February greetings, loyal readers! I’ve received several inquiries about moldy hay in the past couple of weeks, so will focus on that topic for this month’s edition.

Moldy hay (or other moldy feedstuffs) won’t always contain dangerous or poisonous compounds; however, the presence of mold itself can negatively impact animal performance and health. For feedstuffs with considerable mold, it’s a good rule of thumb to assume a 5% decrease in energy content for ruminant animals. Moldy feed is understandably less palatable and could result in lower-than-target intakes of nutrients, leading to decreases in milk production or growth, cause respiratory issues, and could even depress resistance to diseases.

Many molds are capable of producing mycotoxins (definition: toxin produced by a fungus) that can be harmful to livestock. Dramatic decreases in milk production can occur, calf performance can suffer, and abortions can occur from the consumption of mycotoxins. Mycotoxin effects accumulate over time, and the presence of more than one mycotoxin can increase them further. Mycotoxins are also tricky in that mycotoxin content is not necessarily related to the amount of mold present.

If you are concerned about a mold or mycotoxin problem, the first step is to send in a sample for a mold count and identification test. Most commercial feed testing laboratories can conduct this test, as can the MSU Schutter Diagnostic Lab on campus. The mold spore count can provide a guide for how (or if) the hay should be fed, and the identification of mold species can rule out or rule in mycotoxin producers. If mycotoxin-producing species are present, another test to determine mycotoxin concentration can be conducted. Concentrations of as little as 20-40 parts per billion (yes, billion with a B!) of some mycotoxins can cause negative effects.

For more information, you can check out my favorite reference for mold test interpretation is “Mold and Mycotoxin Problems in Livestock Feeding” from Penn State and can be found online with a simple search.