

An excerpt from Combs' research showing the positive effects of including grass in the TMR. When grasses are used to replace alfalfa fiber, milk production and intake of high producing cows does not appear to be affected. But what is affected is rumen health. Evidence of this may be seen in the increase of fat % in the milk.

## Feeding Grass To High Producing Dairy Cows: Could Including Some Grass Be a Good Thing?

Corn silage and alfalfa are the primary forages grown and fed to dairy cattle in the Midwest. However, there is a renewed interest in adding perennial and annual grasses into forage cropping systems. This interest comes with the realization that grasses not only provide a unique nutritional benefit to dairy rations, but that grasses may also help limit the occurrence of acidosis.

Many dairy producers have begun to include more corn silage into dairy diets because corn silage yields more DM per acre than alfalfa, presents less risk of harvest loss, and because corn silage-based cropping systems provide additional flexibility in managing manure on large dairy farms. Corn silage is excellent forage for high producing cows, but has nutritional limitations when used as the primary forage in dairy diets due to its low protein content and high fermentable carbohydrate levels. Lameness in dairy cattle has increased dramatically in the Midwest in recent years, and one of the major contributors to this problem has been formulation of high starch, low fiber diets.

Alfalfa is a good nutritional complement to corn silage because of its high protein content. However, high quality alfalfa may not necessarily be the best forage to increase fiber or reduce non-fiber carbohydrates when fed with corn silage. When alfalfa and corn silage are the only forage in the diets of high producing cows, it can be difficult to provide adequate levels of digestible fiber without providing excessive levels of highly fermentable non fiber carbohydrates (NFC).

High quality grass silages could be a good fit with diets formulated with corn silage and alfalfa. Intensively-managed grass silages are high yielding and contain moderate concentrations of neutral detergent fiber (NDF) with generally low concentrations of NFC. The nutrient profile of high quality grass silage complements the excesses and deficiencies of rations formulated with only corn silage and alfalfa. Additionally, the fiber in early maturity grasses is more digestible than the fiber in alfalfa. When grasses are used to replace alfalfa fiber, milk production and intake of high producing cows does not appear to be affected. But what is affected is rumen health. Including grass into dairy rations will increase digestible fiber and lower the proportion of energy coming from rapidly fermentable NFC's. This appears to reduce the occurrence of acidosis and limits the affects of symptoms such as lameness.

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