

Summary Report

Animal Inputs

Animal Type : Lactating Cow
 Age : 54 months
 Body Weight : 600 kg
 Milk Fat : 3.91%
 Days In Milk : 130

Milk Production : 18.0 (kg/day)
 Days Pregnant : 100
 Breed : Holstein
 Milk True Protein : 3.41%

Diet Nutrient Balances

Requirements	NEI (Mcal/day)	MP (g/day)	Ca (g/day)	P (g/day)	K (g/day)
Maintenance	9.7	603	19	17	121
Pregnancy	0.0	0	0	0	0
Lactation	13.6	916	22	16	27
Growth	0.0	0	0	0	0
Total Required	23.3	1519	41	34	148
Total Supplied	24.7	1324	27*	32*	217*
Balance	1.4	-195	-14	-2	69

* Note that these mineral supplied values are total *absorbable* supplied.

Animal Performance

DMI - Actual : 16.1 (kg/day)
 DMI - Predicted : 17.8 (kg/day)

NEI Allowable Milk : 19.9 (kg/day)
 MP Allowable Milk : 14.2 (kg/day)

Milk Production : 18.0 (kg/day)

Days to gain one condition score : > 305

Daily Weight Change due to Reserves : 0.3 (kg/day)

Protein Values

RDP Required : 1602 (g/d)
 RDP Supplied : 1690 (g/d)
 RDP Balance : 88 (g/d)

RUP Required : 853 (g/d)
 RUP Supplied : 562 (g/d)
 RUP Balance : -291 (g/d)

MP - Bacterial : 871 (g/d)
 MP - RUP : 376 (g/d)
 MP - Endogenous : 76 (g/d)

CP - Diet : 14.0 (%DM)
 CP - RDP : 10.5 (%DM)
 CP - RUP : 3.5 (%DM)

Diet Concentrations

NDF : 45.0 (%DM)
 Forage NDF : 40.2 (%DM)
 ADF : 24.8 (%DM)
 NFC : 33.9 (%DM)
 Undiscounted TDN : 68 (%DM)
 ME : 2.44 (Mcal/kg DM)
 NEI : 1.53 (Mcal/kg DM)
 NEg : 0.96 (Mcal/kg DM)
 Ca : 0.4 (%DM)
 P : 0.3 (%DM)
 Ether-Extract : 3.7 (%DM)
 DCAD : 195 (mEq/kg)

Target Diet Concentrations

NEI : 1.31 (Mcal/kg)
 MP : 85 (g/kg)
 Ca : 2 (g/kg)
 P : 2 (g/kg)

Diet Summary

Feed Name	kg/day (Dry Matter)	kg/day (As-Fed)	% (Dry Matter)
Pradera c Alfalfa Invierno	0.00	0.00	0.00
Pradera c Festuca Invierno	4.00	20.30	24.82

Silo Maiz PE Cabrera	5.02	13.00	31.13
Silo Sorgo PE Cabrera 2019	3.76	13.00	23.34
Grano Humedo Sorgo	1.84	2.50	11.38
DDGS Cabrera 2019	1.35	1.50	8.39
Urea	0.15	0.15	0.93

Energy and Protein Supply

Feed Name	DMI (kg/day)	TDN (g/day)	ME (Mcal/day)	NEI (Mcal/day)	NEg (Mcal/day)	CP (g/day)	RUP (g/day)	RDP (g/day)	NDF (kg/day)	MCP (g/day)
Pradera c Alfalfa Invierno	0.0	0	0.0	0.0	0.0	0	0	0	0.0	-
Pradera c Festuca Invierno	4.0	2773	10.4	6.6	4.3	800	150	651	1.7	-
Silo Maiz PE Cabrera	5.0	3314	11.6	7.2	4.4	348	119	229	2.6	-
Silo Sorgo PE Cabrera 2019	3.8	2144	7.3	4.4	2.3	292	117	174	2.2	-
Grano Humedo Sorgo	1.8	1633	6.0	3.9	2.7	141	56	85	0.3	-
DDGS Cabrera 2019	1.4	1070	4.1	2.7	1.8	249	120	129	0.5	-
Urea	0.2	0	0.0	0.0	0.0	422	0	422	0.0	-
Totals :	16.1	10935	39.4	24.7	15.5	2252	562	1690	7.3	1362

Feed Name	ME (Mcal/kg)	NEI (Mcal/kg)	NEg (Mcal/kg)	Kp (%/hr)
Pradera c Alfalfa Invierno	2.23	1.37	0.82	4.70
Pradera c Festuca Invierno	2.60	1.64	1.07	4.70
Silo Maiz PE Cabrera	2.31	1.43	0.87	4.70
Silo Sorgo PE Cabrera 2019	1.95	1.18	0.62	4.70
Grano Humedo Sorgo	3.26	2.11	1.48	6.18
DDGS Cabrera 2019	3.01	1.96	1.30	6.18
Urea	0.00	0.00	0.00	6.18

Increment over Maintenance : 2.6 X
 Energy/Protein Discount Factor : 4.2%
 Undiscounted TDN in Diet : 67.8%
 Diet RUP Digestibility : 66.9%

Duodenal Amino Acid Supply

Total Dry Matter Intake : 16.1 kg

Total RUP : 562 g/day

Total MCP : 1362 g/day

Amino Acid	Flow (g/day)	DIGAA Flow (g/day)	Percent of MP
Arginine	78	60	4.55%
Histidine	38	29	2.18%
Isoleucine	88	68	5.16%
Leucine	167	128	9.68%
Lysine	113	88	6.68%
Methionine	36	28	2.09%
Phenylalanine	89	68	5.17%
Threonine	90	70	5.25%
Valine	101	78	5.88%
Totals	800	617	46.64%

Total Essential Amino Acids : 800 (g/day)

Dry Matter Intake

Temperature Adjustment Factor (Heifers Only) : 1.0

Coat Condition Adjustment Factor : 1.0

Dry Matter Intake : 17.8 (kg/day)