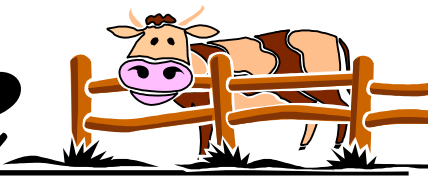
University of Idaho Extension

DAIRY Update



Winter 2004

Coming Soon

Tri-State Northwest Dairy Shortcourse

The 2004 Tri-State Northwest Dairy Shortcourse will be held March 24 and 25 in Boise. The program includes presentations on:

- Hoof health and feeding relationships
- Dry period – Does the cow need one?
- Mycoplasma and biosecurity
- Odor management
- Dairy issues update: Washington, Oregon, and Idaho
- The Igenity-L Test to identify the leptin genotype of cattle
- Dairy product import/export issues
- Consumer concerns of dairy welfare practices
- Deciphering synchronization programs

More information and online registration: http://capps.wsu.edu/dairy or contact Joe Dalton at (208) 459-6365 or jdalton@uidaho.edu

University of Idaho Dairy Symposium

To enhance student knowledge and professional competency, the UI Dairy Club recently sponsored "The UI Dairy Symposium" in Moscow. Speakers and topics included:

- Scott Waltner, DVM: "From the bunk to the bank"
- John Day, DVM: "How to implement and measure success of breeding programs"
- Bill Stouder, DVM and dairy producer: "Cost of feeding dairy cows: on paper vs. reality"
- Reagon Hatch, dairy producer: "Relationship between nutrition, management, and reproduction"

Fifty-two students and faculty attended the symposium. The symposium extended the learning experience of undergraduate, graduate, and veterinary students beyond the traditional classroom through interaction with industry leaders.

BSE Update

For the latest information on bovine spongiform encephalopathy, contact your local UI Extension Educator or Dairy Specialist, or visit the following website: USDA APHIS at http://www.aphis.usda.gov/lpa/issues/bse/bse.html

USDA Bans Downer Cattle from Slaughter for Human Food

Although all downer cattle are not diseased, one of the USDA's new strategies to safeguard human health is a ban on all downer cattle from entering the food chain. As livestock owners, management emphasis must be placed on preventing downer animals.

Tips to prevent downer cows:

- Use AI calving ease sires, especially on heifers. Natural service bulls should not be used, as no information on calving ease is available.
- All dairy personnel must be trained in proper calving management including proper use of obstetrical equipment.
- Consult with a nutritionist regarding feed rations.
- Monitor fresh cow health. Consult your herd veterinarian regarding how to perform daily physical exams, temperature monitoring, and standard treatment procedures.
- Provide a dry, comfortable environment, including well-maintained free stalls, alleys, and dry lots.
- Concrete flooring in barns and alleys should be grooved to allow for traction. Consider the use of rubber belting or mats in barns and alleys to decrease leg and joint stress, and increase cow comfort.
- Trim hooves regularly.
- Cattle should be handled calmly at all times to avoid accidents.
- Treat lame cows promptly. If possible, segregate lame cows from the rest of the herd in a pen close to the milking parlor.
- Make culling decisions with forethought, and while cattle are still in good physical condition. For more information please see "Dairy Beef: Maximizing Quality and Profits" at http://dairybeef.ucdavis.edu.

Although management can help prevent downer cows, it may not eliminate them. When a cow goes down, work with your veterinarian to identify the cause of the non-ambulatory condition. Treat the primary condition first, then work to get the cow up. For more information on the possible causes of downer cows please see www.vet.ohio-state.edu/docs/ClinSci/bovine/downer/downer.htm.

As a livestock owner, eventually you'll be faced with a downer cow that must be euthanized. All livestock owners should discuss humane euthanasia with a veterinarian, and devise a plan for euthanasia on their farm. Brochures on humane euthanasia are available from:

- American Association of Bovine Practitioners: www.aapb.org/euth.pdf
- University of Florida: www.vetmed.ufl.edu/lacs/HumaneEuthanasia/pref.htm

Following euthanasia, a carcass may be rendered, buried, or composted. Producers are urged to check with the Idaho State Department of Agriculture regarding local, state, and (or) federal regulations that govern disposal of livestock carcasses. For more information on disposal of carcasses please see:

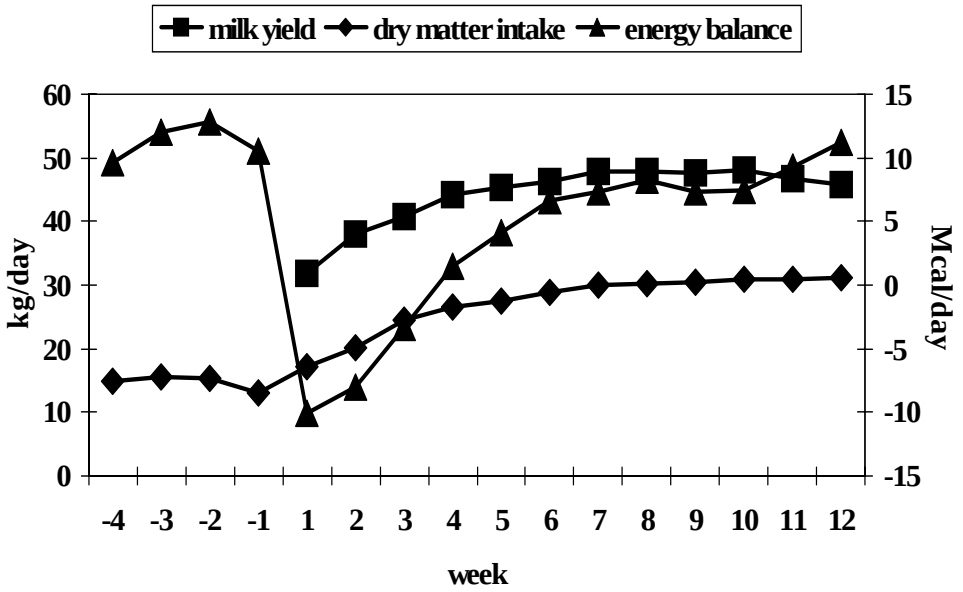
- "Cow mortality disposal" at http://extension.usu.edu/publica/agpubs/ag507.pdf
- "Whole animal composting" at www.cahe.nmsu.edu/pubs/_d/d108.pdf

University of Idaho Dairy Cattle Research Update

Q: ***What is the pattern of energy balance in cows during the transition period?***

A: The transition period is associated with many metabolic changes that reflect mobilization of body energy reserves upon initiation of lactation. Negative energy balance (due to insufficient energy intake relative to energy output for maintenance and milk production in early lactation) is associated with suppression of the immune system, and increased days to first ovulation and first breeding. Previous estimates of time to positive energy balance range from 0 to 16 weeks after calving. Twenty-nine Holstein cows were used for the experiment: 20 were studied from calving to 12 weeks postpartum and 9 were studied from 4 weeks before calving to 12 weeks postpartum. Daily milk weights, feed consumption, and twice weekly milk samples (for determination of milk components) were obtained. In addition, body weight and body condition scores were obtained weekly. Energy balance was calculated as the weekly mean of net energy for lactation (NE_L) consumed (dry matter intake x NE_L per kg dry matter) minus the NE_L requirement for maintenance and milk production.

Milk production was 46.3 ± 7.7 kg/d (102.1 ± 17 lb/d) over the first 12 weeks of lactation, with peak yield of nearly 49 kg/d (108 lb/d) sustained between weeks 4 to 10. Dry matter intake averaged 26.2 ± 4.7 kg/d (57.8 ± 10.4 lb/d) with maximum intake of 28 kg/d (61.7 lb/d) during weeks 7 to 12 .



Dry matter intake, energy balance, and milk yield in Holstein cows during the transition period.

Before calving, energy balance was 11.3 megacalories (Mcal)/d, and declined to -9.2 Mcal/d in the first week after calving. Energy balance increased after the first week of lactation, reaching positive status in the fourth week. Body condition scores declined after calving from 3.6 to 3.0 by week five and did not change thereafter.

Simple correlations demonstrated:

- A strong relationship between dry matter intake and energy balance
- No relationship between milk yield and energy balance
- A weak relationship between body condition score and energy balance

For more information contact M.A. McGuire at mmcguire@uidaho.edu or (208) 885-7683.

Take home message

- The ability to attain positive energy balance is related to dry matter intake and not milk yield.
- High producing cows can reach positive energy balance within 6 weeks after calving.
- Body condition score is not a sensitive indicator of energy balance status.

Posilac® Shortage

Monsanto recently announced a reduction in the allocation of POSILAC ® bovine somatotropin. Customers will be allocated 50 percent of their historic shipments beginning March 1, 2004. This shortage is expected to continue through the end of 2004. Tips for managing during the Posilac® shortage include:

- Consider culling cows currently supplemented with Posilac® that are high days in milk and open, and(or) have a high somatic cell count.
- Refrain from starting supplementation of any cows for a few months to ensure you will have enough doses to complete the lactations of cattle currently on Posilac® and those you plan to start later in the year.
- Consider the benefits of supplementing multiparous cows vs. first calf heifers.
- Do not extend the interval between shots.
- Do not try to split doses.
- Removing supplementation of multiparous cattle late in lactation is not advised.

For more information, please contact your Monsanto Technical Services veterinarian, your herd health veterinarian, or Joe Dalton at (208) 459-6365 or jdalton@uidaho.edu

New University of Idaho Faculty

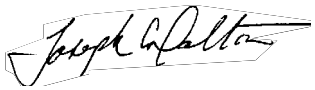
Dr. Mireille Chahine is the new Extension Dairy Specialist at Twin Falls. Dr. Chahine recently graduated from the University of Minnesota, with emphasis in lactation physiology, milk quality and employee relations. Dr. Chahine also has a master's degree with emphasis in ruminant nutrition. Contact Dr. Chahine at (208) 736-3609 or mchahine@uidaho.edu

Scott Waltner, DVM, MS, has recently joined the University of Idaho faculty at the Caine Veterinary Teaching Center in Caldwell. Dr. Waltner is a Dairy Production Medicine Veterinarian with emphasis in ruminant nutrition. Dr. Waltner, a graduate of Washington State University, recently worked as a veterinarian in a western Washington practice. Contact Dr. Waltner at (208) 454-8657 or swaltner@uidaho.edu

Holstein Association USA Robert Rumler MBA Scholarship

Graduates with a Bachelor's degree in Dairy Production are encouraged to apply for this $3,000 scholarship. The successful recipient will receive the award at the time of enrollment in an MBA program. For more information contact Joe Dalton at (208) 459-6365 or jdalton@uidaho.edu

Dairy Update is compiled by Joseph C. Dalton, Asst. Professor and Extension Dairy Specialist for the University of Idaho Department of Animal and Veterinary Science. For more information, contact Dr. Dalton at the Caldwell Research and Extension Center, 16952 S. Tenth Avenue, Caldwell, ID 83607, (208) 459-6365, jdalton@uidaho.edu.



Extension Dairy Specialist

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