



FATS AND PROTEINS RESEARCH FOUNDATION, INC.

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THE DIRECTOR'S DIGEST

D. M. DOTY

TECHNICAL DIRECTOR

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FEEDING TESTS WITH TALLOW COATED UREA AND FEATHER MEAL

Some preliminary results from feeding tallow coated urea and feather meal were reported recently (Director's Digest No. 70). Final results from these feeding tests are summarized below.

In tests with cannulated sheep, Professor Tyznik of Ohio State University found that the maximum rumen ammonia and blood urea levels were reduced when the urea was coated with hydrogenated tallow at a 24% coating level. Lower coating levels tended to increase the concentration of ammonia in the rumen and had no influence on the blood urea levels.

Sixty grams of coated urea (24% tallow coating) fed to a mature ewe did not induce any symptoms of toxicity. Forty-eight grams of uncoated urea induced symptoms of chronic toxicity and 55 grams caused death of the animal.

These results indicate clearly that coating urea with hydrogenated tallow at the 24% level reduced the possible hazard of ammonia toxicity and resulted in better utilization of nitrogen when high levels of urea were fed to ruminants.

Professor Rakes at North Carolina State University has reported that dairy cows accept fat-coated feather meal pellets readily when they are fed with a pelleted grain concentrate ration as contrasted to reduced consumption when the pelleted feather meal was fed with unpelleted meal.

ANIMAL FATS FOR AIR POLLUTION CONTROL

The enclosed reprint, which reports results of research supported by FPRF at Kansas State University, is just another example of how research can simultaneously help our industry and solve current problems.