

Ration Formulation Summary

Client Details	
Jamie Douglas	
Hill Farm, Abridge	
Epping	
Essex	CM12 9PQ

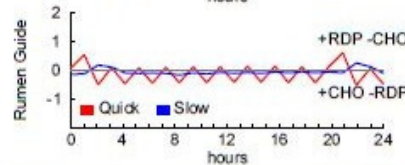
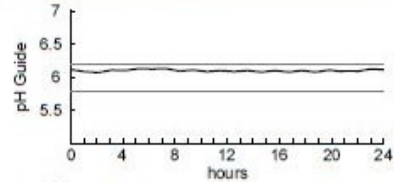
Nutritionist	
Roy Fawcett	

Diet Details			
Farm Details	Jamie Douglas	Date Received	12/10/2009
Diet Name	October Diets	Date Reported	11/11/2009

Feedstuff	FMI	DMI
Grass Silage (Good)	15.8	3.9
Maize Silage	26.3	8.7
Sugar Beet Feed (molassed)	3.9	3.4
Soya (Hipro)	2.3	2.1
Rapeseed Meal	1.7	1.6
General Purpose mineral	0.32	0.30
Haylage	0.53	0.38

Production and Price		
	Achieved	
Milk Yield (kg/d)	30.1	30
Conc use (kgDM/litre)	0.25	
	£/hd/d	p/litre
Conc Feeds	1.9	6.3
All Feeds	3.2	10.5
Margin over feed	4.97	16.5

pH and Rumen Balance Guide



Total Intake (kg)	50.9	20.4
Forage Intake (kg (%DMI))		13.0 (64)

Nutrients	Quantity
Dry Matter (%)	40.1
Active Fibre (% DM)	12
CP (% DM)	16.2
NDF (% DM)	34
Oil (% DM)	3.2
Sugar (% DM)	6.5
Starch (% DM)	16.9
ME (MJ/kg DM)	11.6
ME (MJ/d)	237
MP Supply (g/Days)	1903
Lysine (g/100g True Protein)	2.8
Threonine (g/100g True Protein)	2.9
Methionine (g/100g True Protein)	1.1
Cystine (g/100g True Protein)	0.8
Histidine (g/100g True Protein)	1.7

Minerals	%DM
DCAB (mequiv/kg DM)	162
Sodium (g/day)	56 0.27
Potassium (g/day)	353 1.70
Calcium (g/day)	172 0.84
Magnesium (g/day)	56 0.27
Chloride (g/day)	149 0.73
Phosphorus (g/day)	89 0.44
Sulphur (g/day)	63 0.31
Calcium:Phosphorus	1.92
Copper (mg/day)	597 0.0029
Selenium (mg/day)	7.46 0.0000
Zinc (mg/day)	2418 0.0118

Environmental Discharge	Quantity
Methane (g/d/litre)	14
Faecal N (g/day)	156
Urinary N (g/day)	118

Whilst every care has been taken in preparing these rations, responsibility for use of this information rests with the end user.

Bioparametrics
Feeding Ruminants Correctly

Biopara-Milk

Advanced Dairy Ration Formulation

Predicting how much milk can be produced from a given diet by cows at all stages of lactation, is a complicated business. **Biopara-Milk** is computer software that lets you formulate individual cows or for entire herd. You can set your preferred feeding strategy and produce balanced rations for your cows where ever they are in their lactation.

There are two ways of using it:

- Biopara-Milk
- Remote Biopara-Milk

"Going on to a full Biopara-Milk diet gave a 40% increase in milk from forage, a 10% increase in yield and reduced concentrates. Net result was +£8000 pcm on 220 cows"

Andy Holland, Ontrak Nutrition.

"Biopara-Milk shows me how my farmers achieve higher forage dry matter intakes with less concentrates. Milk went up, costs went down, DMI increased to 32 kg/day and cow health and fertility improved."

Liz Russell, EnviroSystems

Remote Biopara-Milk

Using new and better analytical information, **Remote Biopara-Milk** can significantly increase cow performance by maximizing microbial efficiency and increasing dry matter intake.

Remote Biopara-Milk is available to all **Biopara-Silage** users to help analyse and assess their dairy rations. This one-stop rationing service will:

- Analyse the silages being fed (**Biopara-Silage**)
- Assess the current ration using **Biopara-Milk**
- Suggest alterations to the current ration
- Provide a full written report highlighting any areas of concern or interest, reasoning behind the suggested alterations and the predicted impact on animal performance.

Correct balancing of nutrients is impossible without the proper analysis. For the vast majority of producers, increases in daily milk yield of three or more litres per cow are attainable by using rumen dynamics to correctly balance the amount of carbohydrate and protein in a ration.

Remote Biopara-Milk involves no farm visits and all users need do is:

1. Take a sample of any silages being fed and fill in the Analysis Request Form.
2. Fill in a simple Diet Assessment Form with current ration, milk yield, herd structure and any health or feeding issues
3. Put the silage and forms into the free post bag(s) provided
4. Put the free post bag(s) in the post.

Service

Remote Biopara-Milk includes one **Biopara-Silage** analysis of grass, maize or wholecrop cereal. Additional **Biopara-Silage** analysis can be purchased. Telephone support and the supply of all the necessary stationary and free post bags is included.

It is our aim to supply the full **Remote Biopara-Milk** report via email within 5 days of receipt of the forage samples and diet information.

Biopara-Milk

Biopara-Milk enables you to maximise the use of home-grown forages in your ration, improve the rumen balance of carbohydrate and protein, reduce the risk of acidosis, increase dry matter intake and milk yield and improve animal performance.

A powerful formulation tool

- Single Day. Choose the body weight, condition score, milk production and formulate a diet. See overleaf for typical output.
- Whole Lactation. Formulating rations using **Biopara-Milk** is easy and follows a logical step by step process. Firstly, a description of the herd is required such as the type and size of the animals, the spread of ages in the milking herd and their condition score. Secondly, the user can choose to formulate up to 5 rations.

There is access to an extensive forage and feed library and a pre-mix formulator to produce customised blends. Analysis of your own forages, using **Biopara-Silage** and **Biopara-Minerals**, are copied directly into **Biopara-Milk**.

Biopara-Milk simulates rumen fermentation ten times per hour, providing important information such as the balance of carbohydrate and protein, the risk of acidosis and blood urea levels.

As well as providing in depth analysis of each ration, **Biopara-Milk** also allows you to analyse each diet separately to see how well they suit heifers, 2nd calvers and older cows. Ration analysis results can then either be printed directly from **Biopara-Milk** or saved as PDF documents so that the results can be emailed.

Service

Biopara-Milk or further information on **Remote Biopara-Milk** is available by contacting

Roy Fawcett: +44 (0) 7751587083

Email: roy.fawcett@bioparametrics.com

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www.bioparametrics.com