



# Guide for Mycotoxins In Dairy



APPROXIMATE RANGE FOR POTENTIAL REACTION			
MYCOTOXINS	LOW	MEDIUM	HIGH
DON (vomitoxin)	< 300 ppb	300-1,000 ppb	> 1,000 ppb
Zearalenone	< 100 ppb	100-300 ppb	> 300 ppb
Aflatoxin	< 10 ppb	10-30 ppb	> 30 ppb
T-2 toxin	< 75 ppb	75-200 ppb	> 200 ppb
Fumonisin	< 600 ppb	600-1,500 ppb	> 1,500 ppb

## QUALIFIERS

- Multiple mycotoxins will compound potential effects.
- Toxic effect may be increased by body condition, health challenges, or stress.
- Mycotoxins are not uniformly distributed in feedstuffs.
- Small samples yield high test errors and underestimate mycotoxin contamination rate.
- Low-level test results may still be cause for pro-active response.

## REPRESENTATIVE SYMPTOMS

DON (vomitoxin)	Zearalenone	Aflatoxin	T-2 toxin	Fumonisin
Reduced Feed Intake / feed refusal	Hyper-estrogenism	Liver damage; altered protein synthesis	Reduced Feed Intake	Reduced Feed Intake
Reduced milk production; reduced milk fat	Poor reproductive performance	Lower milk protein	Intestinal hemorrhages	Reduced milk production
Poor reproductive performances	• Short cycle heats	Impaired immune function	Frequent defecation	GI tract ulceration
Elevated SCC	• Cystic cows; follicular cysts	Increased disease rates	Impaired immune function	Impaired immune function
Impaired immune function	• Twinning cows; multiple ovulations	Highly interactive	Increased disease rates	
Loose, inconsistent manure	• Enlarged mammary glands in virgin heifers			

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