

DAIRY CONNECTION

Vol. 21, No. 4 December 2011

EDITORIAL

This remaining 2011 issue has a new look and is shared with you for the coming year. Enjoy its contents.

I'm wishing you a Merry Christmas and Happy New Year. May your holidays be safe and satisfying.

INDEX

EDITORIAL.....	1
CALVES.....	2
Calf Starter Intake Eases Transition.....	2
Colostrum Storage Reminders.....	2
NUTRITION.....	2
Feed in Groups to Reduce Lead Factor.....	2
FORAGES.....	3
How Often Do You Test Forage Samples?.....	2
ANIMAL HUSBANDRY.....	3
Regrouping During Dry Period Can Affect Behavior.....	3
Cow Treatments More Likely Recorded for Larger Herds.....	3
HEALTH REGULATIONS.....	4
Common Reasons for Carcass Drug Residues.....	4
MILK QUALITY.....	4
Report Summarizes Bulk-tank Somatic Cell Counts.....	4
Which Method Triggered More SCC Violations?.....	5
BIOSECURITY.....	5
Protect Preweaned Calves From Pneumonia.....	5
DAIRY HERD RECORDS.....	6
DHIA Users Get Smartphone App.....	6
MANAGEMENT.....	6
MISCELLANEOUS.....	7
Leader Acknowledges Importance of Dairy to the Economy.....	7
Chalk Up Another One for Milk.....	7
Social Media Tips: What to Avoid.....	7

And speaking of next year, save these dates:

Dairy Cow College, Jan. 30-Feb. 3, 2012

The Dairy Cow College is a joint NDSU Extension Service and Midwest Dairy Association (MDA) educational effort in partnership with your county Extension office and me, the Department of Animal Sciences dairy specialist. 2012 will be the program's 19th year.

The program is free and open to the public. The meal will be provided. Topics I will cover this year include defining sustainability, the role of genomics, factors when controlling feed costs, food safety and social issues, a review of automated milking systems, dairy's carbon footprint, crisis management and managing labor on your dairy (Jamestown only). Brochures are in the mail if you haven't already received yours. If you have Internet access, point your browser to my website at www.ag.ndsu.nodak.edu/aginfo/dairy and click on the brochure to download a copy.

Mark your calendars for:

- Jan. 30 – Linton, KEM Electric Cooperative
- Jan. 31 – Dickinson, Elks Lodge
- Feb. 1 – New Salem, Youth Building
- Feb. 2 – Towner, Sandhills Dairy
- Feb. 3 – Jamestown, Gladstone Inn and Suites

Registration and coffee will be available at 10:30 a.m. The program runs from 11 a.m. to 3:30 p.m. local time.

I-29 Extension Dairy Conference, Feb. 8-9, 2012

The seventh annual I-29 Dairy Conference in Sioux Falls, S.D., promises to be another good one. Granted, it is some distance for North Dakota producers to travel. However, I believe we have planned a program worth the trip. Furthermore, the Milk Producers Association of North Dakota has agreed to pay the cost of registration for every North Dakota dairy producer who attends.

The program starts Wednesday evening with dinner and keynote speakers Stan Erwine, Dairy Management Inc., and Clinton Anderson, Bain & Co. Inc., discussing the evolution of the dairy checkoff's strategic plan, results and Innovation Center for U.S. Dairy.

NDSU EXTENSION
SERVICE

North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, sex, sexual orientation, status as a U.S. veteran, race or religion. Direct inquiries to the Vice President for Equity, Diversity and Global Outreach, 205 Old Main, (701) 231-7708.

County Commissions, NDSU and U.S. Department of Agriculture Cooperating.
This publication will be made available in alternative formats for people with disabilities upon request. (701) 231-7881.

The Thursday program includes:

- Interpreting Sustainability: Here is what you said! – James Paulson
- Dairy Sustainability in the United Kingdom: Let Me Show You Your Future – Neil Baker, dairy producer from England
- Long-range Weather Forecasting: What is the New Climate Norm? – Mark Seeley
- Luncheon keynote speech: How We Do It Across the Pond – Neil Baker
- How Are We Going to Feed Cows in the Future Using \$10 corn and \$200 Oil? – David Casper
- Managing Risk and Seizing Opportunities in 2012 and Beyond: Overview of Risk Management for Uncertain Times – Marin Bozic
- Midwestern Economic Resiliency Panel: How Milk Pricing and Input Cost Implications Affect Me Now and in the Future
 - Marin Bozic, dairy economist, University of Minnesota
 - Paul Bertels, National Corn Growers Association, Missouri
 - Les Hardesty, U.S. Dairy Export Council and Colorado dairy producer
 - Area dairy producers

Brochures were mailed in early December. If you would like to download a copy to share with others, go to my website at www.ag.ndsu.nodak.edu/aginfo/dairy and look for it under announcements.

■ CALVES

Calf Starter Intake Eases Transition

The two weeks before and after weaning are critical points in a calf's life, according to Al Kertz, ANDHIL LLC consultant, because starter intake is the primary factor determining the calf's success. He notes that if intake isn't high enough before weaning, the calf won't be able to support her current rate of growth during weaning, let alone increase gains afterward. As a result, the growth rate drops and calves even may lose weight.

Guidelines for a smooth transition include 1 pound per day of starter before weaning, 2 pounds per day during weaning, 4 pounds per day one week after weaning and 5 to 6 pounds per days two weeks after weaning.

Access to fresh, clean water also is essential. Before weaning, calves should drink about 2 pounds of water for every pound of dry-matter intake. After weaning, that ratio jumps to 4-to-1.

Weaning age is a related factor. The problem is many calves aren't simply weaned. They're often de-horned, vaccinated, moved to groups and switched to new feed simultaneously. Together these changes create a high-stress situation that can depress immunity, which increases the risk of respiratory infection. That's bad news because respiratory infections inflict life-long damage, even in calves that appear to fully recover.

So the take-home message here is managing starter and stress to improve the transition for calves. For instance, if you have enough hutches to house calves up to 8 weeks of age, wean at 6 weeks, but give the calves an additional two weeks in hutches to adjust to weaning before other changes occur.

Colostrum Storage Reminders

Proper storage of maternal colostrum can make a big difference to calf health. Experts recommend the following tips to help preserve immunoglobulin levels in refrigerated or frozen colostrum:

- Store fresh colostrum for no more than one week in the refrigerator.
 - Maintain a refrigeration temperature between 33 and 35 F. This helps reduce bacterial growth.
 - Freeze colostrum for up to one year.
- Freeze 1 quart (1 liter) of colostrum in a 1- or 2-gallon re-sealable storage bag.
 - Lay bags flat in the freezer.
 - You also may freeze colostrum in clean, sanitized 1- or 2-liter plastic bottles.
 - Check your freezer periodically to make sure it is minus 5 F.
- Thaw frozen colostrum in warm (less than 120 F) water to prevent heat damage to colostrum antibodies.

For additional colostrum management guidelines, see Gold Standards I on the Dairy Calf and Heifer Association website for Holstein heifers less than 6 months of age at www.calfandheifer.org/.

■ NUTRITION

Feed in Groups to Reduce Lead Factor

Today's larger herds do have certain advantages. One opportunity is feeding more groups. That can reduce over-feeding, be used to feed closer to the cow's nutrient requirements and reduce the lead factor for ration formulation.

Years ago (1984), M. McGilliard and C. Stallings from Virginia Tech published an article in the Journal of Dairy Science in which they looked at the use of lead factors

for formulating rations for total mixed ration feeding. The lead factor was used to increase the nutrient demand by feeding to a higher level of milk production than the average. Basically, they found that an ungrouped herd needed a lead factor of 1.32. In other words, if the herd averages 60 pounds of milk, balance a ration for 79 pounds (60 x 1.32).

More recently, this practice has come into question because it overfeeds a majority of the cows and leads to issues with environmental quality due to excretion of excess nutrients. Nutritionists now are recommending reducing the lead factor, which means feeding closer to the average requirement. Because the lead factor was calculated to be one standard deviation above the mean, it would support the requirement for the 83rd percentile cow in the herd.

An option for reducing the lead factor is to feed two groups of equal numbers and reduce the lead factor to 1.17 for the high-production group and 1.23 for the low-production group. Further reduction can occur if feeding three equal groups with a lead factor of 1.14 for high-, 1.1 for middle- and 1.21 for low-production groups.

Herds have gotten bigger, feeding more groups is easier and thus reduces the lead factor needed. This makes sense not only environmentally but economically now that high feed prices are the norm.

■ FORAGES

How Often Do You Test Forage Samples?

Dry-matter content should be determined on a regular basis to know the amount of high-moisture feed (silages) to offer or include in your total mixed ration. This can be done weekly or more often, usually depending on farm size. In addition, the nutrient profile (protein, fiber, energy and minerals) needs to be determined by a commercial lab on a regular basis.

Past recommendations were to sample and test every four to six weeks or when feeds changed. For a 50-cow herd, sampling once a month is acceptable. However, a 1,600-cow herd could justify testing three samplings every four days, or 21 analyses a month. A 400-cow herd could justify three samplings every seven days, or 12 analyses a month.

Wisconsin researchers have modified these recommendations and suggest that sampling every 10 days in the 400- and 1,600-cow herds will result in adequate quality control. They did suggest that duplicate samples be taken at each sampling for a total of six per month to base changes in rations.

Source: Adapted from Dairy Herd Management, October 2011

■ ANIMAL HUSBANDRY

Regrouping During Dry Period Can Affect Behavior

A recent study determined the effect of regrouping during the dry period on feeding, social, rumination and lying behaviors for cows that were moved to a new pen and cows that remained in their home pen but had new cows introduced.

Cows that were moved to a new pen after regrouping decreased dry-matter intake by approximately 9 percent on the day of regrouping, but cows that remained in their home pen showed no significant decrease in intake after regrouping.

The feeding rate decreased in both treatments by 10 percent after regrouping. Rumination times also decreased by approximately 9 percent in both treatments, reaching the lowest values on the day of regrouping for cows that stayed in the home pen and on the day after regrouping for the moved cows.

Cows that were moved to a new pen displaced other cows at the feeder twice as frequently after regrouping, but no such effect of regrouping was observed in cows that stayed in the home pen. These results indicate that regrouping can affect behavior of prepartum dairy cows, especially those cows that are moved to a new pen.

Source: J. of Dairy Science, Vol. 94, Issue 5, Pages 2312-2319, May 2011

Cow Treatments More Likely Recorded for Larger Herds

The nation's dairy farms have room for improvement in recording treatments that cows receive. Recording treatments is extremely important to make sure the appropriate length of therapy and withdrawal period are followed.

A survey conducted by the U.S. Department of Agriculture's National Animal Health Monitoring System (NAHMS) indicated only 58.2 percent of U.S. dairy operations reported keeping a written or computerized record for each cow that received a treatment requiring a withdrawal period.

Herd size paralleled the likelihood that a dairy operation kept written or computerized records of each treatment, with 94.4 percent of larger dairies (500 or more cows), 67.4 percent of medium-sized dairies (100 to 499 cows) and 51.7 percent of smaller dairies (fewer than 100 cows) following this practice.

The NAHMS Dairy 2007 study was conducted in 17 of the major dairy states, representing 79.5 percent of U.S. dairy operations and 82.5 percent of dairy cows.

Source: http://nahms.aphis.usda.gov/daily/daily07/Dairy2007_PartIV.pdf

■ HEALTH REGULATIONS

Common Reasons for Carcass Drug Residues

According to the most recent USDA data available (2008), cull dairy cows accounted for just more than 7 percent of all cattle slaughtered in the U.S. but were responsible for approximately 90 percent of carcasses in which drug residues were detected.

Some of the more common reasons leading to having a carcass condemned for drug residues are:

- **Changing the dose or route for Procaine Penicillin G:** The label dose for PPG is only 1 cc per 100 pounds, or a total of about 15 cc. When a cow is given higher doses or treated subcutaneously (under the skin), the slaughter withdrawal time can increase from the four to 10 days on the label to up to several weeks.
- **Marketing cows treated for mastitis before completing their slaughter withdrawal:** Dairy employees usually do a great job of holding out milk from cows treated for mastitis, but they sometimes forget that mastitis tubes also have slaughter withdrawal times ranging from four to 28 days.
- **Marketing dry-treated cows before completing their slaughter withdrawal:** While culling a cow that has aborted is tempting, she'll still have residues in her tissues from her dry treatment and a slaughter withdrawal of 14 to 60 days from the day she was dried off.
- **Calves marketed for veal that have consumed colostrum or medicated milk replacer:** Calves slaughtered shortly after birth (as bob veal) may have consumed enough antibiotic from the dry treatment to trigger a positive carcass test. Tissue residues also frequently are caused by calves consuming milk replacer medicated with tetracycline and neomycin. Calves fed medicated milk replacer never should be marketed as veal.
- **Giving pain relievers in the muscle or under the skin:** The only pain relievers approved for cattle contain flunixin (Banamine, Flu-Nix), a drug that was designed to be administered only in the vein. Giving flunixin-containing products in the muscle or under the skin, rather than intravenously, can increase the withdrawal time from the label's four days to more than a month.
- **Marketing cows treated with intrauterine boluses or infusions:** Tetracycline can cross the uterine wall and be detected in the milk and at slaughter for variable periods. Some veterinary publications recommend slaughter withdrawal of up to four weeks following intrauterine treatment.
- **Thinking that a "zero meat, zero milk withdrawal" antibiotic exists:** While products containing ceftiofur (Naxcel, Ceftiflex, Excenel, Excede) are attractive because they have no milk withdrawal, all ceftiofur-containing

products have slaughter withdrawals ranging from three to 13 days when used according to label. There is no such thing as a "zero meat, zero milk withdrawal" antibiotic.

- **Using any sulfa drug off label:** Sulfonamide (sulfa) drugs only may be used legally exactly according to label instructions. Recent Food and Drug Administration investigations of residues suggest that overdosing sulfa boluses (Albon) or giving intravenous sulfa products (Di-methox) off label in the muscle or under the skin has led to tissue residues.

While the situations above are some of the more common causes of tissue residues, virtually any drug can cause residues if it is used off label or if the drug is used according to the label but the label withdrawal isn't followed. With the USDA stepping up enforcement on tissue residues and the potential for FDA testing of bulk-tank milk in the future, now is an excellent time for dairy managers to review their treatment programs.

As always, your veterinarian is your most valuable resource for information and advice about avoiding tissue and milk residues.

*Source: Excerpts from California Dairy Newsletter
Vol. 3, Issue 2, June 2011*

■ MILK QUALITY

Report Summarizes Bulk-tank Somatic Cell Counts

The U.S. Department of Agriculture Animal and Plant Health Inspection Service's Centers for Epidemiology and Animal Health, in conjunction with the USDA Agricultural Marketing Service and the National Mastitis Council's Milk Quality Monitoring Committee, monitor milk quality in the U.S. using bulk-tank somatic cell count (BTSCC) data provided by four of the nation's 10 Federal Milk Marketing Orders (FMOs).

In 2010, four FMOs were monitored: Central, Mideast, Southwest and Upper Midwest. These FMOs monitored milk from 33,912 producers in 34 states and accounted for nearly half of the nation's milk supply.

The milk-weighted geometric BTSCC mean was 224,000 cells/milliliter in 2010. The milk-weighted BTSCC takes into account the amount of milk shipped by a producer, resulting in an overall BTSCC mean of monitored milk. In comparison, the milk-weighted geometric BTSCC was 227,000 in 2009; 247,000 in 2008; 260,000 in 2007; 249,000 in 2006; and 258,000 in 2005.

The producer shipment BTSCC was 272,000 in 2010. The producer shipment BTSCC is a geometric, nonmilk-weighted mean of all shipments (that is, all shipments

have equal weight). In comparison, the producer shipment BTSCC was 277,000 in 2009; 294,000 in 2008; 298,000 in 2007; and 293,000 in both 2006 and 2005.

More than 99 percent of the milk and 98 percent of the shipments monitored in these FMOs during 2010 met the current Pasteurized Milk Ordinance SCC federal regulatory limit of 750,000. Of the 31,912 producers, 91.2 percent shipped milk with BTSCCs below 750,000 during all months monitored.

In 2010, during all monitored months, 89.5 percent of the milk would have met a goal of 400,000 SCC (which is the current European Union SCC limit), but only 50.7 percent of the producers would have done so.

Monthly monitoring continues to show that BTSCCs peak during the summer months (July to September). In 2010, monthly milk-weighted BTSCCs were highest in August (262,000) and lowest in December (197,000).

Which Method Triggered More SCC Violations?

Currently in the U.S., a producer's permit is suspended when three of the last five bulk tank somatic cell counts (SCCs) exceed the SCC regulatory limit. How does this method of determining compliance compare with using a three-month rolling average SCC calculated using a geometric mean, the method proposed along with the failed attempt to lower SCC limits in the U.S.?

Researchers at the USDA Animal Improvement Programs Laboratory examined data from Dairy Herd Improvement (DHI) herds to determine the consequence of imposing a lower SCC regulatory limit on U.S. dairy herds. Percentages of herds and milk produced that would not meet the current or proposed U.S. standards based on three out of five consecutive SCC tests, as well as the European Union standard of 400,000 based on four consecutive three-test geometric means, were determined. The time period for the study was November 2009 through October 2010.

Under the current system for determining compliance (based on three out of five consecutive tests greater than the SCC standard), 14.1 percent of DHI herds in the U.S. would have been noncompliant if the SCC standard were 400,000. However if compliance was based on four consecutive rolling three-test geometric means exceeding 400,000, 7.8 percent of DHI herds would have been noncompliant.

Results indicate that the number of noncompliant herds in the U.S. would be higher using the current system of three out of five consecutive samples exceeding the SCC limit than if a rolling geometric mean SCC were used in the regulatory standard.

Source: National Mastitis Council's 50th Annual Meeting Proceedings (Pages 119-120).

■ BIOSECURITY

Protect Preweaned Calves From Pneumonia

In the article "Control, Management and Prevention of Bovine Respiratory Disease in Dairy Calves and Cows" in *The Veterinary Clinics of North America Food Animal Practice*, authors review the biosecurity programs that should be implemented for young calves.

Here's a quick review of the "inconvenient truths" about pneumonia in preweaned calves:

- Newborn calves acquire immunity to disease from colostrum and, except in limited, specific cases, vaccines will not improve the immune function of young calves.
- Further, veterinarians and the scientific community generally agree that pneumonia in cattle begins with a viral infection, which is not treatable by any available medicines.
- The viral infection typically "opens the door" to infection by one of four types of bacteria. The bacterial infection ultimately causes permanent lung damage and sometimes death.
- Large-scale surveys show, on average, that less than 60 percent of pneumonia cases are detected in a timely manner by farm personnel.

These "inconvenient truths" dictate that, by far, the most effective way to control pneumonia in young calves is through proper management directed toward disease prevention. The major focus of the article is on biosecurity programs to reduce the incidence of pneumonia in both cows and calves. Their specific recommendations are generally the same as those given for reducing the frequency and severity of scours in newborn calves:

- Maintain a rigorous maternity pen protocol.
- Use fresh, clean bedding for every calving.
- Remove calves from maternity pens immediately after birth.
- Place calves in dry, clean pens away from cows immediately after birth. See Gold Standards I, section VI, for more information on housing standards.

Ensure that all calves are fed an appropriate amount of high-quality colostrum:

- Measure the quality of all colostrum with a colostrometer, and feed only high-quality colostrum (preferably not from first-calf heifers).
- Feed 3 to 4 quarts of colostrum in the first two hours.
- Ensure that the navel of every newborn calf is properly disinfected immediately after birth by dipping it in a 7 percent iodine solution that is freshly prepared for each calf.

- Give calves proper nutrition, either whole (pasteurized) milk or a nutritionally equivalent milk replacer. Remember, the traditional two bottles per day generally is not sufficient nutrition to maintain optimal immune function, particularly in weather below 40 degrees.
- Monitor the cow herd vigilantly for Johne's disease because the ability of pasteurization to control Johne's disease is disputed.
- Design and implement a proper vaccination program.
- Maintain a high level of physical biosecurity.
- Provide a continuous supply of clean, fresh air to every calf.

Always consult with your veterinarian and nutritionist for specific recommendations for your operation. For recommendations on target housing and nutrition, refer to the Dairy Calf and Heifer Association Gold Standards.

Source: M. Payne, D.V.M., Ph.D., University of California, Davis

■ MANAGEMENT

Safety should be the No. 1 consideration in the management of bulls. No cow pregnancy is worth serious injury. Here are some thoughts taken from volume 29, issue 6, of the Dairy Pipeline Newsletter, which was published a few years ago. Comments by M.C. Scott, a Virginia Extension agent, still apply today.

Select a bull from a reputable, "disease free" source. Just because he is the right color and walks doesn't mean he is a good bull. Pedigrees are a plus.

Bulls should pass a breeding soundness exam before they are to breed cows. This exam should be repeated at least four times a year. The exam also presents an excellent opportunity for you and your veterinarian to discuss your herd's reproduction plan.

Bulls should be on the same herd health program as the lactating herd. Work with your veterinarian to formulate a plan that complements your herd bulls.

continued on page 7

■ DAIRY HERD RECORDS

DHIA Users Get Smartphone App

If you are a Dairy Herd Improvement member and you have a smartphone, then you will want the PocketDairy application.

Members of the Heart of America DHIA affiliate have been using PCDART for years. The PocketDairy app kicked off the hand-held dairy management revolution in 2000.

Now it is being used around the farm on the newest Android smartphones, thanks to efforts at Dairy Records Management Systems.

The PocketDairy Android app displays vital cow statistics, including production, reproduction and udder health. A flick of the screen reveals the lifetime health, vaccination and protocol history. Views include cow pages and various lists for calving, breeding and other actions. A variety of filters allows for simplicity of use, even in the largest of herds.

Following an extensive beta phase, this product is being released to PCDART customers worldwide with the option of choosing different languages, including English and Spanish. Product testers have been raving about the PocketDairy Android app since the beta testing earlier this year.

The beta phase revealed that producers love programs that can be used on their smartphones, as opposed to having to carry another device dedicated to farm management. Currently used by customers with smartphones, a few are experimenting with using it on the newest Android tablets appearing on the market.

Mobile computing is posting tremendous growth in the general business and consumer markets as smartphones change the daily routine. The dairy industry won't be left behind.



MANAGEMENT

continued from page 6

A conservative stocking rate is one bull for every 25 to 30 cows. Social rank may affect bull performance, so avoid grouping smaller bulls with larger bulls because the larger bulls may dominate the breeding and inhibit younger bulls lower in the social pecking order.

No bad temperament is tolerated. Too many bull calves are born every day to take a risk with an ill-tempered bull.

The use of younger bulls is preferred. Feed is too expensive to be feeding an old, big bull.

Make sure all family members, employees and visitors are aware of the bulls, and use extra precaution when working around them. Your dairy cows are handled frequently, lending several opportunities for a "bad" bull to "get" you.

■ MISCELLANEOUS

Leader Acknowledges Importance of Dairy to the Economy

The impact of livestock, especially dairy, is well-established. During his address, Minnesota Gov. Mark Dayton said that in addition to providing high-quality food for Minnesotans, our dairy sector also is answering his call by providing good-quality jobs and economic activity for the state.

Nearly 4,500 family farms produce milk and other dairy products in Minnesota. Together, these family farms provide us with more than 1 billion gallons of milk and other dairy products each year. Those numbers are impressive enough, but when you factor in the related economic impacts and activity generated by this milk production, the true impact of Minnesota dairy farmers comes into focus.

When all impacts are factored in, Minnesota's dairy sector supports 40,000 jobs around the state. The dairy sector also generates an amazing \$11.5 billion in total economic impact for the state.

Breaking it down a bit more, the average dairy cow in Minnesota has a total economic impact of nearly \$25,000. That's a lot of impact for any animal, even one that can weigh more than 1,000 pounds. And the economic impact isn't just about Main Street. Dairy production also benefits other farmers by providing a steady market for locally grown corn and other feed. This creates stronger demand and higher values for Minnesota crops.

MILK: IT DOES A STATE
AND A BODY GOOD!

Chalk Up Another One for Milk

In the ongoing battle among milk, water and sports drinks for superiority in rehydrating people after physical exercise, researchers at McMaster University in Canada have found that milk is best for rehydrating active children.

"Children become dehydrated during exercise, and it's important they get enough fluids, particularly before going into a second round of a game," says Brian Timmons, research director of the Child Health and Exercise Medicine Program at McMaster University and principal investigator of the study. "Milk is better than either a sports drink or water because it is a source of high-quality protein, carbohydrates, calcium and electrolytes."

This is the latest in a series of findings that affirm the recuperative properties of milk. The McMaster University research replicates previous research out of the United Kingdom that showed milk was better at rehydrating people than water or a carbohydrate sports beverage.

Researchers don't fully understand the mechanism yet but believe that the protein and other dairy components cause the water to be released from the stomach slowly, which would slow absorption. It's sort of a slow-release mechanism that allows for longer-term retention of the water. In other words, when water or a sports drink is consumed, the water is absorbed rapidly and the kidneys work to remove what the organ sees as too much.

Social Media Tips: What to Avoid

If you are getting a smartphone for Christmas, then you will be purchasing a data plan. Once you get past the cost, you will find you have lots of opportunities to use this new and powerful device, often in place of your home computer, especially for email and social media.

If you aren't into social media, chances are that others in your family are. This is more than texting between two people or a group on your phone; it is sharing with the world. And for breaking news, what used to take 24 hours to reach us now takes about 20 minutes! Two of the many examples of growing social media outlets among the dairy audience are Facebook and Twitter.

Even if you have yet to purchase an Android, iPhone, Palm or Windows smartphone, many of you already are into social media, but just on your computer. Being a user of social media means that you probably are talking about items of interest such as home life, your work, perhaps the cows. I think you see where this is going.

Consumers are paying attention to what is happening in the world of social media. You are more visible and more

NDSU encourages you to use and share this content, but please do so under the conditions of our Creative Commons license. You may copy, distribute, transmit and adapt this work as long as you give full attribution, don't use the work for commercial purposes and share your resulting work similarly.

For more information, visit www.ag.ndsu.edu/agcomm/creative-commons.

vulnerable than ever before. If you don't believe it, consider the following: In 2008, data from Google show that consumers searched more for information about Proposition 2 than they did the Los Angeles Lakers. The overthrow of the Libyan government is claimed to have gained momentum because of social media users.

Your Midwest Dairy Association has been actively involved in that cyber world for the last few years, monitoring the messages and training spokespeople about the potential impact it can have. Perhaps you recall the presentations at the dairy convention two years ago.

Regardless of your level of familiarity and comfort with social media, or if you are thinking about it because the kids are doing it, here are some tips to keep in mind as you journey down this latest path of communication and sharing.

These are things to avoid when using social media:

- Jargon
- Acronyms
- Speculation
- Guarantees
- Blame
- Straying from your area of expertise
- Negative messages

Negative messages, more than any message you send, just don't work. If someone else has a negative blog or post, respond with a positive blog, post or video. In other words, to be an ambassador for your industry and your community; play in the medium others are playing in but with positive messages.