



WEST CENTRAL®

SoyChlor®

Technical Bulletin

Suggested Nutrient Levels for Close-up Dairy Cows

100% Dry Matter Basis

Nutrient	Suggested	Maximum	Minimum	Note
Crude Protein	12%	15%	12%	Mature Cows
Crude Protein	15%		15%	1 st Calf Heifers
DCAD (meq/kg)	-50 to -100	-150		Urine pH 6-7
Calcium	100-120g	1.5 %	0.48 %	
Phosphorus	0.3%	0.5%	0.26%	
Magnesium	0.3%	0.4%	0.12%	
Potassium	As low as possible		0.62%	K:Mg = 4:1 or less
Sulfur	0.25%	0.4%	0.20%	
Sodium	0.14%		0.14%	
Chloride	To achieve DCAD	1.5%	0.50%	

How should rations be balanced for DCAD?

Step #1: Test all feeds for sodium, potassium, calcium, magnesium, chloride, sulfur, and phosphorus, along with the more typical nutrients like protein, fiber and energy.

Step #2: Choose feeds relatively low in sodium, potassium and phosphorus; and relatively high in chloride and sulfur that balance for protein, energy, and fiber according to the nutritionist's specifications.

Step #3: If a calcium source is needed add calcium sulfate until Sulfur reaches desired level.

Step #4: Add SoyChlor until DCAD is -100 meq/kg

Step #5: Make sure Phosphorus is low (30 -50 g/day), Calcium is medium (1 -1.2% of DM), and Magnesium is around 0.4 % of DM. The K/Mg ratio should be less than 4:1.

Step #6: Add fat-soluble vitamins and trace minerals

Step #7: Monitor effectiveness with urine pH and milk fever rates.