	1233
NDF	40- 50 %	48
DCAB	<0m eq/kgDM	- 90
Intake	>12kgDM	13.5
Energy	120- 130 MJ	134
Starch	>10 %	9

At Calving

1. Reviva + yeast
2. Snatch calf
3. Milk via portable milker
4. Barrel of milkers TMR
5. Remain in individual calving pen 12hrs – 3 days
6. Rumination graph
7. Moved into milking group



Measuring transition success

1. Metabolic issues
2. Fertility
3. 21-day pre-breeding scan
4. Days to peak



	Target	2022-24
Milk Fever	2%	<1%
Retained Cleaning	6%	3%
Metritis	5%	3%
Ketosis	1%	1%
DA	<1%	0%



2. Optimising lactation performance

No substitute for good silage!



	DM %	ME MJ/kgDM	CP %	NDF %	Sugars %	Oil %	Starch %	Cute Date	Interval
1 st	25.6	12.1	16.4	41.2	1.4	3.3		1 st May	
2 nd	35.9	12.1	16.9	43.7	1.7	4.6		7 th Jun	5 weeks
3 rd	29.6	12.1	15.0	42.6	2.7	3.5		12 th Jul	5 weeks
4 th	41.6	11.0	14.0	45.5	4.0	4.8		28 th Aug	7 weeks
Maize	29.8	11.1	7.4	43.4			27.8	22- Oct	

Current diet

	Intake (fresh)	Intake (DM)	Cost / ton DM	Feed Costs
Grass silage	34	9.33	£ 150	1.40
Maize silage	12	3.46	£ 175	0.61
Blend	10	8.8	£ 357	3.14
Parlour Nut (16%)	4	3.5	£ 362	1.45
TOTAL	60kg	25kgDM	Feed Cost	£ 6.42
Yield		38.5		
BF		4.30		
Pro		3.36	Milk Price	43.5p/ l
			Milk Sales	£ 16.75
			IOFC	£ 10.33

	14 Kg/head
Maize meal	2.6
Wheat	2.4
Barley	0.4
Soya	1.8
Sopralin (protected soya)	1.0
Rapeseed	0.6
Hulls	3.7
Maxfat	0.4
Molasses	0.2
Buffers	0.2
Protected Methionine	0.015
Yeast	0.008
TOXO	0.03
Minerals	0.7

Ration Guidelines

	Target	Farm
Dry Matter %	➤ 40 - 45	42
Dry Matter Intake		25kg DM
% Forage : Concentrate	45 - 50	50:50
Kg forage		12.8
Energy Density MJ/kgDM	> 12.0	12.4
Crude Protein %	15.8 – 16.5	16.5
NDF %	32 – 35	35
Starch %	Max 20	18.5
Sugar %	3 – 7	2.5
Oil %	3 – 5	4.3



Grazing - Criteria

Criteria	Full- time	Out by day	Housed
PD	+ 40 days	+ 40 days	
BCS	3.0	>2.75	
Litres	<32	<38	>38
Supplementation	FTY Max 8kg	55% TMR + FTY	
M+ Forage	14- 16	12- 14	10



3. Herd Health & Fertility

Herd Health

Lameness

- Routine trimming at drying-off & 90- 100 DIM
 - Ideally 1trim / 4000L
- Foot-bathing every other day

Vaccinations

- | | |
|-----------------|-------------------------|
| • IBR | • Q Fever |
| • BVD | • Rotavac |
| • Leptosporosis | • BRD |
| • Salmonella | • Clostridia / Blackleg |



Fertility

- Sexed Semen December only
 - ~80% of eligible animals in Dec are sexed
 - Criteria: Milk recording, fertility, conformation, foot health
 - 2024 Sires: Perfect, Renegade, Mecca - P, Marvel, Pursuit
- Pre-breed scan at 21DIM
- Scanning every 2 weeks
- VWP 40 days
- Use of OV and CIDR Sync

	Target	Farm
% herd pregnant by 130 days	>90%	92
Services per conception	<1.75	1.7
Calving to conception interval (days)	85	87
Calving interval (days)	365	367
Conception rate %	>60	59
Empty rate %	<5	5

A photograph of a metal gate in a field. The gate is made of several horizontal bars and is set against a backdrop of green grass and trees. The sky is overcast. The text 'Take home messages' is overlaid on the image in a large, white, sans-serif font.

Take home messages

Summary

1. Focus on the KPI's that drive profitability
2. Dry cow diet - Biggest win!!!
3. Lactating diet – Forage quality + balanced diet
4. Revised herd health plan
5. Fertility – effective record keeping + prompt action



.....aiming for 'consistent' attention to detail all the time!