

**HERE'S HOW SIMPLE  
VICAM TESTS ARE TO USE:****EXTRACT SAMPLE**

- Grind and weigh sample
- Add salt and methanol/  
water mixture
- Filter

**DILUTE AND FILTER**

- Dilute extract
- Filter

**ABSORB AND ELUTE**

- Pass filtrate over selected  
affinity column
- Wash column
- Elute toxin and collect in a cuvette

**MEASURE**

- Add developers and place cuvette  
into a calibrated fluorometer, or
- Dilute and inject eluate into  
HPLC or UPLC
- Determine toxin concentration

## Keeping the Peanut Trade Healthy

From ready-to-eat snacks to peanut butter and cooking oil, Peanuts – also known as Groundnuts – are a nutrition-packed member of the 'legume' family. Naturally high in protein, fiber and unsaturated fat, peanuts also provide essential vitamins, minerals and powerful antioxidants. During peanut cultivation, the plant's seed forces its way underground to complete development, and fully mature peanuts are pulled up from the soil at harvest. This direct soil contact places the peanut at risk for aflatoxin contamination because aflatoxin-producing fungi are natural inhabitants of most soils. Heavily regulated worldwide in order to minimize its impact on human and animal health, aflatoxin is one of the most potent toxins to naturally occur in peanuts, tree nuts, grains and feed products.

Classified as a Group 1 Carcinogen according to the International Agency for Research on Cancer (IARC,) aflatoxin is also linked to immune suppression and reproductive effects. Strict regulatory limits are enforced worldwide to minimize exposure and protect human and animal health. Brazil has enforceable maximum limits of 10 ppb for aflatoxins in peanuts for human consumption, while the EU has set levels of 2 ppb (Afla B<sub>1</sub>) and 4 ppb (total aflatoxins B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub> & G<sub>2</sub>) for product intended for direct human consumption. The US and Asia-Pacific countries regulate aflatoxin in the range of 0 to 20 ppb.

VICAM offers accurate, precise AOAC-approved aflatoxin testing solutions which are performed in minutes. Strengthen your Food Safety program today with expert solutions from VICAM - contact us to learn more.

- **Accurate, Precise and Proven Results for Aflatoxins in Peanuts**
- **Have Full Confidence in Your Aflatoxin Monitoring Strategy**

## VICAM NARROW BORE COLUMNS



BENEFITS		AflaTest
<b>Durable</b>	Long shelf life; requires no refrigeration	X
<b>Versatile</b>	Can be used with a variety of samples	X
<b>Convenient</b>	For use with fluorometric or HPLC	X
<b>Easy</b>	No special skills required, test can be performed virtually anywhere	X
<b>Quick</b>	Less than 10 minutes to isolate toxin	X
<b>Safe</b>	Requires less toxic materials than other methods	X

## VICAM WIDE BORE COLUMNS



BENEFITS		AflaTest WB
<b>Durable</b>	Long shelf life; requires no refrigeration	X
<b>Versatile</b>	Can be used with a variety of samples	X
<b>Exclusive</b>	Specifically for HPLC, UPLC or LC/MS/MS use	X
<b>Quick</b>	10 minutes to isolate toxin	X
<b>Wide Range</b>	Detects levels as high as 500 ppb	X
<b>Fast Flow</b>	Passes more volume over the column	X

Subject to change without notice.

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