



United States  
Department of  
Agriculture

Agricultural  
Research  
Service

Midwest Area  
U.S. Dairy Forage  
Research Center

1925 Linden Drive West  
University of Wisconsin  
Madison, WI 53706

August 2, 1999

Cliff Wetzel  
2501 W. Washington  
Ithaca, MI 48847

Dear Cliff:

I am responding to your inquiry into the value of properly roasted soybeans relative to soybean meal or raw (unheated) soybeans.

Based on an average of 16 studies, the average milk production response was an increase of 3.5 lbs. of milk per day when roasted soybeans replaced soybean meal or raw soybeans in the lactation diet. Milk fat (%) increased .06 points, and milk protein decreased .07 points. Using average milk prices, and average incorporation rates of roasted soybeans into dairy diets, this translates into about a \$100 per ton greater value for roasted soybeans compared to soybean meal or raw soybeans. This increase in value in terms of milk production response due to heat treatment is considerably in excess of the cost of roasting.

Best regards,

Larry D. Satter  
Dairy Scientist

LDS:clb