



Extension Connection

Monthly Highlights – December 2012

Starch digestibility can affect milk production, but it also costs money.

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Opportunities for Improving Starch Digestibility on Dairy Farms

Starch is an important source of energy for dairy cows. Starch typically comes in the form of dry or high moisture corn and corn silage. Digestibility of corn starch, however, can be highly variable. Particle size, grain processing, moisture levels, and storage methods are some of the factors that affect starch digestibility. Starch digestibility can affect milk production, but it also costs money – corn is too expensive to let it just pass through the cow. One way to determine the amount of starch that is getting digested by cows is to assess the level of starch coming out of cows. This can be done through fecal starch analysis. A reasonable goal for fecal starch in high producing cows is five percent or less. Excess starch in the manure means it is not being digested by the cow, meaning decreased milk production and wasted money.

To determine starch content in corn silage, high moisture corn and dry corn grain, and how much starch is passed through the digestive tract and left in the manure, Dairy & Livestock Agent Tina Kohlman collected samples from area dairy farms. Two Fond du Lac County farms were among the 30 dairy operations across the state to participate in the *2012 UW-Extension Manure Starch Analysis Study*. The field survey also looked at how starch content and digestibility change after corn has been stored and fermented over winter.

Based on the survey and supported by university-based research, recommendations to improve starch digestibility were made:

- Leave corn silage in storage longer to improve starch digestibility 7 percentage units.
- Harvest corn silage at a lower dry matter content with 40% DM being the goal.
- Increase kernel processing at harvest.
- Improve control of moisture levels at the time of high moisture corn harvest.
- Grind dry corn to a fine particle size.
- Sample manure for fecal starch content to better manage starch digestibility on the farm

It is estimated for each percentage unit increase in fecal starch above five percent, a decline in milk yield of about one pound per cow per day can be expected. Excess starch in the manure means not only decreased milk production but also money wasted on feed not being digested.

Civil Rights

Last month, our office participated in a peer review of the “all reasonable efforts” we make to reach Fond du Lac County residents protected by Civil Rights laws. To make sure our programs are accessible and relevant to all residents of the county, we’ve analyzed the most recent demographic information from the 2010 Census to share with you.

- All racial and ethnic groups (except White) in the county increased in number in the last 10 years. The increases were among Hispanics (120% increase), African-Americans (43% increase), Asian or Pacific Islanders (33% increase), and American Indians (19% increase).
- Hmong residents live mostly in the City of Fond du Lac, Village of North Fond du Lac and Town of Fond du Lac, with smaller numbers residing in the Towns of Rosendale, Eldorado, Friendship, Taycheedah, Lamartine, and Empire.
- 5.4% of county residents speak a language other than English at home (mostly Spanish and “other European” languages).
- About 10% of our county population has a disability.
- About 50% of the county’s African-American and American Indian residents live in poverty.
- Poverty rates are highest in the City of Fond du Lac, City of Ripon, and Town of Ripon.

We would be happy to share more details about county demographics with you and your group upon request.

Food Safety & Nutrition Education

On December 19th, the Wisconsin Nutrition Education Program (WNEP) will partner with the Salvation Army during their annual “Holiday Distribution Event.” It will be held at the Fond du Lac County Fairgrounds Recreation Building from 7:45 am to 2:00 pm. An estimated 525 individuals will receive food safety and nutrition education information from WNEP, which will accompany the holiday meal distributed to them.

Advocap Head Start, the Fond du Lac School District and Fond du Lac Birth to Three Program will hold its annual “Fond du Lac Child Development Days” at the Lighthouse Christian Church on Monday, January 28th from 10:00 am to 6:00 pm and Tuesday, January 29th from 8:00 am to 6:00 pm. Parents of children three and/or four years old have the opportunity to receive free developmental, hearing and vision screenings. The Wisconsin Nutrition Education Program (WNEP) will partner with the above agencies in providing nutrition education during the event.

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