



# Calibrin™-Z

## Enterosorbent for Mycotoxins

### In-Vitro Study

# In-Vitro Efficacy Study

## Zearalenone Mycotoxicosis

The efficacy of **Calibrin-Z** was compared in-vitro to leading commercial mycotoxin products by Trilogy Analytical Laboratory, an independent mycotoxin testing service. In-vitro adsorption tests provide an unbiased method to compare the ability of different adsorbents to bind toxins.

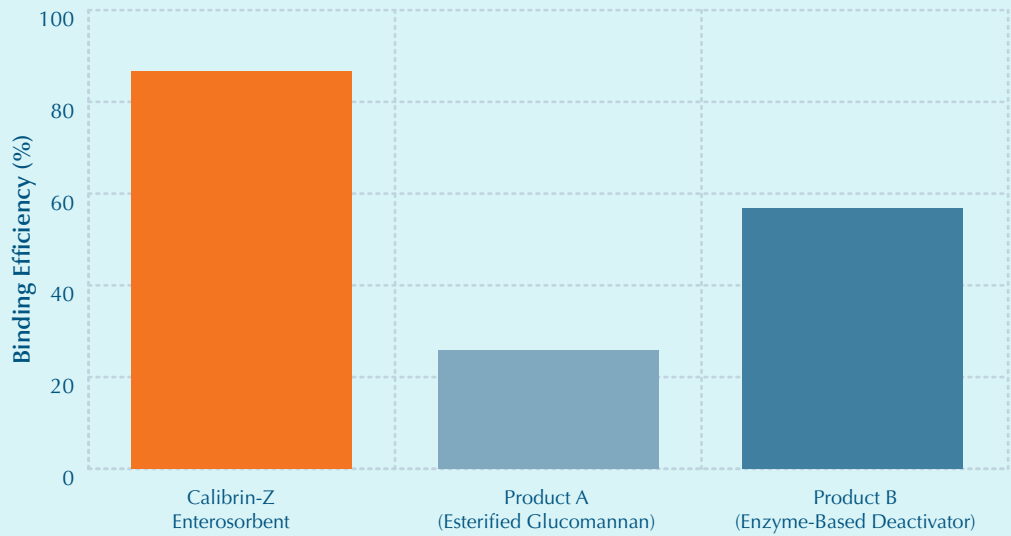
The in-vitro study was conducted using a standard mycotoxin binding protocol. Equal amounts of three leading mycotoxin adsorbents were combined separately with mycotoxins in a test solution with a pH of 3.0 (stomach environment). Since some compounds are known to become “unbound” from the surfaces of mineral adsorbents under different pH levels, further analysis is required to determine overall efficacy.

The of adsorbent and “bound” toxin is then taken through a desorption procedure in a solution with a pH of 6.5. This critical step measures the amount of toxin that “desorbs” in a neutral pH (intestinal environment). The percent of desorbed toxin is then subtracted from the amount of adsorbed toxin to calculate the overall binding efficiency of the adsorbent.

The results of the study show that **Calibrin-Z** is over 200% more efficient at binding zearalenone than Product A the leading esterified glucomannan and over 50% more efficient than Product B the leading enzyme-based deactivator (Figure 4). The advanced performance of **Calibrin-Z** is the result of its careful selection and processing during production.

**FIGURE 4**

**Zearalenone Binding Efficiency of  
Leading Toxin Adsorbents**



Source:  
Analytical work performed by Trilog  
Analytical Laboratory, USA. Samples  
submitted as a blind study using  
commercially obtained products.

