



# FATS AND PROTEINS RESEARCH FOUNDATION, INC.

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THE DIRECTOR'S DIGEST  
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## ENZYME RENDERED MEAL NOT SATISFACTORY

From time to time progress on the enzyme rendering studies have been presented in "The Director's Digest." The last report on these studies was in the December, 1966 issue.

Battelle Memorial Institute produced about 100 pounds of enzyme rendered meal in a suitable pilot plant operation using the cheapest, most effective enzyme as established in earlier laboratory studies. The enzyme rendered meal had a satisfactory amino acid profile. The material was submitted to the Wisconsin Alumni Research Foundation for feeding tests with chicks and rats. Despite the satisfactory amino acid profile, the meal did not support growth of either chicks or rats when it was used as the sole source of protein.

This might have been due to the high salt content (source undetermined) of the material. Consequently a small sample of meal was submitted to the Amicon Corporation for desalting. The desalted material was again fed to rats at the 15% protein level. The rats failed to grow - in fact they lost weight.

There is no simple, reasonable explanation for these unexpected results. Since the economic feasibility of the enzyme rendering process depends upon better utilization of the residual collagen and bone fraction, research on the process and on the enzyme rendered powder will be discontinued until such time as results from other research projects indicate that collagen protein can be better utilized.

## FAT-DERIVED SURFACTANTS IN FOLIAR NUTRITION SPRAYS

The enclosed reprint describes results from some FPRF-sponsored research at Purdue University. The fat-sugar complexes used improved greatly the absorption and translocation of phosphorus in foliar sprays.