

## FATS AND PROTEINS RESEARCH FOUNDATION, INC.

2720 DES PLAINES AVENUE . DES PLAINES, ILLINOIS 60018

TELEPHONE AREA CODE 312 827-0139

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

July 21, 1972 No. 97

## FAT IN PIG DIETS IMPROVES GAINS AND FEED EFFICIENCY

Professors Gilbert A. Leveille and Dale R. Romsos, Michigan State University, with grant support from FPRF, have been investigating the effects of dietary fat on the performance of finishing pigs. Preliminary experiments with semipurified diets containing 1% to 13% supplemental fat indicated that maximal performance was obtained with a level of 4% added fat.

In a recent experiment practical corn-soybean oil meal diets were supplemented with 3% and 6% tallow and fed to growing pigs. The results show that 3% tallow added to this type of diet resulted in an improved (but not statistically significant in this experiment) rate of gain and feed efficiency (Table 1). Addition of 6% tallow to the diet did not result in any further improvement.

The Michigan State scientists conclude: "Addition of 3% tallow to a practical corn-soybean oil meal diet improved feed efficiency and rate of gain slightly without increasing fat deposition in the carcass."

Table 1. Effect of Dietary Fat on Weight Gain, Feed
Intake and Feed Efficiency in Pigs

THURSE GIVE IN	sed Hillerenc	<del></del>	
	Diet		
	Basal	3% Tallow	6% Tallow
Weight Gain (kg.)	43.4±2.1	44.1±1.2	42.8±1.9
Feed Intake (kg.)	149.6±6.0	140.2±2.8	135.9±3.8
Feed Intake (Mcal.*)	549.9±22.0	531.5±10.7	531.0±14.8
Feed Efficiency	128.1±5.4	120.9±2.3	125.1±3.4
Mcal. consumed			
kg. wt. gained			

<sup>\*</sup>Megacalories of metabolizable energy. Each diet was fed for 56 days. The initial weight of the pigs was 49.4±1.3 kg. The figures given are mean.±'standard error of mean for 10 pigs.