Technical Bulletin

Field Data – Health Events Decrease in WI Herd Fed SoyChlor

A 1000 Cow Dairy in Wisconsin was being fed a "traditional" transition cow diet with a low potassium & low calcium approach for the prevention of milk fever.

Event	
Freshenings	**140.00**
Milk Fever	**12.00**
%	***8.50***
D A 's	**25.00**
%	***17.80***
R P's	**13.00**
%	***9.20***
Metritis	**24.00**
%	***17.10***
Calving Comp	
%	

Heath event data was recorded on Dairy Comp 305 during January and February of 2003.

A ration change with a DCAD approach including SoyChlor® 16-7 was made in March 2003 and was accompanied by a significant decrease in negative health events.

Event	31-May	3-Jun	7-Jul	17-Aug	16-Sep	3-Oct	3-Nov	3-Dec	March to December 2003
Freshings	89.00	109.00	97.00	66.00	99.00	116.00	97.00	104.00	**903**
Milk Fever	0.00	0.00	0.00	0.00	3.00	2.00	3.00	0.00	**8**
%		*0.00*			*3.00*	*1.70*	*3.10*	*0.00*	***0.88***
D A 's	6.00	8.00	4.00	2.00	2.00	4.00	8.00	7.00	**50**
%	*6.70*	*7.30*	*4.10*	*3.00*	*2.00*	*3.40*	*8.20*	*6.70*	***5.54***
R P's	6.00	1.00	4.00	4.00	4.00	1.00	2.00	5.00	**34**
%	*6.70*	*0.09*	*4.10*	*6.00*	*4.00*	*0.80*	*2.00*	*4.80*	***3.76***
Metritis	13.00	1.00	13.00	9.00	9.00	19.00	18.00	11.00	**72**
%	*14.60*	*0.09*	*13.40*	*13.60*	*9.00*	*16.30*	*18.50*	*10.50*	***7.95***
Calving Comp	1	6	5	6		4	3	4	**35**
%	*1.1*	*5.5*	*5.1*	*10*		*3.4*	*3.1*	*3.8*	***3.87***

Heath event data was recorded on Dairy Comp 305 from Marc through December of 2003.

Calcium is required for muscular function and is a factor in the immune system.

At freshening, the dairy cow needs to be able to replace calcium removed from the blood stream by the sudden on-set of milk and colostrum production.

If the blood calcium is not replaced efficiently, the cow will experience hypocalcemia (Milk Fever.) These cows go down and cannot get up without intervention.

Approximately 6 % of the US Dairy herd is affected annually.

Subclinical hypocalcemia is a disease whose symptoms are expressed by increase in negative health events. Cows affected by this disease have low blood calcium levels but not low enough to cause them to go down and not be able to get up.

A growing body of research suggests that up to 60% of a dairy herd may be affected by this disease.

Low appetites resulting in increased rates of ketosis, fatty liver, displaced abomasum and accompanied by poor body condition are often seen in herds with subclinical hypocalcemia.

Decreased muscular tone and immune function contribute to increased rates of retained placenta and metritis which often result in poor breeding program performance. Additionally, mastitis rates often increase in herds with sub-clinical hypocalcemia.

SoyChlor®, when fed as part of a properly balanced DCAD diet, can help prevent subclinical hypocalcemia by decreasing blood pH and helping parathyroid hormone (the main hormone controlling calcium metabolism) work better. This increases the efficiency of calcium uptake from the bones and diet so that the cow is better able to avoid sub-clinical hypocalcemia and the negative health events asso-ciated with it.