

firm is marketing," said Dornblaser.

The two major consumer groups for specialized marketing efforts remain teens and baby boomers, she explained. For the latter group, there is a marked lack of products combining the specific needs of this generation together with easy-to-handle packaging.

And when it comes to teens, there is a missing opportunity within the snacking sector, as this consumer group has often been ignored in favor of younger kids. "But teens also wield substantial spending power," said Mintel. "In addition, key avenues for companies lie within a new focus on products 'growing up' with teens, converting teen users into adult loyalists," it added.

Another key trend is expected to be a "fresh start for breakfast".

"Finally, the day's most important meal will continue to see new innovation and development. Beyond convenience, companies may find themselves looking for ways to bring more traditional aspects of the meal back into play. Dominated by bars and juices, companies are predicted to look for ways to resurrect other items that have been diluted by the on-the-go trend."

Other trends identified include a return to simplicity, marked by clean lines and traditional ingredients; technologically advanced packaging and the use of cell phones to advertise products; and increased internet marketing.

OKLAHOMA UNWANTED PESTICIDE DISPOSAL PROGRAM

- February 20, 2007 8:00am-1:00pmFarmers Elevator Company Drummond, OK
- February 22, 2007 8:00am-1:00pm..... UAP Webbers Falls, OK

What is the Oklahoma Unwanted Pesticide Disposal program?

The Oklahoma Department of Agriculture, Food and Forestry is funding a program to help collect and properly dispose of unwanted pesticides that farmers, commercial applicators, or dealers may have. This will be an annual event; for future locations and dates check the website listed above.

Who is eligible to participate and what does it cost?

Oklahoma commercial and non-commercial applicators and pesticide dealers may participate as well as Oklahoma farmers and ranchers. There is no cost for the first 2,500 pounds of pesticides brought in by a participant. Participants will however be charged \$1/pound for anything over 2,500 pounds except in the case of mercury based pesticides. Mercury based pesticides will cost participants \$2.22/pound for disposal. Clean Harbors will accept payment in the form of check or credit card only at the disposal site. No cash will be accepted!

What are the steps to participate in the collection program?

Applicators, farmers, and ranchers are not required to preregister. Dealers are asked to pre-register with Clean Harbors through OSU Pesticide Safety Education Program. After completing pre-registration requirements, if required, bring unwanted pesticides safely to one of the collection sites. Visit the OSU Pesticide Safety Education Program for information and how to register at <http://pested.okstate.edu/unwanted.htm>.

Contact Information:

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Rick Nelson
Extension Educator, Agriculture/4-H Youth Development



AG NEWS

Division of Agricultural Sciences & Natural Resources
Oklahoma State University

Beaver County Extension Office * Courthouse * Box 339 * Beaver OK 73932 * (580)625-3464

January 2007

WHEAT PRODUCTION & PRICE OUTLOOK

Roger Gribble, OSU Area Agronomist, will discuss current wheat production information at noon on Wednesday, January 24th. JC Hobbs, Area Ag Economist, will provide a wheat price outlook for the upcoming crop. This meeting will occur at the Gate School Cafeteria beginning at noon. Lunch will be provided. Please call the Extension Office at 625-3464 by Tuesday, January 23rd.

GRAIN SORGHUM MEETING

Wed, Jan 31, 2007 — 9:30am — Ellis Co Fairgrounds (Red Barn)
Shattuck, OK

- **Grain Market Outlook**—*JC Hobbs, OCES Area Farm Mgt Specialist*
- **Herbicides in Dry Years**—*Roger Gribble, OCES Area Agronomist*
- **Emerging Issues for Sorghum Producers**—*Dr Jeff Dahlberg, Research Dir, Nat'l Sorghum Producers Assn*
- **Grain Sorghum Production**—*Rick Kochenower, OCES Area Agronomist*
- **Future of Ethanol in Oklahoma**—*Dr Ray Huhnke, OCES Ag Engineer*

For more information contact the Ellis County Cooperative Extension Service at (580)885-7775.

2007 OKLAHOMA GRAPE MANAGEMENT ONLINE COURSE

Concept is to familiarize present and potential Oklahoma grape growers with grape management requirements throughout the growing season.

- Fee:** \$250 per individual
- Format:** Discussion and practical exercise
- Time Frame:** March—September 2007
- Location:** Oklahoma Fruit Research Station, Perkins, OK (1/2 mile north of Hwy 33 & 177 intersection)

Preregistration is required! Registration form is available at the Beaver County Extension office. For additional information contact Stephanie Larimer, OSU Hort & Landscape Architecture Dept, at (405)744-5404 or email: stephanie.larimer@okstate.edu

2007 FUNDAMENTALS OF PECAN MANAGEMENT ONLINE COURSE

Concept is to provide an in-depth experience, classroom and orchard for current and prospective pecan growers.

- Content:** Prioritization and practical application of major management practices by month.
- Fee:** \$250 per individual
- Format:** Discussion and practical exercise with optional web based study component.
- Time Frame:** March—October 2007
- Students Receive:** Knowledge, notebook of all reference materials, pecan variety board, five rootstock trees, and a certificate of completion.
- Presenters:** OSU Cooperative Extension Specialists & Pecan Growers.
- Location:** Oklahoma Fruit Research Station, Perkins, OK (1/2 mile north of Hwy 33 and 177 intersection)

Preregistration is required! Registration form is available at the Beaver County Extension office. For additional information contact Stephanie Larimer, OSU Hort & Landscape Architecture Dept, at (405)744-5404 or email: stephanie.larimer@okstate.edu

PORK OUTSHINES BEEF, CHICKEN

Pork has outpaced beef and chicken in tonnage growth versus year-ago performance, according to FreshLook, a retail report that analyzed data from the first six months of 2006. It shows that fresh pork tonnage is up 6 percent from the first half of 2005-- beef is up 3 percent and chicken is up 4 percent. Pork also has outperformed chicken in dollar sales growth.

For pork, tonnage gains were made across segments, including: roasts, up 12 percent; ribs, up 9 percent; value-added products (including flavored tenderloins), up 8 percent; chops, up 5 percent; unflavored tenderloins, up 3 percent.

Pork chops continue to drive the fresh-pork category, representing 38 percent of pounds sold and 43 percent of dollar sales. This is followed by ribs and roasts, which flip-flop for second and third place, based on the time of year and region.



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PROVIDE EXTRA PROTECTION TO SPRINKLER BOXES

Cut a piece of fiberglass insulation to fit into sprinkler valve boxes. This will cover the valves and provide some extra protection from alternate thawing and freezing. It also keeps the valves clean and free of dirt and dust accumulations.

CLEAN BIRD FEEDERS

If you haven't already cleaned up the bird feeders and birdbaths, get to it now. Use a 10% liquid chlorine bleach solution and some dishwashing liquid and scrub them down. This will get rid of any diseases and parasites that may be lurking.

SQUEEZING MORE SHELF LIFE OUT OF MILK

Putting the squeeze on milk may be a long-sought solution to the search for improved ways of killing harmful bacteria in milk and increasing its shelf life without introducing off-flavors into the beverage, researchers report.

Michael C. Qian and colleagues at Oregon State University point out that ultrahigh-temperature pasteurization (UHT) does produce milk that stays fresh at room temperature for six months. They add, however, that UHT leaves a "cooked" flavor in milk that has limited the popularity of UHT milk in the United States.

In experiments scheduled for publication in the Nov. 29 issue of the ACS biweekly Journal of Agricultural and Food Chemistry, they describe how a new food processing technology affects the taste of milk. Called high hydrostatic pressure processing (HPP), it involves putting foods under pressures that crush and kill bacteria while leaving food with a fresh, uncooked taste.

"Milk processed at a pressure of about 85,000 pounds per square inch for five minutes, and lower temperatures than used in commercial pasteurization, causes minimal production of chemical compounds responsible for the cooked flavor. HPP gives milk a shelf life at refrigerated temperature of at least 45 days," they note.

BEEF MARBLING STARTS EARLY

By Miranda Reiman, Certified Angus Beef

Getting cattle to hit the higher quality grades takes effort at every link in the production system.

In a recent research review, Certified Angus Beef LLC (CAB) vice president Larry Corah and supply development director Mark McCully looked at early management factors that affect one of the traits that earn higher quality grades: marbling, or the intramuscular flavor fat.

"People used to think marbling was something that only happened in the feedlot," says McCully. "But research shows targeting a high-quality beef market should begin long before that."

Cells begin developing into either muscle or fat, before a calf is even born. Once the calf hits the ground, the fat cells start to further differentiate into subcutaneous fat (back fat) and marbling.

"We blame a lot on genetics, but it is management," says Francis Fluharty, animal scientist at The Ohio State University.

Nutrition, from mid-gestation on, has a significant effect on how cells develop, according to Fluharty.

"Pre-partum nutrition is really important, because the cow sets up the calf's ability to marble," Fluharty says. "In addition to genetics, the cow's body condition and quality of colostrum are very important as they determine the newborn calf's immune status."

Early weaning and feeding a grain-based diet increase marbling significantly, Fluharty says.

"What we're really trying to do is get these young calves on a high grain diet much earlier in life," Fluharty says.

Forage-based rations are much more likely to result in rumen end-products of fermentation that convert cells to back fat. By comparison, high-energy grain rations with corn or grain sorghum lead to more propionate, glucose and marbling.

CAB CATTLE UPDATE: GROWTH PROMOTION CAN IMPEDE QUALITY

Implants can negatively affect quality, if you let them.

Growth implants are commonly used in the cattle industry with little regard to how they influence marbling, the "taste fat," says Gary Fike, feedlot specialist for Certified Angus Beef LLC (CAB).

"For every dollar invested in an implant, the return could be more than \$6 in increased weight and efficiency in today's marketplace," he says. "Most producers can't afford to leave that kind of money on the table, but if the implants aren't used properly, they could cost significant dollars in lost grid premiums."

Implants shift nutrient use to lean muscle, rather than marbling or intramuscular fat, which decreases quality grades. Since 1995, packers have paid more than \$200 million in grid premiums for cattle meeting the *Certified Angus Beef* (CAB) brand specifications. Those who want these bonuses must pay attention to management decisions that impact the end meat product.

"The degree to which implants suppress marbling can be minimized," Fike says, "if used judiciously and in harmony with nutrition, timing and age of the cattle."

He analyzed the CAB database that tracks cattle fed in nearly 70 partner feedlots across the country. The Feedlot Licensing Program (FLP) information shows that both the number and potency of the implants used affect quality grade.

Fike asks, "Why not try to reap the economic benefits of the implant on growth and performance and couple that with quality premiums?"

Looking at 12,000 rows of detailed carcass records from the 2005 dataset, he divided cattle into four CAB acceptance rate groups: 0% to 9.9%, 10% to 19.9%, 20% to 29.9%, and over 30% CAB.

Feeders submit the number of times cattle were implanted and the brand name of the implant used. Cattle in the over-30%-CAB group were implanted 0.91 times—significantly fewer times than all other acceptance rate groups. The average on all 2005 cattle was 1.3 times, and non-implanted cattle achieved 37% CAB acceptance (Table 1).

Chris Reinhardt, Extension feedlot specialist at Kansas State University, ranked implant potency by active ingredient. "Potency scores" ranged from 1 for "low" to 5 for "very high."

Averages were figured for each lot of cattle. The mean implant potency score for the top CAB group was 1.88, significantly lower than for the other three groups. "The lower CAB-acceptance groups had been implanted with much more aggressive products," Fike says. "The acceptance rates were most affected when average potency score exceeded 3."

Overall implant values were assigned to lots by multiplying average potency by the number of times implanted. The results mirrored the implant potency scores (Table 2).

"This doesn't tell the entire story," he says. "Whether the timing of the implant matches nutrition level can make or break quality grade."

An implant containing both trenbolone acetate (TBA) and estrogen can be beneficial to performance and not affect quality grade significantly, Fike says. That's if it is given at the right time with a nutrition program that matches the dose.

On the other hand, aggressive use of high-dose implants used early in life—immediately pre- or post-weaning—can "wreck" marbling, he explains. That's especially true if the diet is high in roughage and low in energy.

"If a producer holds off on implanting them until the cattle are on high-energy feed, the depression of marbling will be much less," Fike says.

South Dakota State University research found that delayed implanting results in a 15% increase in the number of cattle reaching Premium Choice or higher, with virtually no change in the effectiveness of the implant. A research paper by ruminant nutritionist Robbi Pritchard, can be found at <http://www.cabpartners.com/news/research/index.php>.

For more information on the CAB study, read Fike's summary, "Traits of Cattle That Hit the Quality Target," at www.cabpartners.com/news/research/index.php.

MINTEL IDENTIFIES KEY TRENDS FOR 2007

By Lorraine Heller

Sustainability and age-specific products are key trends that will shape the consumer packaged goods industry in the year to come, according to Mintel.

The market researcher last week revealed "ten hot trends" that it expects to impact the global food and beverage market, as well as the cosmetics and personal care market.

And one of the themes that underlies a number of these trends is sustainability and a responsibility to the environment, said Lynn Dornblaser, director of Mintel Custom Solutions.

"It seems that we are seeing a renewed consumer interest in the wider world, and this includes a better understanding of the broader impact of products on the environment," she told Food-Navigator-USA.com.

This concern will be manifested through a growing commitment to ethical products, fair trade and sustainable ingredients, which will continue to expand into mainstream product groups, according to Mintel.

"This will help highlight local and seasonal products, symbolizing a return to fresher ingredients that have more community-oriented ties," it said.

Biodegradable packaging is also expected to regain popularity, especially as more companies reformulate packaging to be more environmentally conscious.

The market researcher also believes that refillable packaging has a strong opportunity to make a mark as consumers are increasingly looking for more opportunities to save natural resources. Manufacturers in diverse product categories are responding with products and packages that are better for the environment, reducing the quantity of materials used and continuing to care for ethical and social issues.

But an increased consumer interest in the wider world is also seen through a stronger focus on other parts of the world for unique ingredients or flavors, said Dornblaser. And this is reflected in one of the key trends identified by Mintel: the Amazonia movement.

This will see consumers increasingly turning to products that feature plentiful indigenous resources from the Amazon rainforest.

"This trend is closely tied to increased interest in natural products and exotic ingredients. Botanicals from the region linked to wellness and natural functionality, with exotic fruits such as açai and cupuaçu, will continue their rise to fame due to their anti-aging benefits and link to the 'superfoods' concept. We can expect to see more of products such as Happy Monkey Açai Brazilian Rainforest Superberry Juice Drink in the UK, which is made from all natural ingredients, blended Açai berries and red grapes," said Mintel.

But Dornblaser says it is important to keep in mind that there is "a lot more going on" than just sustainability and an interest in exotic products. Another major issue that is set to impact the direction of consumer packaged goods is an interest in age-specific product launches.

"There are many consumer groups out there, each with different needs, and that means there's a lot of opportunity to target a number of types of consumers, no matter what kinds of products a