



## SDP PERFORMANCE NOT AFFECTED BY PROCESSING CONDITIONS

Spray-dried plasma (SDP) has been found to have growth enhancing effects when fed in swine starter diets. Swine feed is usually processed under 77° Celsius in order to avoid the Mallaird reaction, which reduces the digestibility of amino acids. Previous research has found that SDP applied post-pelleting improves growth performance and meat yield in broilers.

Four experiments were performed looking at the effect of temperature and processing of pelleted (85°-95°C) or expanded (149°C) feed containing SDP to ensure no loss of performance. Treatments included control, post-pelleting coated with SDP, or pre-pelleting blended with SDP for all experiments. Experiments 2 and 3 contained an additional treatment including pre-pelleting blend with SDP treated at 90° or 95° Celsius. The goal was to evaluate how SDP affected broiler performance and mortality when housed on used litter.

## SPRAY-DRIED PLASMA IMPROVES KEY PERFORMANCE MEASURES IN BROILERS



Experiment 1 found that the treatments containing SDP improved growth rate and feed intake from day 1-28 ( $P < 0.05$ ). On day 28, body weight was improved with the inclusion of SDP ( $P < 0.01$ ). Performance was not affected past day 28. The method of processing had no significant effect on the results of this experiment.

Experiment 2 focused on the temperature of processing the pellets. Data was more consistent to day 42. SDP improved body weight, growth rate, feed intake, and efficiency of gain. SDP response was not affected by the variances in temperature during processing.

Experiment 3 added fat post-pelleting in order to maximize the effective pellet conditioning temperatures. Inclusion of SDP in the treatments improved growth rate, feed intake, efficiency of gain and body weight. These results were consistent whether SDP was added pre or post pelleting or at any temperature.

Experiment 4 focused on the effects of expanding on SDP response. Body weight, daily gain, and feed intake were improved with the inclusion of SDP.

### BOTTOM LINE

BODY WEIGHT



DAILY GAIN



GROWTH RATE



FEED INTAKE



EFFICIENCY OF GAIN

