

## FATS AND PROTEINS RESEARCH FOUNDATION, INC.

3150 DES PLAINES AVENUE . DES PLAINES, ILLINOIS 60018
15 MINUTES FROM CHICAGO'S O'HARE AIRPORT;
TELEPHONE AREA CODE 312 827-0139

THE DIRECTOR'S DIGEST
D. M. DOTY
TECHNICAL DIRECTOR

April 20, 1971 No. 82

. File: Cop

## USE OF FORMALDEHYDE AS A DISINFECTANT IN RENDERING PLANTS TO CONTROL SALMONELLA

Recent memoranda from the Animal Health Division, Agricultural Research Service, U.S.D.A., have encouraged the use of formaldehyde as a disinfectant or sanitizing agent in rendering plants, in appropriate situations, to control Salmonella. The need for a disinfectant and sanitizing agent for equipment and storage areas to control Salmonella in rendering plants is acute and it is encouraging that experimental plant tests with formaldehyde have been promising.

However, before a rendering plant owner decides to use formaldehyde as a disinfectant the following should be carefully considered.

- 1. Formaldehyde should be used only under the close supervision of persons who understand completely the nature of the material and possible hazards to personnel. Guidance and supervision will be given by State and Federal inspectors at the plant level in the application of formaldehyde. (See ANH Division Memorandum 565.5, Supplement # 4, December 18, 1970.
- 2. Tolerances for formaldehyde residues in animal feed have not been established by the Food and Drug Administration. Thus, every precaution must be taken to avoid contact of animal by-product meal with formaldehyde in solution or in the gaseous form. Otherwise residues of formaldehyde could be present and the product would not be in compliance with existing regulations.

Many organizations are continuing to study the problem of Salmonella control. You will recall that FPRF has sponsored a number of projects on this subject and the research is continuing. For example, recent preliminary results from feeding trials at WARF Institute show that treating meat and bone meal with a terminal heater, or with an acid antagonist, has no adverse effect on feeding value for rats or chicks. Treating meat and bone meal with formaldehyde (500 ppm) did not adversely affect its feeding value. Similar results have been obtained in feeding trials conducted by other organizations.

## MEAT AND BONE MEAL IN RATIONS FOR SWINE

Professor R. J. Meade and his associates, University of Minnesota, with grant support from FPRF, have studied extensively the nutritive value of meat and bone meal in rations for growing swine. The research was quite fundamental and evaluated several samples of meat and bone meal as sources of amino acids for growing swine. The results of the research are presented in the enclosed reprints of articles published in the Journal of Animal Science.