

# Research • Education • Innovation



Quarterly Update

April 2011 • Volume 5, Issue 2

## 2011 CATTLE INDUSTRY ANNUAL CONVENTION REI COMMITTEES

At the Annual Convention in Denver, REI joint committees received updates on FY 2011 activities and set the stage for the 2012 fiscal year planning process. The REI committees are:

### Research, Education & Innovation Group

- Craig, Uden, Chair
- Roger West, PhD, Vice Chair

### Joint Producer Education Committee

- John Mass, DVM, Chair
- Dan Kniffen, PhD, Vice Chair

### Joint Human Nutrition Committee

- Lana Slaten, RN, Chair
- Brian Healey, Vice Chair

### Joint Beef Safety Committee

- Jeff Clausen, Chair
- Todd Allen, Vice Chair

### Joint Product Enhancement Committee

- Molly McAdams, PhD, Chair
- John Schafer, Vice Chair

### Joint New Product and Culinary Initiatives Committee

- Richard Thorpe, Chair
- Bruce Dopslauf, Vice Chair

Along with discussions on current programs and future planning, some committees heard from special guests who shared information relevant to committee activities. During the Joint Research, Education and Innovation Group update meeting, a panel including Rick Stott from Agri Beef, Mike Thoren from Five Rivers Feeding Operations; Steve Kappas of USDA, ARS and Richard Clemens who served as a member on the recent Dietary Guidelines Committee discussed, “What Keeps Me Awake at Night” and invited further discussion from the audience.



## LONG RANGE PLAN 2011-2013

In October 2010, a group of 23 industry leaders convened to begin developing a long range plan for the beef industry. They gathered information from various sources, examined and prioritized the industry’s most urgent needs, and began to put together a vision, mission statement and tactics to answer those needs. They identified six core strategies and at convention, the results of their work, a three year long-range plan was presented and approved.

2011-2013 Long Range Plan Core Strategies
Improve domestic consumer preference for beef
Capitalize on global opportunities
Strengthen the image of beef and the beef industry
Protect and enhance our freedom to operate
Improve industry trust, openness and relationships
Position the U.S. cow herd for growth

Funded in Part by The Beef Checkoff





## BQA LAUNCHES SEVERAL NEW PROGRAMS

Consumers are being bombarded with anti-meat and anti-agriculture propaganda which makes it more important than ever for producers to become BQA certified. To help increase awareness of the BQA program, we are creating BQA promotional materials targeting cow-calf and seedstock producers. We also are working with breed associations to increase communication efforts to these target audiences.

The plan is to include BQA promotional materials in breed association communication vehicles such as bull-sale catalogs, websites, newsletters, and magazines. Through efforts like these, we can leverage our resources with industry partners and create a greater awareness of BQA throughout the country.

To expand producer education efforts, the BQA program has launched a new social media campaign. The goal of the campaign is to not only provide educational content but also afford producers the opportunity to engage with each other as well as with industry experts. BQA information is split into biographies, entire blog posts, or bite-sized tweets containing daily tips. We will distribute to those who register via [Facebook](#) or Twitter @NationalBQA.



On another note, two producers were honored with annual national Beef Quality Assurance (BQA) awards at the 2011 Cattle Industry Annual Convention. This award was created to recognize outstanding beef and dairy producers from across the country who incorporate BQA principles as part of the day-to-day activities on their operations. The winners were selected based on their commitment to beef quality assurance while operating sustainable cattle operations. Congratulations to the 2011 [winners](#), John Ligo, of LiTerra Farms in Mercer, Pa. (dairy), and Mike Milicevic, of Lykes Bros. Inc. in Okeechobee, Fla. (beef).



*John Ligo*



*Mike Milicevic*

Finally, the new video education modules that were approved during Annual Convention in 2010 have been completed. These modules, funded by the Beef Checkoff, focus on the philosophy that underpins Beef and Dairy Quality Assurance programs, the procedures and protocols that are foundations of effective implementation, and the use of stockmanship in support of BQA.

These educational modules were created to supplement the online and print materials currently available to state coordinators and BQA trainers. The twelve modules support current BQA curricula targeted to beef and dairy producers. We encourage you to view these new [BQA videos](#).



## BEEF PRODUCTION RESEARCH COMMITTEE CONVENTION REVIEW

The NCBA's Beef Production Research Committee met during the Cattle Industry Annual Convention in Denver, CO on Friday, February 3rd, 2011. The committee discussed cattle industry business and research topics. The priorities discussed were as follows:

- **Beef Cattle Genetics/Genomics – Interactions and Integration with Management Practices**
- **Cattle Growth, Development, Reproduction and Efficiency of Production**
- **Food Safety**
- **Prevention, Early Detection, and Therapy of Sick Cattle**
- **Environmental Impact and Sustainability**
- **Technology Transfer**





## 2011 CATTLEMEN'S COLLEGE®

Cattlemen's College drew 685 attendees on its 18th anniversary in Denver. The curricula focused on a host of contemporary topics confronting the industry and individual beef enterprise managers. Many of the presentations from the event can be found at the [Cattle Learning Center](#) website. See below for highlights.



### **The State of Antimicrobials in the Industry**

The use of antimicrobials in the livestock industry has come under criticism from media, politicians and activist groups. Learn the facts about the use of antimicrobials in the U.S., the risk of microbial resistance and the impact of antibiotic bans on production systems in other parts of the world.

[Why You Need to be Part of the Solution](#)

[Using Antimicrobials Like We Want to Keep Them](#)

### **Building Relationships and Telling the Beef Story**

Whether in one-to-one conversations with consumers, chefs, retailers, or school children, effective communication about beef producers and beef production can go a long way in improving perceptions about the beef business. Learn from a variety of industry-led programs that engage people in the beef story.

[Telling the Beef Story](#)

[Reaching Gate-to-Plate Beef Tour - New Mexico Beef Council](#)

[Telling the Beef Story - Certified Angus Beef](#)

[Gardiner Angus Ranch](#)

### **Reproductive Management for Profit**

Attention to details improves success of AI and estrus synchronization programs. Learn cow- and people-management factors to refine AI programs and improve pregnancy rates.

[Management Factors that Influence Fertility](#)

[The Economic Impact of Fixed Time AI in Our Operation - Mike Kasten](#)

[Factors that Influence the Outcomes of AI Programs: Cow Biology](#)

[Variables that Influence the Outcomes of AI Programs: Cow Biology](#)

### **Is it Time to Implement an AI Program?**

Things to know and do before starting a synchronization program, reasonable expectations and basic implementation. Understand the influence of cow factors such as age, body condition and calving date.

[Starting an A.I. Program - Preparation, Protocols, Implementation and Expectations](#)

[Practical Tips for Starting & Implementing an AI Program](#)

[Getting it Right with A.I. and Estrus Synchronization](#)

[How Mishandling Frozen Semen can Lead to Unexplained Breeding Failure](#)

[Resources from the Beef Reproduction Task Force](#)

[Beef Cow Protocols - 2011](#)





## JOINT BEEF SAFETY COMMITTEE

Members of the committee gathered in Denver at the 2011 Cattle Industry Annual Convention to hear important program updates and guest speakers. Dr. Ken Peterson, Administrator of the Office of Field Operations for FSIS talked to the group about FSIS current policies as well as topics of concern to the agency. Topics addressed during his presentation included: sanitary dressing, high microbial count event programs, non-O157 Shiga toxin-producing *E. coli* (STEC), non-intact product labeling and antibiotic residues. Checkoff program updates were provided on the Fiscal Year 2010 plan which ends in May as well as an update on the Fiscal Year 2011 plan which will end in May 2012. Polly Ruhland, CBB VP of Planning & Evaluation provided a program evaluation and answered questions from the committee. The committee engaged in a discussion about their role in the new Beef Industry Long Range Plan and provided direction to the staff as they prepare the 2012 Authorization Request (AR). A webinar will be held later this spring to update the committee on the draft AR topics before leadership meetings in May.



*Under Secretary  
Dr. Elisabeth Hagen*

### 2011 BEEF INDUSTRY SAFETY SUMMIT

The 3-day event included updates on current safety issues and interventions, forums on emerging pathogens and technical workshops that allowed attendees to share ideas on improving processes that can best reduce safety risks. Included in the program was a keynote address from Dr. Elisabeth

Hagen, USDA under secretary for food safety, who told the group that “everyone wins when food is safe, and no one wins when it is not.”



More than 240 people participated in the Summit – a record attendance for the event, which is funded in part by The Beef Checkoff. Next year’s Beef Safety Summit will take place in Tampa, Florida. For more information, visit <http://www.bifsc.org/>.

Communicating with beef producers about the Safety Summit was accomplished through a press release, radio news release and magazine articles. In addition to being broadcast by stations across the nation, the radio news release was also published in 18 publications. The press release was printed by multiple magazines and an example of these articles can be accessed using this link [Drover’s Cattle Network](#). State beef councils were provided with articles and photos from the event for use in individual states. Spreading the story of the collaborative efforts that are evident at the Safety Summit is vital to ensure the beef industry’s commitment to beef safety is recognized by all audiences. Additional plans are underway to spread the message to retail and foodservice audiences.



## STUDY INDICATES THE CONSUMPTION OF BEEF MAY BE BENEFICIAL TO BONE HEALTH

Osteoporosis is a major health concern

affecting nearly 50 million Americans. Controversy persists about whether consuming meat protein is good or bad for calcium nutrition and bone health. The beef checkoff supported research led by Jay Cao, Ph.D., and his associates at USDA Grand Forks Human Nutrition Research Center to further examine this topic and the findings were recently published in the January 2011 issue of the Journal of Nutrition. The article, titled: [A Diet High in Meat Protein and Potential Renal Acid Load Increases Fractional Calcium Absorption and Urinary Calcium Excretion without Affecting Markers of Bone Resorption or Formation in Postmenopausal Women<sup>1–4</sup>](#), assessed the relationship between beef protein and bone health. The study had two objectives. The first was to determine whether calcium is as well retained from a diet high in beef protein and potential renal acid load (PRAL) as from a diet low in beef protein and PRAL. The second was to determine whether urinary acid and calcium excretion adapt within weeks in response to diets with a high- and low-acid load.

Results showed a diet rich in protein from beef improves calcium absorption, at least partially compensating for increases in urinary calcium. Compared with the low-beef-protein diet, the high-beef-protein diet increased urinary calcium and acid production, but it also increased calcium absorption. The high-beef-protein diet also increased a blood hormone known to stimulate bone formation. These findings indicate that consumption of beef may be beneficial, rather than detrimental to bone health.

### EXPERIMENTAL BIOLOGY MEETING

The checkoff nutrition research program is gearing up to participate in the Experimental Biology (EB) Meeting taking place April 9-13, 2011 in Washington, DC. EB attracts the world's top life science researchers and it is one of the largest scientific meetings attended by nutrition scientists. Nine scientists from around the world will share their checkoff-funded research results through posters and presentations highlighting the healthy content of nutrients and protein found in beef, during this 5 day meeting. In addition, the checkoff will partner with the Vitamins and Minerals Research Interest Section (RIS), since beef is a source for many important vitamins and minerals. This RIS is made up of researchers who encourage the development of new research techniques to better understand and promote the contributions of vitamins and minerals to health promotion and disease



prevention. Also, the ad above will be placed in the American Society for Nutrition's daily newsletter at EB to demonstrate for the daily attendees at the meeting the beef checkoff's support of nutrition research.



### 2011 CONVENTION REVIEW

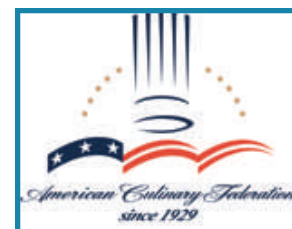
The Joint Product Enhancement Committee, led by Chair Molly McAdams, Ph.D. and Vice Chair John Schafer, met on Friday, February 4th at the 2011 Cattle Industry Annual Convention in Denver. Committee members reviewed the industry's new Long Range Plan and engaged in an initial discussion on the planning and prioritization process for FY 2012. This planning process included identifying broad research areas for program focus in FY 2012. In addition, members heard an update on the FY 2011 Request for Proposals (RFP) Strategic Meeting held on December 1 in Dallas, TX. They also received a report of Product Enhancement program activities for FY 2010 and 2011. The objective of this joint committee is to establish research and funding priorities, conduct novel and meaningful research, review research results related to the improvement of beef and beef products and communicate research findings to the beef industry.

### CUTTING DEMONSTRATION HIGHLIGHTING RESEARCH AND NEW BEEF CUTS

Research, Education & Innovation Department staff member Bridget Wasser recently conducted a cutting demonstration and presentation at the 2011 NAMP Meat Industry Management Conference in Chicago, IL. The session was titled *Roaming Around the Round* and the session's purpose was to highlight new checkoff-funded cuts from the beef round. Cuts showcased included the Santa Fe Cut, Round Petite



Tender, San Antonio Steak, Tucson Cut, Braison Cut and Merlot Cut. In addition, Bridget recently conducted a cutting demonstration for the Idaho Chefs de Cuisine chapter of the American Culinary Federation in Boise, ID. This session was intended to highlight new checkoff-funded cuts from the beef chuck and was done on behalf of the Idaho Beef Council. Cuts showcased here included the Denver Cut, Sierra Cut, Delmonico Steak, Boneless Country-Style Ribs and America's Beef Roast.



## BEEF AGING GUIDE ADDENDUM

Recently published was an addendum to the *Industry Guide for Aging Beef* called the *Round Muscle Addendum*. The original aging guide covers findings by Colorado State University researchers, who evaluated 40 USDA Select and 40 upper two-thirds USDA Choice fresh carcasses to identify optimum aging periods for 17 different beef muscles. During the seven-month study, subprimals were fabricated into one-inch thick steaks, vacuum-sealed, stored at 36°F and examined after 2, 4, 6, 10, 14, 21 and 28 days of aging. The new addendum supports the launch of the new cuts from the round from the Beef Innovations Group (September 2010) and provides aging information for four additional muscles. The *Industry Guide for Beef Aging*, including the *Addendum* on the round, is available for download via [www.beefresearch.org](http://www.beefresearch.org). You may also purchase the two publications as a single item from the checkoff's contracted Customer Service Department by calling 800-368-3138 or by visiting the beef store (<https://store.beef.org/>) and clicking on Product Quality then Product Enhancement.



The product development team has identified and created prototypes for over 20 different beef products that are fast, simple and delicious. The target market for the CFB products are primarily for busy families with working parents and secondarily for millennials who lack cooking skills.



*Shenoa French and John Lundeen testing the CFB products in the Culinary Innovations Center.*

The Culinary Innovations Team has played an important role in testing cuts and applications for the Convenient Fresh Beef line. For example, the team identified steaks and roasts that can cook quickly in a skillet and the oven. Cooking times have been tested for each steak and roast to verify the best eating experience in a faster time. The team is also reviewing all of the cooking instructions to ensure they are consumer friendly and use the correct standard language for easy understanding.



*Two examples of prototype labels for a fast cooking London Broil and Cheese Steak.*



Value and convenience are two consumer demand drivers behind beef checkoff-funded efforts to develop new, quick and easy fresh beef solutions. Convenient Fresh Beef (CFB) is a new program initiative to provide consumers with a variety of fresh and convenient beef products, using an array of beef cuts and appliance applications. These new product ideas help make beef a “fast food” by allowing consumers to have a delicious fresh beef meal in less time than it would take using standard cooking methods.

Currently, the Beef Innovations Group is seeking retail and food manufacturing partners to develop, refine, and position these convenient products for commercialization.

## BLUE RIBBON TASK FORCE UPDATE

It was just short of 20 years ago that beef producers had to familiarize themselves with the term *E. coli* O157:H7 and learn about the ramifications of the pathogen. Now there's a new set of letters and numbers related to food safety that need similar attention.

STEC – or Shiga toxin-producing *E. coli* (often pronounced S-teck) – includes O157:H7, but represents a broader continuum of both benign and virulent organisms that researchers, government officials and industry leaders are addressing. While hundreds of non-O157 STEC exist, they vary considerably in their severity, with some possibly as dangerous as O157:H7 and others presenting no problems. The CDC has targeted six strains of interest related to human illness including: *E. coli* O26, O45, O103, O111, O121 and O145.

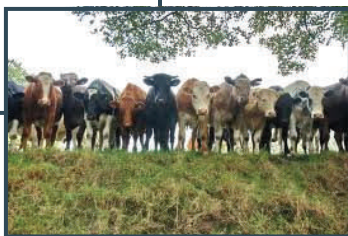
In 1993, the first Blue Ribbon Task Force, funded by the Beef Checkoff, was formed to address *E. coli* O157:H7. The group was charged with evaluating the science related to this pathogen, identifying the research gaps and making recommendations to the industry for next steps to address this beef safety challenge. Now, a new Blue Ribbon Task Force, established last August, has been tasked with a similar challenge, but for a new group of pathogens. With representation from different sectors of the beef production & supply chain, the group has begun its evaluation of the science and identification of knowledge gaps for non-O157 pathogenic STEC, focusing on the genetic factors that cause human illness and how to detect and eliminate these organisms from the beef supply.

### Upcoming Meetings

August 1-4 Cattle Industry Annual Summer Conference .....Orlando, FL

#### **DID YOU KNOW?**

There are about 920 different breeds of cows in the world. They were domesticated about 5,000 years ago. Cows came to America with the pilgrims.



For more information, contact



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