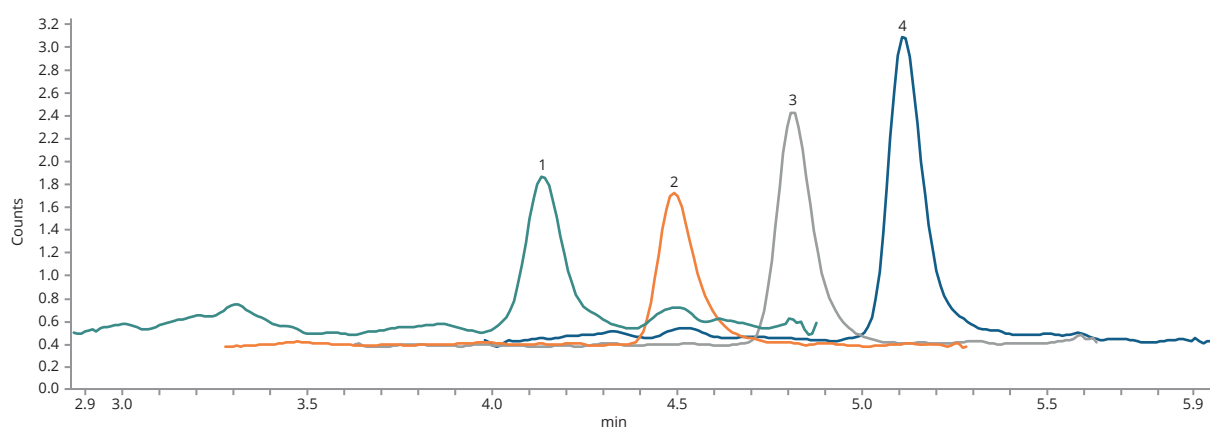
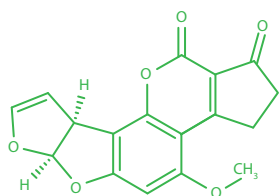


## Aflatoxins by LC/MS

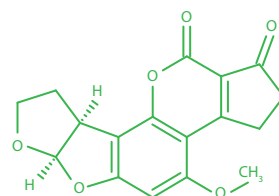
Aflatoxins are Group 1 carcinogens and are a natural product of mould. Mycotoxins are monitored worldwide and allowed concentration limits depend not only on the territory, but also on the food/feed matrix and are given by local administrations.



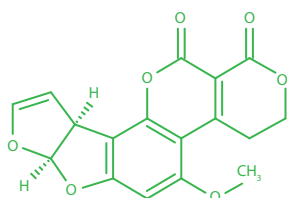
*Stress test – test mixture on ARION® column*



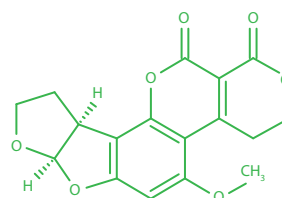
*Aflatoxin B1*



*Aflatoxin B2*



*Aflatoxin G1*



*Aflatoxin G2*



## Aflatoxins by LC/MS

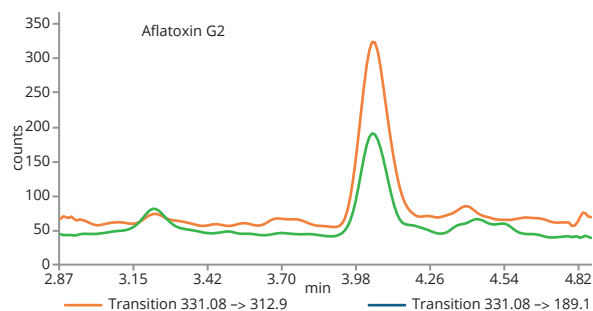
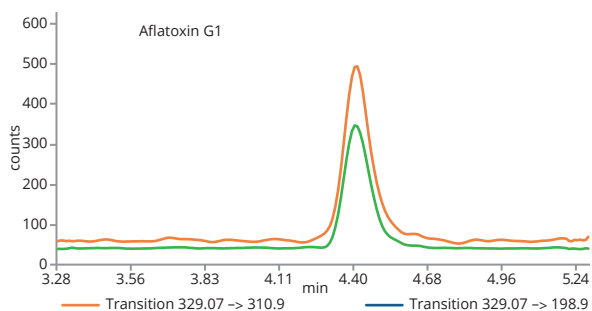
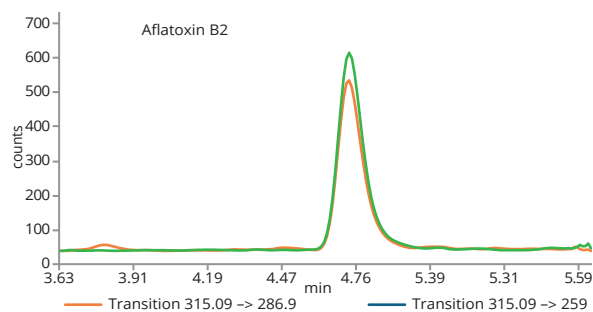
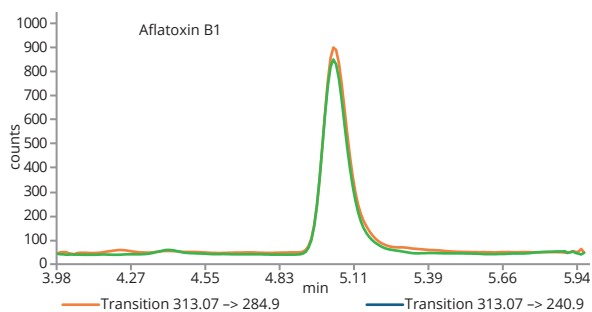
|                         |                                                                                                      |              |
|-------------------------|------------------------------------------------------------------------------------------------------|--------------|
| <b>Column</b>           | ARION® Plus C18, 2.2 µm                                                                              |              |
| <b>Dimensions</b>       | 100 mm × 2.1 mm                                                                                      |              |
| <b>Part number</b>      | ARI-5720-EI21                                                                                        |              |
| <b>Mobile phase</b>     | A: 5mM ammonium formate / 0.2% formic acid<br>B: Methanol / 0.2% formic acid                         |              |
| <b>Gradient elution</b> | <b>Time</b>                                                                                          | <b>A (%)</b> |
|                         | 0.0                                                                                                  | 70           |
|                         | 0.5                                                                                                  | 70           |
|                         | 8.0                                                                                                  | 0            |
|                         | 10.5                                                                                                 | 0            |
|                         | 10.6                                                                                                 | 70           |
| <b>Flow rate</b>        | 0.35 mL/min                                                                                          |              |
| <b>Temperature</b>      | 40 °C                                                                                                |              |
| <b>Analytes</b>         | <b>1. Aflatoxin B1</b><br><b>2. Aflatoxin B2</b><br><b>3. Aflatoxin G1</b><br><b>4. Aflatoxin G2</b> |              |

### MS method:

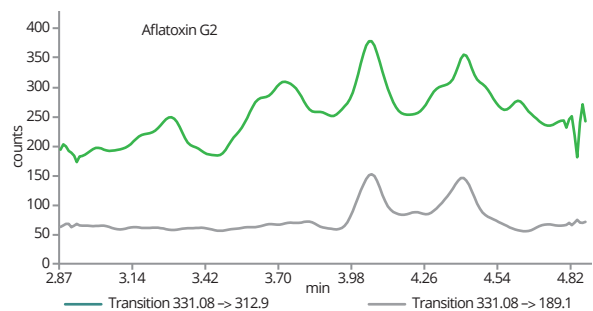
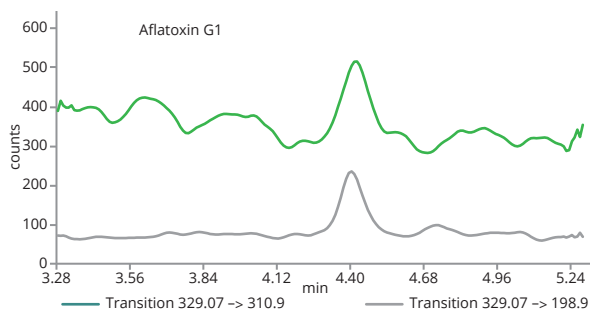
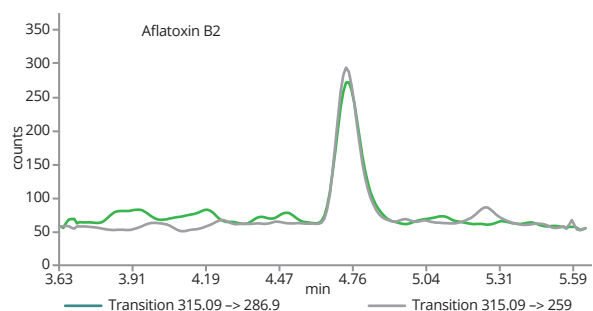
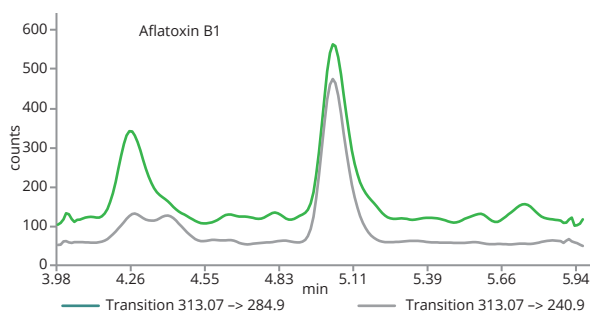
| Compound name | Precursor ion | Product ion | Collision energy |
|---------------|---------------|-------------|------------------|
| Aflatoxin B1  | 313.07        | 284.9       | 25               |
| Aflatoxin B1  | 313.07        | 240.9       | 45               |
| Aflatoxin B2  | 315.09        | 286.9       | 33               |
| Aflatoxin B2  | 315.09        | 259         | 33               |
| Aflatoxin G1  | 329.07        | 310.9       | 25               |
| Aflatoxin G1  | 329.07        | 198.9       | 57               |
| Aflatoxin G2  | 331.08        | 312.9       | 25               |
| Aflatoxin G2  | 331.08        | 189.1       | 49               |

## Aflatoxins by LC/MS

This page shows analyses of peppers and Brazil nuts.



### LC/MS analyses of aflatoxins in Brazil nuts



### LC/MS analyses of aflatoxins in peppers