

## Mycotoxin Guidelines

rev. 8/11/99

Mycotoxin	Concern Level (a)	Potentially Harmful to: (b)	
		Cattle	Swine
Aflatoxin, ppb (c)			
Air dried (d)	20.0	20 – 300	20 – 100
DM	22.0	22 – 333	22 – 111
Vomitoxin, ppm			
Air dried	0.50	4.5 – 11.0	0.7 – 1.3
DM	0.56	5.0 – 12.0	0.8 – 1.4
Zearalenone, ppm			
Air dried	0.50	5.0 – 9.0	1.0 – 5.0
DM	0.56	5.6 – 10.0	1.1 – 5.6
T-2, ppm			
TRDM (e)	0.25	0.7 – 1.5	0.7 – 1.5
Ochratoxin, ppm			
TRDM	0.25	5.9 – 9.0 (f)	0.7 – 1.5 (f)
Fumonisin, ppm			
Air dried	4.5 – 27.0	27.0 – 54.0 (g)	18.0
DM	5.0 – 30.0	30.0 – 60.0	20.0

**Notes:**

- (a) Level indicates possible favorable conditions for mycotoxins and a probable need for further testing. Limit amounts fed if moderate performance effects are present. At least temporarily discontinue use if effects are pronounced for if acute clinical symptoms are present. Continue checking for possible other causes and closely observe animals. Pending further tests, negative samples should be considered at concern levels in the presence of moderate symptoms and at harmful levels with marked symptoms.
- (b) It is probable that mycotoxins at these levels affect performance and cause acute clinical symptoms. Discontinue feeding at least temporarily in the presence of symptoms. Observe animals closely in the absence of symptoms and do further testing.
- (c) A diet with 20 – 40 ppb aflatoxin should not be fed to dairy cows to keep milk values under FDA actionary levels and to avoid health or performance effects in young, milk fed animals.
- (d) Air dried = 85 – 95% DM as normally found in most dry feedstuffs.
- (e) TRDM = Total Ration Dry Matter
- (f) Crude estimates based on relative differences in LD 50s between chickens and livestock species.
- (g) Potentially harmful to horses over 5 ppm, lactating cows 30 ppm, and slaughter cattle 60 ppm.

Source: Adapted from Dairy Reference Manual 3rd Ed. (NRAES-63), 1995, p. 153. Developed by R. S. Adams based on literature and experiences through 1992.