



NUTRIENT PROFILE

	Dry Matter	As Fed
Dry Matter, %	100.00	88.00
Protein, %	51.14	45.00
Fat, %	1.17	1.03
Fiber, %	5.90	5.20
ADF, %	7.50	6.60
NDF, % w/o sulfite (CPM)	20.88	18.37
NDF, % w/ sulfite (NRC)	14.86	13.08
Non-Fiber Carbohydrate (NFC), % (CPM)	28.69	25.25
Non-Fiber Carbohydrate (NFC), % (NRC)	25.34	22.30
Starch, %	6.00	5.28
Sugar, %	11.50	10.12
Ash, %	6.70	5.90
Lignin, %	0.90	0.79
RUP, % of crude protein	72.00	72.00
RDP, % of crude protein	28.00	28.00
SIP, % of crude protein	6.00	6.00
Digestible Protein, % of bypass protein	95.00	95.00
Saturated Fatty Acids, %	0.20	0.18
Unsaturated Fatty Acids, %	1.00	0.88
Unsat/Sat Ratio	5.00	5.00
TDN, % ^A	81.70	71.90
Digestible Energy ^A , Mcal/lb	1.86	1.64
Metabolizable Energy ^A , Mcal/lb	1.54	1.36
Net Energy Lactation ^A , Mcal/lb	0.99	0.87
Net Energy Gain ^A , Mcal/lb	0.75	0.66
Net Energy Maintenance ^A , Mcal/lb	1.07	0.95
Calcium, %	0.42	0.37
Phosphorus (total), %	0.70	0.61
Calcium/Phos Ratio	0.60	0.60
Chloride, %	0.05	0.04
Magnesium, %	0.34	0.30
Potassium, %	2.40	2.11
Sodium, %	0.014	0.012
Sulfur, %	0.41	0.36



	Dry Matter	As Fed
Cobalt, mg/lb	0.014	.0012
Copper, mg/lb	10.10	8.90
Iodine, mg/lb	0.054	0.048
Manganese, mg/lb	18.00	15.84
Zinc, mg/lb	26.40	23.23
Iron, mg/lb	65.90	58.00
Lysine, %	3.12	2.75
Methionine, %	0.75	0.66
Arginine, %	3.85	3.24
Tryptophan, %	0.70	0.62
Histidine, %	1.47	1.29
Leucine, %	4.00	3.52
Isoleucine, %	2.43	2.14
Phenylalanine, %	2.64	2.32
Threonine, %	2.01	1.77
Valine, %	2.37	2.09
Tyrosine, %	1.69	1.49
Choline, mg/lb	1323	1164

A= calculated based on equations published in the NRC 2001 Nutrient Requirements of Dairy Cattle
RUP = Ruminally undegraded protein
RDP = Ruminally degraded protein
SIP = Soluble Intake Protein



CPM Input

Lignin, %NDF	4.30
NPN, % SoIP	25.44
NDIP, % CP	18.32
NDIP, %DM	9.37
ADIP, % CP	2.40
ADIP, %DM	1.23
Sugars (A), %NFC	39.50
Starch (B1), % NFC	20.00
Sol Fiber, %NFC	40.50
peNDF, % NDF	20.00
Amino Acids, % of RUP	
Methionine	1.57
Lysine	6.10
Arginine	7.28
Threonine	4.18
Leucine	8.99
Isoleucine	5.16
Valine	5.34
Histidine	2.69
Phenylalanine	5.63
Tryptophan	1.25

	<u>KD, %H</u>	<u>Int. Dig, %</u>
Sug (A2)	300	100
Sta (B1)	25	75
SOLF (B2)	25	75
NDF (B3)	7	20
Prot (A)	10000	100
Pro (B1)	230	100
Pro (B2)	3	100
Pro (B30)	0.3	80

The CPM Dairy / CNCPS v3.0 model has been used in the field since 1994. This specification was developed to allow the inclusion of AminoPlus in the CPM model with relative ease since the nutrient values are expressed in different units than our standard specification sheet.



NRC Input

	<u>DM Basis</u>	<u>As-fed Basis</u>
NDFIP, %, (w/ sulfite)	4.80	4.22
ADFIP, %	1.09	0.96
Protein A, % CP	6.00	6.00
Protein B, % CP	94.00	94.00
Protein C, % CP	0	0
Protein Digestion Rate, %/hr	2.00	2.00
RUP Digestibility, %.	95.00	95.00
CP Digestibility, %	1.00	1.00
NDF Digestibility, %	0.33	0.33
Fat Digestibility, %	1.00	1.00
Arginine, % CP	7.46	7.46
Histidine, % CP	2.84	2.84
Isoleucine, % CP	4.70	4.70
Leucine, % CP	7.75	7.75
Lysine, % CP	6.10	6.10
Methionine, % CP	1.44	1.44
Phenylalanine, % CP	5.09	5.09
Threonine, % CP	3.89	3.89
Tryptophan, % CP	1.36	1.36
Valine, % CP	4.59	4.59
Ca Bioavailability, g/g	0.60	0.60
P Bioavailability, g/g	0.70	0.70
Mg Bioavailability, g/g	0.16	0.16
Cl Bioavailability, g/g	0.90	0.90
K Bioavailability, g/g	0.90	0.90
Na Bioavailability, g/g	0.90	0.90
S Bioavailability, g/g	1.00	1.00
Co Bioavailability, g/g	1.00	1.00
Cu Bioavailability, g/g	0.04	0.04
I Bioavailability, g/g	0.85	0.85
Fe Bioavailability, g/g	0.10	0.10
Mn Bioavailability, g/g	0.075	0.075
Se Bioavailability, g/g	1.00	1.00
Zn Bioavailability, g/g	0.15	0.15