## TECHNICAL SERVICE Dames BULLETIN



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## UNIVERSITY OF ILLINOIS RESEARCH CONFIRMS CLOSE-UP PELLET<sup>®</sup> IMPROVES FRESH-COW PROFITABILITY

Another university feeding trial has proven that **CLOSE-UP PELLET**<sup>®</sup> prevents milk fever, while reducing substantially the full complex of fresh cow diseases. As a result of lower disease costs and increased milk production, **CLOSE-UP PELLET** improved net profitability by over \$75/cow.

Researchers at the University of Illinois, led by Dr. James Drackley, fed **CLOSE-UP PELLET** in a TMR to one group of dairy cows, and an anionic-salt (AS) blend in a TMR to another group. The results are found in the researchers' attached summary, presented as Abstract M202 at the 2005 ADSA Conference.

This Illinois trial confirms the results from an earlier study conducted at the University of Missouri, in which **CLOSE-UP PELLET** increased both fresh-cow feed intake and milk production, and improved health as well as calcium and energy status, compared with a control group of fresh cows that received no AS (Technical Service Bulletin #310).

In the Illinois research:

- \* CLOSE-UP PELLET prevented milk fever by maintaining average blood plasma calcium levels at 9.5 mg/dl;
- \* **CLOSE-UP PELLET** achieved this healthy calcium level even though it reduced urine pH less than did the commodity AS ration;
  - The combined incidence of milk fever, ketosis, DA, RP and metritis in the **CLOSE-UP PELLET** group was less than 27%, compared with a combined incidence in the AS group of more than 54%;
  - These results were accomplished despite the **CLOSE-UP PELLET** group beginning the trial with a significantly higher average Body Condition Score;
  - The **CLOSE-UP PELLET** group averaged 2.2 lb/cow/day more 3.5% fat-corrected milk during the 56-day post-calving period.

The Illinois trial demonstrated a substantial economic advantage for **CLOSE-UP PELLET** over AS, as shown in the following table based on the work of Dr. Chuck Guard of Cornell University. Dr. Guard's spreadsheet, "Costs of Common Diseases," is widely used to determine the lost revenue and costs of treating various disorders (The Dairy Focus, Feb. 2002; Total Dairy Nutrition, Jan. 2000).

In the following table, the economic implications of the Illinois research are calculated using Dr. Guard's standard values for the various costs of reproductive diseases:

				1			CLOSE UP	ANIONIC			
		CLOSE UP	ANIONIC				PELLET	SALTS			
						Cost of milk not					
		PELLET	SALTS			produced (\$/cwt)	\$12.00	\$12.00			
	Cows					Cost of discard milk					
	/group	26	24			(\$/cwt)	\$7.00	\$7.00			
	Cost of										
	dead cow	\$1,800	\$1,800			Cost of extra day open	\$3.00	\$3.00			
	Cost of										
	cull	\$1,400	\$1,400			Farm labor per hour	\$20.00	\$20.00			
											_
	Disease	% Death	% Culled	Milk not	Milk	Extra	Farm	Vet &	Cost/	Group cost	
	Case	per	per	made	Discard	days open	Labor	Drug	case	per year	
	Rate %	case	case	lb/case	lb/case	days/case	hr/case	\$/case	\$	\$	
LDA	16.67	2	8	840	77	12	1	86	\$396	\$1,717	[
LDA	3.85	2	8	840	77	12	1	86	\$396	\$396	
KETOSIS	25.00	0.5	5	506	0	10	0.67	19	\$202	\$1,314	
KETOSIS	11.54	0.5	5	506	0	10	0.67	19	\$202	\$606	
<b>RP/METRITIS</b>	12.50	1.5	6	550	248	15	0.67	20	\$273	\$886	
<b>RP/METRITIS</b>	11.54	1.5	6	550	248	15	0.67	20	\$273	\$818	
MILK FEVER	0	4	5	286	0	13	0.50	25	\$250	\$0	
MILK FEVER	0	4	5	286	0	13	0.50	25	\$250	\$0	
										Total costs	\$/cow
ANIONIC SALTS									\$3,917	\$163.21	
CLOSE-UP PELLET										\$1,821	\$70.03
DIFFERENCE										\$2,096	\$93.18

As the table indicates, over the course of a full lactation the **CLOSE-UP PELLET** group projects \$93.18/cow in lower disease-related costs plus increased milk production.

Even after the higher cost of CLOSE-UP PELLET is subtracted, there is still a net savings of at least **<u>\$79.53/cow</u>**. Every additional dollar spent on **CLOSE-UP PELLET** generated \$6.82 in greater benefits, using Dr. Guard's standards. Once again the value of **CLOSE-UP PELLET** has far exceeded its cost.

**CLOSE-UP PELLET** has now been proven in two independent university research trials. The product consistently improves the health status of fresh cows. The Illinois trial also puts to rest the issue of urine pH, a reduced level of which is not necessary to indicate the effectiveness of CLOSE-**UP PELLET**.

**CLOSE-UP PELLET** is the most palatable means by which your transition feeding program can assure healthy and productive fresh cows. For more information on how CLOSE-UP PELLET can improve herd health and profitability, please call our Technical Service staff at 1-800-362-2085.