

FDA action levels for total aflatoxin

Class of Animals/ Human food	Feed Type or Commodity or Food	Action level, aflatoxin concentration
Finishing beef cattle	Corn and peanut products	300 ppb
Beef cattle, swine or poultry	Cottonseed meal	300 ppb
Finishing swine over 100 lb.	Corn and peanut products	200 ppb
Breeding cattle, breeding swine and mature poultry	Corn and peanut products	100 ppb
Immature animals	Animal feeds and ingredients, excluding cottonseed meal	20 ppb
Dairy animals, animals not listed above, or unknown use	Animal feeds and ingredients	20 ppb
Human food	Brazil nuts	20 ppb
Human food	Foods	20 ppb
Human food	Milk	0.5 (aflatoxin M1) ppb
Human food	Peanuts and Peanut products	20 ppb
Human food	Pistachio nuts	20 ppb

Source: Thiex, N. 2011. Analytical methodology for quality standards and other attributes of DDGS. *Distillers Grains – Production, Properties, and Utilization*. Boca Raton, FL: Taylor and Francis, CRC Press.

FDA advisory levels for vomitoxin (DON) in livestock feed and human food

Class of Animal / Human Food	Feed Ingredients & Portion of Diet or Food	DON Levels in Grains & Grain By-products and Finished Feed or Food
Ruminating beef and feedlot cattle older than 4 months	Grain and grain by-products not to exceed 50% of the diet	10 ppm (5 ppm)
Chickens	Grain and grain by-products not to exceed 50% of the diet	10 ppm (5 ppm)
Swine	Grain and grain by-products not to exceed 20% of the diet	5 ppm (1 ppm)
All other animals	Grain and grain by-products not to exceed 40% of the diet	5 ppm (2 ppm)
Human food	Finished wheat products, e.g. flour, bran, and germ	1 ppm

Source: Thiex, N. 2011. Analytical methodology for quality standards and other attributes of DDGS. *Distillers Grains – Production, Properties, and Utilization*. Boca Raton, FL: Taylor and Francis, CRC Press.

FDA guidance levels for total fumonisins in animal feeds and human foods

Class of Animal / Human food	Feed Ingredients & Portion of Diet or Type of Food	Levels in Corn & Corn By-products	Levels in Finished Feeds/Human Food
Equids and Rabbits	Corn and corn by-products not to exceed 20% of the diet **	5 ppm	1 ppm
Swine and Catfish	Corn and corn by-products not to exceed 50% of the diet**	20 ppm	10 ppm
Breeding Ruminants, Breeding Poultry and Breeding Mink*	Corn and corn by-products not to exceed 50% of the diet**	30 ppm	15 ppm
Ruminants >=3 Months Old being Raised for Slaughter and Mink being Raised for Pelt Production	Corn and corn by-products not to exceed 50% of the diet**	60 ppm	30 ppm
Poultry being Raised for Slaughter	Corn and corn by-products not to exceed 50% of the diet**	100 ppm	50 ppm
All Other Species or Classes of Livestock and Pet Animals	Corn and corn by-products not to exceed 50% of the diet**	10 ppm	5 ppm
Human food	Degermed dry milled corn products (e.g., flaking grits, corn grits, corn meal, corn flour with fat content of < 2.25%, dry weight basis)		2 ppm
Human food	Whole or partially degermed dry milled corn products (e.g., flaking grits, corn grits, corn meal, corn flour with fat content of ≥ 2.25 %, dry weight basis)		4 ppm
Human food	Dry milled corn bran		4 ppm
Human food	Cleaned corn intended for masa production		4 ppm
Human food	Cleaned corn intended for popcorn		3 ppm

- Includes lactating dairy cattle and hens laying eggs for human consumption.

** Dry weight basis.

Source: Thiex, N. 2011. Analytical methodology for quality standards and other attributes of DDGS. *Distillers Grains – Production, Properties, and Utilization*. Boca Raton, FL: Taylor and Francis, CRC Press.