



TECH TALK

Mycotoxins: A Hidden Thief of Cattle Health and Production

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Mycotoxins are toxic compounds produced by molds that can grow in the field, during harvest or in storage. Even at low levels, they can silently chip away at feed intake, reproduction, immunity and productivity — often without obvious visual signs.

Mycotoxins can quietly rob your bottom line

- **Up to 15% lower milk yield** with chronic aflatoxin exposure¹
- **Reduced feed intake and efficiency** with DON contamination²
- **Lower conception rates and embryonic loss** linked to ZEN³
- **Performance losses documented in 80% of ruminant trials²**

Key culprits to watch for

- **Aflatoxin.** Can damage liver, suppresses immunity and can transfer into milk.
- **Deoxynivalenol (DON).** Reduces feed intake, irritates the gut and lowers milk production.
- **Fumonisin.** Impairs immune function and performance.
- **Zearalenone (ZEN).** Disrupts reproduction and conception rates.
- **T-2 Toxin.** Highly toxic; causes gut lesions, immunosuppression and reduced feed efficiency.

When challenges stack, costs add up

When immunity and gut integrity are compromised, conditions like mastitis, ketosis and displaced abomasum become harder to prevent.*

\$326

per cow for a single mastitis case³

\$641

average cost of displaced abomasum³

\$180

average cost of ketosis³

\$555

per lost pregnancy⁴

\$2-6

per cow/day for each day open⁵

*These disease-related costs reflect common dairy economics and represent the added burden when cow health is compromised, not direct financial impacts of mycotoxins.

Protect what mycotoxins can steal

Monitor and test

- **Track cow health closely.**
Look for changes in intake, manure, reproduction and overall health.
- **Test silage for mycotoxins at least once per season** and when transitioning to a new pile.
 - When sampling, collect silage from multiple locations of the pile.

Tighten up storage

- **Check for damaged plastic covers** regularly and repair promptly.
- **Use a clean, tight-face management technique** (shave rather than tearing silage).
- **Remove at least 6–12 inches of silage per day** during warm weather to prevent spoilage.

Manage Feed

- **Remove or limit the most heavily compromised feed** where possible.
- **Blend higher-risk silage with clean feed** to reduce overall exposure in the ration.
- **Adjust rations based on feed testing results,** forage variability and herd performance.



Ask your Diamond V™ representative about regional mycotoxin risks and feed management strategies tailored to your herd.



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References:

- 1 Adams et al., 2016. Mold and Mycotoxin Problems in Livestock Feeding. Penn State Extension.
- 2 Bandyk, C.A. 2024. Mycotoxins in ruminant livestock production: An underestimated and overlooked risk and opportunity? Applied Animal Science 40:802–817.
- 3 Liang et al., 2017. Estimating US dairy clinical disease costs with a stochastic simulation model. J. Dairy Sci. 100:1472–1486.
- 4 De Vries et al., 2006. Economic Value of Pregnancy in Dairy Cattle. J. Dairy Sci. 89:3876–3885.
- 5 Dairy Cattle Reproduction Council. The Dollar Value of a Pregnancy.