FATS AND PROTEINS RESEARCH FOUNDATION, INC.





FRED D. BISPLINGHOFF, D.V.M.
Director Technical Services

7150 ESTERO BLVD. • APT. 906 FT. MYERS BEACH, FL 33931 AREA CODE 813 — 463-4744

March 1990

No. 192

UTILIZATION OF MEAT AND BONE MEAL IN DAIRY CATTLE RATIONS

Dr. Roger R. Epley Nutrition Professionals Hortonville, WI 54944

Meat and Bone Meal often provides ruminally non-degraded amino acids. Calcium and phosphorus at an attractive price. The comfortable inclusion rate ranges up to 2.5 lbs. per cow daily. The amino acid balance appears to be superb for rations that have marginal levels of ruminally non-degraded lysine. While the price is often attractive, meat and bone meal is not an ingredient for poorly managed dairy herds.

Price of meat and bone meal may be over-shadowed by several drawbacks. If the ration moisture level is too high, meat and bone meal significantly reduces bunk life of mixed rations. In wet rations, during times of high environmental temperatures, meat and bone meal decomposes quickly. At high inclusion rates of meat and bone meal, too much calcium and phosphorus may be added to the ration. Meat and bone meal is relatively low in potassium compared with vegetable protein sources. This means that a source of supplemental potassium is important in some rations. Supplies of meat and bone meal are extremely variable from wholesale venders. If you are buying from more than one renderer, you must sample each load for laboratory assay. The laboratory assay should include a microscopic check.

Meat and bone meal can cause serious palatability problems when it is introduced into the ration. A gradual transition is necessary from the onset of use to avoid depression of feed intake. Meat and bone meal comes from the renderer free of salmonella pathogens, but is one of the first ingredients suspected of causing salmonella problems; due most likely to on-farm contamination.

วัล