Calibrin™-Z
Enterosorbent for Mycotoxins

In-Vivo Study

Amlan™
INTERNATIONAL

Calibrin™-Z Therapy
enterosorbent for mycotoxins

For Swine

Clinical Trial

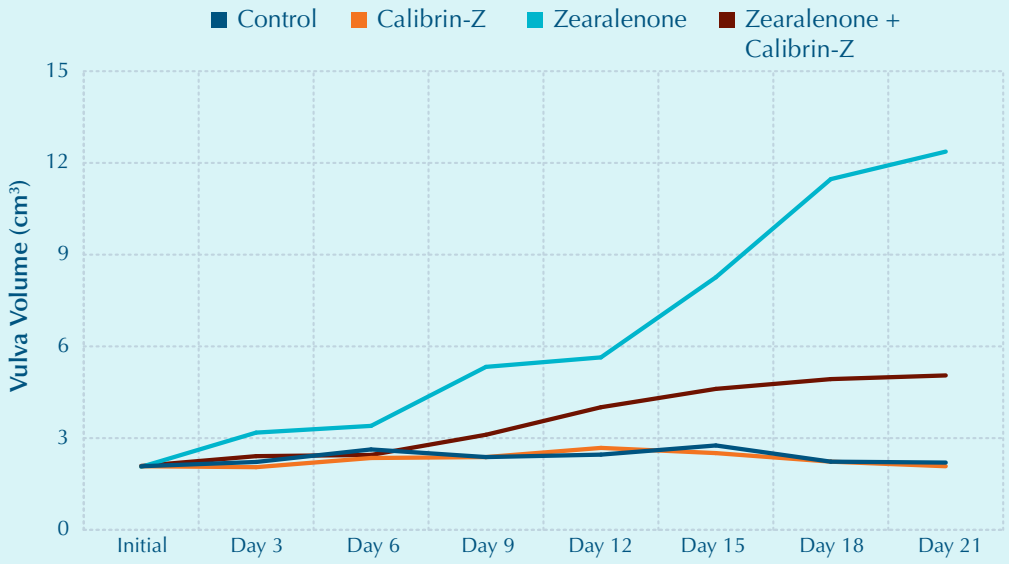
Twenty-four clinically healthy gilts were utilized in the study performed by LAMIC – Mycotoxicological Test Laboratory, with four treatments and six replications each. The gilts were fed a diet consisting of corn, soybean meal, and a vitamin-mineral premix. Prior to challenge the ingredients used for the study tested negative for the presence of mycotoxins.

Significantly Reduced Estrogenic Effects

The clinical study showed that including **Calibrin-Z** in a zearalenone contaminated diet reduced vulva size by 72% compared to feeding zearalenone alone (Figure 1). Gilts fed **Calibrin-Z** and zearalenone were statistically similar to gilts fed no zearalenone throughout the entire 21 day study. The increase in vulva size, a zearalenone target organ, is often the only visible symptom of the estrogenic effects associated with zearalenone exposure in swine.

FIGURE 1

Reduction of Vulva Size in Gilts by Including Calibrin-Z in a Diet Contaminated with Zearalenone



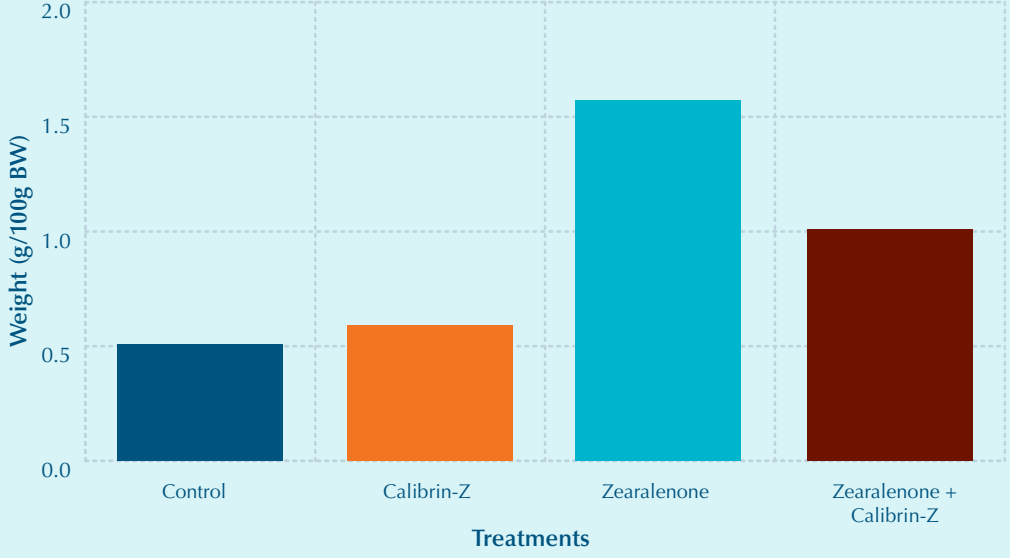
Source:
LAMIC-UFSM and Instituto Samitec

Weight of Reproductive Tract

Calibrin-Z significantly reduced the relative weight of the reproductive tract by 53% (Figure 2). The reproductive tract weight in gilts fed **Calibrin-Z** and zearalenone was statistically similar to gilts that were only fed **Calibrin-Z**. Although increased reproductive tract weight is not obvious during production, it would reduce dressing percentage at slaughter.

FIGURE 2

Reduction of Reproductive Tract Weight by Feeding Calibrin-Z in the Diet



Source:
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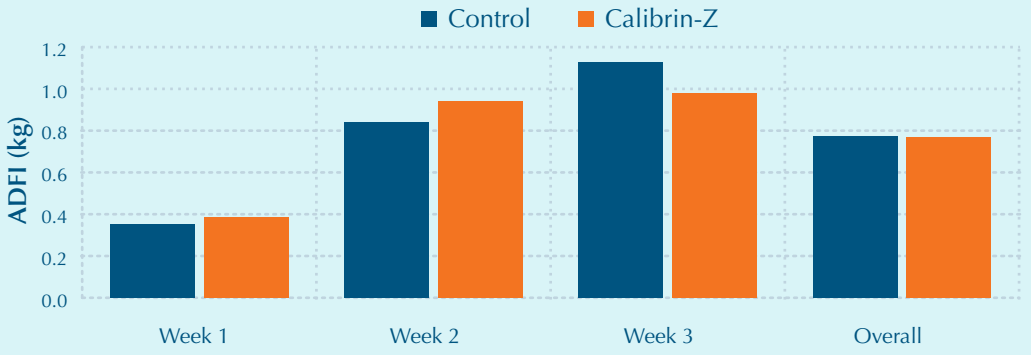
No Interference with Nutrients and Vitamins

A common perception of mineral-based mycotoxin binders is that they non-selectively bind vitamins and nutrients in the diet. Many differences exist among sorbent minerals even of the same type. How they are processed is critical to affecting their binding characteristics. **Calibrin-Z** was monitored in-vivo to assure it doesn't interfere with nutrients.

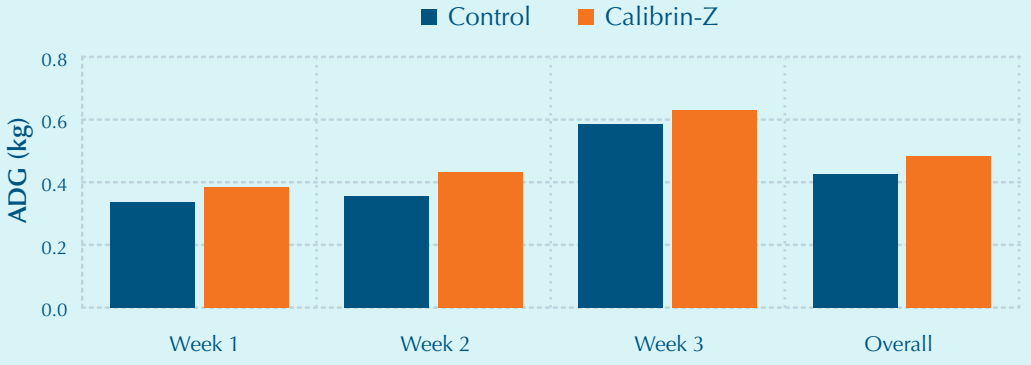
Figure 3 to the left represents average daily feed intake (ADFI), average daily weight gain (ADG), and feed conversion ratio (FCR) recorded by treatment groups during the **Calibrin-Z** and zearalenone study. No statistical difference in ADFI, ADG, or FCR was observed between gilts fed **Calibrin-Z** and the control gilts after 21 days of feeding 5 kg/MT **Calibrin-Z** in a diet.

FIGURE 3

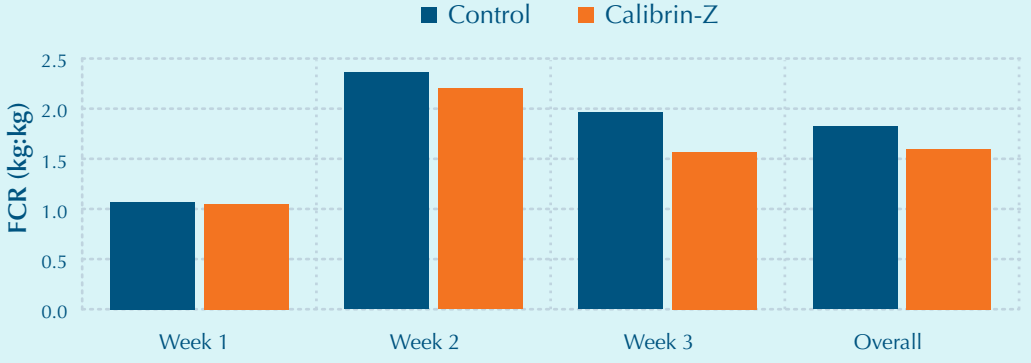
Average Daily Feed Intake of Gilts Fed a Diet Containing Calibrin-Z Enterosorbent



Average Daily Weight Gain of Gilts Fed a Diet Containing Calibrin-Z Enterosorbent



Feed Conversion Ratio of Gilts Fed a Diet Containing Calibrin-Z Enterosorbent



Source:
LAMIC-UFSM and Instituto Samitec

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CAL-Z ENG 10-2008