

Institute of Food and Agricultural Sciences (IFAS)

Department of Animal Sciences

# Dairy Update

Quarterly Newsletter Vol. 10 No. 1

Winter 2010

#### **New Year's Resolutions For 2010**

David R. Bray

Happy New Year to you all. It's time again to plan for a successful New Year on your dairy and give thanks that 2009 is gone. This time of the year is a good time for planning, not only for this year, but also for the future. This means how do we continue to improve the things we do well and what do we change or eliminate of the things we don't do well.

- 1- Try to forget about last year and focus on a positive new year.
- 2- Take time off. Go on vacation with your family, go fishing, do something to take your mind off last year and recharge your mind and body for a successful new year.
- 3- Revisit your business plan. Make sure you can take advantage of upswing of the economy, where you can reallocate your resources to increase your profits. Continuing with cut-backs may not be the most profitable plan.
- 4- Set new performance goals for all the enterprises or areas of your dairy. These should have employee inputs also as this is the road map for success. These will then set the goals for your employees to strive to meet the whole dairies performance and safety goals.
- 5- Implement some sort of employee retraining program to insure they understand their responsibilities in this quest for improvement to reach your goals.
- 6- These performance goals then are translated to employee job descriptions and compensation for their part of meeting the dairy's goals; these are to be explained at the employee performance review.
- 7- Do only what you can do well. If you can't raise calves, use a calf raiser or buy replacements. If you can't grow crops, buy them or have them custom grown and or harvested.
- 8- Go visit other dairies in the country. Go to Extension and other dairy meetings. You might get some new ideas and reconnect with people you have not seen in a while.

- 9- Replace outdated, worn out milking equipment. The milking system is the only thing that makes you money on your dairy.
- 10- Milk clean dry udders and dip teats.
- 11- Dig out the back of your freestalls, add new sand.
- 12- Keep cows as clean, cool and comfortable as possible.
- 13- Inventory your blind quarters, replace missing leg bands. Apply new bands to new found blind quarters, and cull those 2 quartered beauties. Nothing builds employee satisfaction like milking a bunch of 2 quartered cows!
- 14- Hire help with more teeth than tattoos.
- 15- If you get out of breath tying your shoes, lose weight or wear boots.
- 16- Keep a smile on your face, people will wonder what you are up to.

Contact Dave Bray at <u>drbray@ufl.edu</u> or call (352) 392-5594.

# A Diet Enriched in Linoleic Acid Increases Plasma IGF-I and First Service Conception Rates in Lactating Holstein Cows

L. Badinga, C. Caldari-Torres, and M.C. Perdomo

In dairy cows, concentration of insulin-like growth factor I (IGF-I) is low immediately after calving, but increases gradually as liver growth hormone receptor

number increases. The IGF-I system is active in the reproductive tract of cows and is thought to play an important role in pregnancy establishment and embryo survival. With the support of the Southeast Milk Inc. Dairy Check-Off, Virtus Nutrition (Fair Lawn, OH) and Cargill (Minneapolis, MN), we

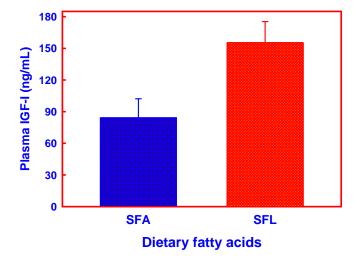


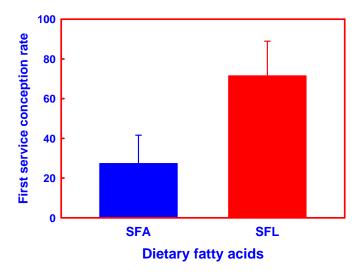
Southeast Milk, Inc. Dairy Check-Off

conducted a feeding trial to examine the effect of feeding calcium salts of safflower on plasma IGF-I and fertility rates in lactating Holstein cows.

Healthy multiparous cows were assigned randomly to a control (highly saturated rumen bypass Fat, SFA) or

safflower-supplemented (SFL) diet from approximately 4 wk before expected calving date through 7 weeks postpartum. Cows supplemented with safflower (55% linoleic acid) had greater plasma IGF-I concentrations at day 50 postpartum than those receiving a control diet enriched in highly saturated fatty acids (Figure 1).





The greater plasma IGF-I concentrations at 50 days in milk were associated with higher conception rates to first insemination (Figure 2). These observations suggest that cows supplemented with safflower may have endocrine and uterine environments that are conducive to optimal embryo development and successful pregnancy establishment in lactating cows. Understanding the effect of supplemental linoleic acid on reproductive efficiency may lead in the long-term to development of producer-friendly nutritional strategies to enhance fertility in high producing dairy cows.

Badinga, Caldari-Torres and Perdomo are in the UF/IFAS Department of Animal Sciences. Contact Lokenga Badinga at <a href="mailto:lbadinga@ufl.edu">lbadinga@ufl.edu</a>; or call (352)-392-1958 Ext 252

## **Bioenergy from Livestock Manure**

#### Ann C. Wilkie

With increasing interest in manure digesters and bioenergy production, as well as greater attention being focused on greenhouse gas emissions from livestock production, it's more important than ever to learn about the latest developments in anaerobic digestion of livestock manures. The AgSTAR Program will hold its annual national two-day conference at the Hotel Sierra/KI Convention Center in Green Bay, Wisconsin, on April 27-28, 2010. This conference is recommended for livestock producers and others interested or involved in the design, financing, operation, or regulatory oversight of animal waste management systems, or in the development of alternative sources of energy.



Hotel Sierra/KI Convention Center, Green Bay, Wisconsin - April 27-28, 2010

As usual, this year's conference will feature technical, policy and financial presentations, poster sessions, networking opportunities, and exhibits of the latest technologies and services. The conference will also include a tour of two local dairy farm digesters. Full conference information will soon be available at the AgSTAR website, <a href="http://www.epa.gov/agstar">http://www.epa.gov/agstar</a>.

The AgSTAR Program is a voluntary effort jointly sponsored by the U.S. Environmental Protection Agency (EPA), the U.S. Department of Agriculture, and the U.S. Department of Energy. The program encourages the use of methane recovery (biogas) technologies at confined animal feeding operations (CAFOs) that manage manure as liquids or slurries. These technologies produce energy and reduce methane emissions while achieving other environmental benefits. For additional information, visit the AgSTAR Program website.

For questions or information about manure bioenergy, contact: Dr. Ann C. Wilkie at <a href="mailto:acwilkie@ufl.edu">acwilkie@ufl.edu</a>, (352) 392-8699, or visit the website <a href="http://biogas.ifas.ufl.edu">http://biogas.ifas.ufl.edu</a>. Ann Wilkie is in the UF/IFAS Department of Soil and Water Science.



## Did your Teat Dip Freeze this Winter?

David R. Bray

The cold weather this winter in the Southeast has been the coldest and longest in history. One of things that can freeze are teat dips. When this happens the salts settle to the bottom of the container. When the container thaws, you are left with a concentrated active ingredient in the bottom of the container. If you remove the dip from the top, you get a diluted dip that's an ineffective product, and what's on the bottom will often burn teats.

We use a variety of products in various containers, and they may come from various parts of the country and stored from open loading docks to heated warehouses. Once they get to your dairy they are stored in various places also.

It is a common practice in colder climates to mix dips before you use them because they probably froze before they get to the dairy. There is a good possibility that your dip may have been frozen if it came south for the winter. Mixing some containers may be easier said than done. Drums should be rolled before usage. Many times the delivery person does this, especially if the dip originated in cold climates. If mixed this way, care should be taken not to injure the roller because drums are heavy. Totes can't be rolled or shaken. If they come to the dairy mixed, they can be stirred with a stick. If you have damaged or irritated teats, it may not be the cold weather; it could be the teat dip that was frozen. Or if you get a mastitis outbreak, it may be because your dip has separated and you are using liquid on top of the concentrated dip.

Other chemicals used for wash up can also freeze also and should be mixed, again these are caustic chemicals and care should be used to prevent injury to your employees.

Want to know more about teat dip? Contact Dave Bray at drbray@ufl.edu or call (352) 392-5594.

# Nine Florida Students Competed in 4<sup>th</sup> Southern Regional Dairy Challenge

Mary Sowerby and Albert De Vries

A total of 76 students from 16 southern colleges and universities participated in the fourth annual Southern Regional Dairy Challenge, held November 19 through 21, 2009, in Russellville, KY. The Southern Regional Dairy Challenge is an innovative two-day event designed by professionals from allied industry and university educators to bring classroom training to life in the real world for students interested in the dairy industry. The University of Kentucky, Western Kentucky

University, and Eastern Kentucky University co-hosted the 2009 contest, drawing participants from Alabama A&M University, Berry College, Clemson University, College of the Ozarks, Eastern Kentucky University, Lake City Community College, University of Florida, University of Kentucky, Louisiana State University, Mississippi State University, North Carolina State University, Santa Fe College, Southern Illinois University, Virginia Tech, West Virginia University, and Western Kentucky University.

Teams of students from the different schools were formed to conduct a comprehensive evaluation of a working dairy farm. Afterwards, teams presented their analysis and prioritized opportunities for improvement to a panel of expert judges and the dairy owners.

Florida was represented by nine University of Florida Dairy Science Club members: six from UF – Candy Munz, Marissa Navarro, Kelley Johnson, Kimberly Hencken, Patricia Fledderman and Nickolas Jenkins; two from Santa Fe College – Emily Hetherington and David Kirkland; and one from North Florida Community College – Lauren Ellison.



The nine University of Florida Dairy Science club members that participated in the 2009 Southern Regional Dairy Challenge

"The regional Dairy Challenge, while offering a competitive format, educates undergraduate students about the dairy industry itself and allows them to apply the concepts they have learned in the classroom to a real farm situation and then defend their practical recommendations," said contest planning committee co-chair Donna Amaral-Phillips of the University of Kentucky. "Students learn a great deal in the process."

Despite the high stress created from working with other students never met before, time deadlines and giving an oral presentation, the Florida delegation returned unitedly glad for the opportunity to see new places, learn new things, experience new challenges and meet new people – both other students and dairy

industry representatives. Several from Florida are now looking forward to competing in the National Dairy Challenge to be held in California in April 2010.



### SOUTHERN REGIONAL

The Southern Regional is one of four regional contests under the guidance and support of the North American Intercollegiate Dairy Challenge™. The NAIDC mission is to facilitate education, communication and an exchange of ideas among students, agribusiness, dairy producers and universities that enhances the development of the dairy industry and its leaders. Mississippi State University will host the 2010 Southern Regional Dairy Challenge and UF is scheduled to host the contest in 2011.

Generous donations from sponsors make the events possible. To become a Southern Regional sponsor, contact Albert De Vries at <a href="mailto:devries@ufl.edu">devries@ufl.edu</a>. Contributing sponsors are recognized on the Dairy Challenge site <a href="www.dairychallenge.org">www.dairychallenge.org</a>, as well as in programs and news stories issued throughout the year.

# **Upcoming Dairy Meetings**

- Dairy Herd Management Clinics: Using dairy record information to measure herd performance. Three workshops are provided by Southeast DHIA:
  - Okeechobee Wednesday, January 27. 10:00 am at Okeechobee County Extension Office (458 Hwy 98 N)
  - Branford Thursday, January 28. 6:00 pm at The Gathering Cafe (on SR 247 in Branford)
  - Quitman, Georgia. Friday, January 29. 10:00 am at Brooksco Dairy Office (near Quitman, Ga.)

We are currently releasing a new version of PCDART (version 7.12) that contains enhancements that will be very useful for large herds to track management events and results. Dr. Greg Bethard from DRMS in Raleigh, NC, has agreed to visit and be our conference leader for some producer sessions in Florida and South Georgia. This will be a unique opportunity to learn how these new features can help your dairy operation!

Please call or email Christina Doré (352-392-5592, <a href="mailto:cdore@ufl.edu">cdore@ufl.edu</a>) or Dan Webb (352-392-5596, <a href="mailto:dwwebb@ufl.edu">dwwebb@ufl.edu</a>) for reservations because meals are being provided.

- 36th Annual Southern Dairy Conference, Atlanta, GA, January 26-27, 2010. This program is planned and presented to focus on issues and opportunities affecting the entire dairy industry of the Southern United States. The full program, registration details, and all past proceedings, can be found at <a href="http://www.southerndairyconference.com">http://www.southerndairyconference.com</a>. For conference information, call (540) 231-4762 or email Bennet Cassell at bcassell@vt.edu.
- 21<sup>st</sup> annual Florida Ruminant Nutrition Symposium, Gainesville, Florida, February 2-3, 2010. Program and registration on <a href="http://dairy.ifas.ufl.edu/rns/index.shtml">http://dairy.ifas.ufl.edu/rns/index.shtml</a>.
- February 12 is the Florida State Fair Open Show and "Gathering of Dairy Friends Breakfast" in Tampa.
- A new Dairy Risk Management course is starting February 16. The second meeting for the new group will be March 16. Contact Mary Sowerby, (386) 362-2771, or meso@ufl.edu.
- February 22 is the date for the next on-going Dairy Risk Management meeting, to be held in Mayo staring at 7 PM. The following meeting is March 22, again in Mayo starting at 7 PM. Contact Mary Sowerby, (386) 362-2771, or meso@ufl.edu.
- Contemplating a change to your current dairy production system? Or looking for new ideas to lower production costs and improve efficiency. Either way, plan to join the **Dairy Alternatives Tour** - High Tech or Low, on March 2, 2010 from 9 am to 3 pm (the day after the SMI board meeting). The tour will include Sunset Dairy in Dixie, GA, where Claus Haaren's cows have been rotationally grazing since December 2008. In addition, we'll tour Calvin Moody and Doyle Weltzbarker's conventional Brooksco Dairy and the under construction (but soon to be completed) Westbrook Dairy near Quitman, GA. Lunch and discussion about both dairy operations will be held at the Books County Extension office in Quitman, GA. There will be a \$10 registration fee to cover lunch. For more information and to pre-register please call Mary Sowerby at (386) 362-2771 on or before Thursday February 25.
- 59<sup>th</sup> annual Florida Beef Cattle Short Course,
   Gainesville, Florida, May 5 7, 2010. Program and registration on <a href="http://conference.ifas.ufl.edu/beef/index.htm">http://conference.ifas.ufl.edu/beef/index.htm</a>.

Dairy Update is published quarterly by the Department of Animal Sciences, University of Florida, as an educational and informational service. Please address any cancellations or comments to Albert De Vries, Editor, Dairy Update, PO Box 110910, Gainesville, FL 32611-0910. Phone: (352) 392-5594. E-mail: <a href="mailto:devries@ufl.edu">devries@ufl.edu</a>. Past issues are posted on the UF/IFAS Florida Dairy Extension website at http://dairy.ifas.ufl.edu. This issue was published on January 22, 2010.