



Calibrin™-A

Enterosorbent for Mycotoxins

In-Vitro Study

In-Vitro Efficacy Study

Aflatoxicosis

The efficacy of **Calibrin-A** for binding aflatoxin B₁ 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 aflatoxin B₁ 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.

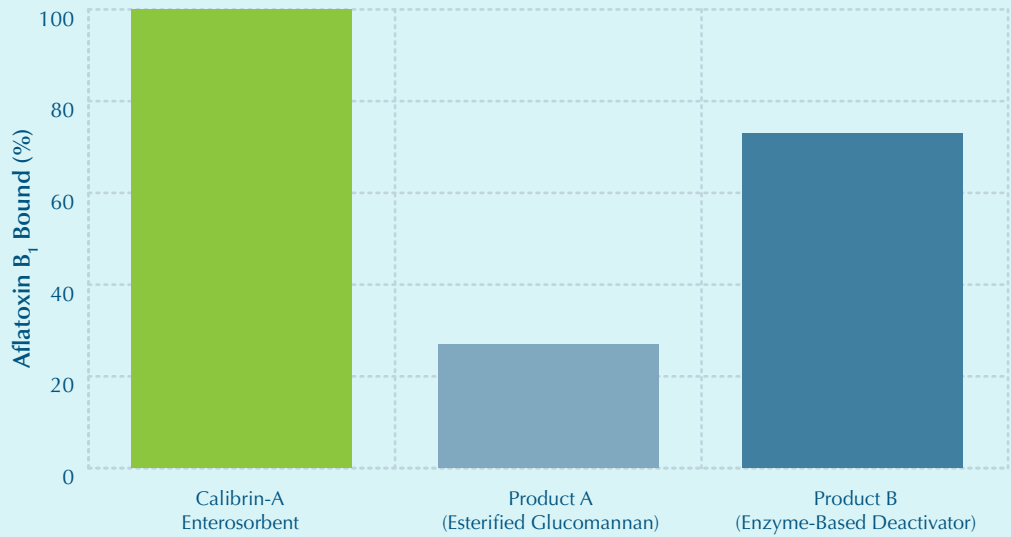
The adsorbent and “bound” toxin is then taken through a desorption procedure in a solution with a pH of 6.5. This critical step measures

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-A** is 263% more efficient at binding aflatoxin than Product A, the leading esterified glucomannan and 24% more efficient than Product B, the leading enzyme-based deactivator (Figure 5). The advanced performance of **Calibrin-A** is the result of its careful selection and processing during production. The result is a product that adsorbs more aflatoxin than the leading products tested and exhibits the lowest desorption (< 1%) as pH conditions change in the animal.

FIGURE 5

**Binding Efficiency of Aflatoxin B₁
of Leading Toxin Adsorbents**



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

