Feeding Mouldy Hay

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2016 will likely go down as a wet summer for Manitoba, in my opinion, because of the untimely rains during the haying season from June to September. Looking at the weather summaries across the Province some areas received 125-145% more rain than normal while other areas are closer to 100% of normal. Looking at the positives, the pastures grew wildly, and the hay fields were lush with new grass to cut. The big negative was that our cut hay often got rained on or we had to bale it before it was sufficiently dry because more rain was on the way. The likely result of this weather can be mouldy hay.

Feeding mouldy hay to livestock is a tough decision. Although all hay contains some mould, when mould becomes noticeable the decisions become important. Usually, mould makes hay less palatable, heat generated by mouldy growth can result in significant loss of dry matter and energy within the forages. Carbohydrates are consumed by the mould and heating denatures protein rendering it unavailable for use by the animal. The overall result is poor nutritional quality which can result in lower intake or in animals refusing to eat the hay.

Not all moulds produce dangerous mycotoxins and even the ones that do produce variable amounts. When mould is obviously present, you need to take action to minimize negative effects caused by dust, mycotoxins and reduced nutritional quality.

The physical dust created by the mould spores can be an issue. Horses are most susceptible and can develop respiratory issues - Recurrent Airway Obstruction (RAO or heaves). A horse with RAO has a normal temperature and appetite but exhibits labored breathing during exercise with coughing and nasal discharge. People can also be affected by mould spores, causing a condition called farmer's lung, where the fungus actually grows in lung tissue. So try to avoid breathing these spores.

Ruminants are protected to some extent due to rumen fermentation, but they are still susceptible when the mycotoxins load is excessive, especially pregnant animals and those under stress. The potential negative effects of mycotoxins include: abortions, reduced feed intake, lowered fertility, suppression of the immune system, lethargy and increased morbidity.

Below is a list of strategies that you can follow to deal with mouldy hay:

- First, identify your most “at risk” animals and avoid feeding them mouldy hay if possible. Animals deemed to be the most at risk will be non-ruminants, especially horses, and pregnant and/or stressed livestock.
- Next, identify the least susceptible animals (mature male ruminants, open mature female ruminants) and feed the worst hay to them. Use some common sense here when determining what is “worst”.
- Allow livestock to sort through hay and reject mouldy portions. Remove rejected hay and discard.
- Another strategy is to dilute the mouldy hay with “clean” feed. This can be good quality hay or high fiber feedstuffs such as dried distillers’ grains or baled corn stover. Be careful that you don't make your animals sick by tricking them into eating bad hay that they normally would refuse.
- Feed hay outside to minimize respiratory issues due to dust.
- If late enough in the season, you can use temporary fencing to take advantage of new spring growth in non-pasture areas to reduce reliance on hay.
- In all cases, provide high quality minerals or vitamins and make sure that protein and energy are not lacking in the diet. The most common consequence of spoiled feed to Manitoba’s cattle is reduced quality of the feed and inadequate supplementation to the herd to make up for the decreased food value. There are a wide variety of self-fed supplement products that can help you meet these needs. Livestock on a high nutritional plane will be much more capable of withstanding a temporary encounter with mycotoxins than animals that are lacking.

Mould is a difficult problem to deal with. Common sense and good observation often are your best decision aids.

For more on moulds click on:

Spoiled Feeds, Moulds, Mycotoxins and Animal Health