



# Does enzymatically hydrolyzed yeast affect the feeding behavior and immune function in early lactation dairy cows?

K. Proudfoot, J. Nocek and M.A.G. von Keyserlingk

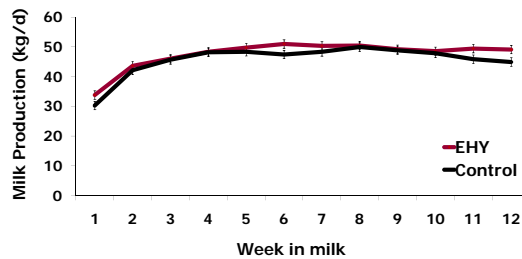
**AIM:** A pilot study to evaluate the effects of supplementing Celmanax (Yeast culture plus enzymatically hydrolyzed yeast culture, EHY) on production performance in dairy cattle during early lactation.



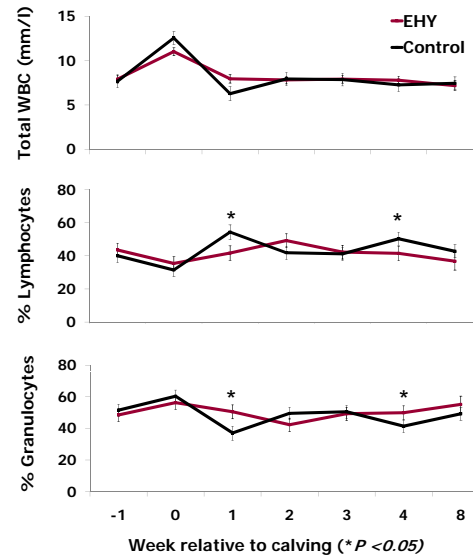
22 multiparous cows housed in one pen could eat from feed bins with either EHY supplementation ("EHY", n = 11) or no supplementation ("control", n = 11) from they day they calved until 12 wk into lactation. During this period we recorded: DMI, feeding time, milk yield and components, white blood cell counts (lymphocytes, monocytes and granulocytes) and mastitis incidence.

## DMI and Milk Production

Effect of Celmanax on DMI and Milk Yield				
Item	Treatments			P
	Control	EHY	SEM	
N	11	11		
DMI, kg	22.7	22.9	0.05	NS
Milk, kg	45.7	47.5	1.50	NS
Efficiency Kg Milk/KgDMI	2.01	2.07		



## White Blood Cell Counts



## Milk Components & Mastitis Incidence

Effect of Celmanax on Milk Composition and Mastitis				
Item	Treatments			P
	Control	EHY	SEM	
Composition				
Fat, %	5.04	4.88	0.12	NS
Protein, %	3.17	3.14	0.05	NS
Lactose, %	4.71	4.73	0.03	NS
Yields				
Fat, kg	2.30	2.32	0.03	NS
Protein, kg	1.45	1.51	0.02	NS
Clinical Mastitis	3	0		
Sub-Clinical (SCC > 400,000)	4	1		



EHY supplementation resulted in a numerical increase in milk yield compared to control. The effects of EHY on immune function and disease incidence require further research.