

Wichita County

K-State Research and Extension News

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*Knowledge
for Life*

June 2015 Wichita County Extension Office

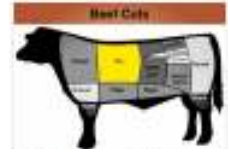
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Stretching Dollars at the Meat Counter



We've all done it.... stood at the meat counter trying to figure out what to buy. And if we're having guests, the decision is even more critical. Throw in the expense, especially if the wrong choice is made, and the process can be daunting.

There are ways to make smart choices and enjoy the flavor and aroma of meat while maximizing the grocery budget. "There are a lot of options we have at the grocery stores right now to stretch our dollars when it comes to buying meat," said Travis O'Quinn, who is a meat science specialist with K-State Research and Extension. "Most consumers are familiar with T-bone steaks, ribeye strips and tenderloin steaks. However, many of those steak items are higher priced."

Beef prices have been at record highs the past couple of years, due to a shortage of beef cattle that occurred when producers sold off their cattle due to drought in major beef states such as Texas, Oklahoma and Kansas.

Beyond the T-bone

In the last few years, alternatives to the more expensive cuts have been developed that produce satisfying grilling and eating experiences at a lower price than T-bones and tenderloins. Flatiron steaks, that come from the area of the animal called the chuck, are now available at many retail stores and are less expensive than the cuts from the loin or the rib area. Other popular cuts from the chuck are the shoulder petite tender, Denver steak and the ranch steak. These cuts were developed in the last 10 years and compare favorably pricewise with the more traditional cuts.

Beef brisket tends to be high in price, but other beef cuts will work for chopping and shredding, including the beef clod and the beef chuck roll – both from the shoulder. "They will go a long way and cook very similar to a beef brisket but at a much less cost per pound," he said. "Beef tri-tip from the sirloin of the animal, can also be a good option, as is the beef culotte."

The best way to identify these cuts is to check the label. "Traditionally if you're looking for good grilling cuts, retailers will list the primal cut, so they'd list 'Beef, loin, t-bone steak,'" O'Quinn said. "Cuts that are from the rib or loin are almost always guaranteed to be tender and flavorful. Many of these other cuts come from the 'chuck.' In that case they'd say beef chuck flatiron steak, for example."

Adding an enzymatic meat tenderizer (commonly containing papain, from the papaya) to a marinade is a great way to improve the tenderness of lower valued, tougher cuts, he said. Mechanically tenderizing meats using a handheld needle or blade tenderizer or a meat tenderizing mallet are other options.

Beef is typically labeled with U.S. Department of Agriculture quality grades. Consumers should look for meats that are USDA Choice in order to ensure a good eating experience, O'Quinn said. The butcher at the full service counter is often knowledgeable about different cuts and cooking methods and can guide shoppers.

Be temperature savvy

When grilling, use a food thermometer, O'Quinn said. That helps ensure you'll get a good outcome from a food safety standpoint but also ensures you'll get the meat cooked to the degree of doneness you prefer, whether it's medium, medium rare or well done. Cook meat to 140 degrees F for rare; 160 degrees for medium; and 170 degrees for well done. "If you're using a food thermometer you're guaranteeing that the steaks will come out exactly as you want." He said the best time to buy the meat is within a couple of days before you'll cook it. Steaks have a tendency to brown after 3-4 days.



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Tuesday, June 2, 2015, Prairie Pals FCE will have a meeting at 10:30 am at the community bldg, followed by a lesson at 12:00 noon: " Emergent Literacy: Helping Young Children's Development Through Reading," given by Dorene Reimer. Bring a salad and a friend.

HANNAH FAIRCHILD AWARDED FCE SCHOLARSHIP

The Wichita County FCE Council awarded a \$500 scholarship to senior WCHS student, Hannah Fairchild, daughter of Mark and Deb Fairchild. Hannah has been active in many activities at WCHS as well as in the Community. In the sports area, she was in Cross Country, Basketball, and Track. Hannah is the Val-edictorian of the WCHS class of 2015, a Kansas Honors Scholar, a Kansas Regents Scholar and a member of National Honor Society, Scholars' Bowl, Vocal Music, and FFA. In the community, Hannah was a student member of the Wichita County Economic Development Board and active in 4-H. Hannah will be attending Washburn University, majoring in Biochemistry to become a Physician's Assistant, eventually becoming a Medical Missionary. Congratulations, Hannah, and success to you throughout your college career!



The Wichita County FCE Scholarship is awarded to a WCHS graduate planning to attend or presently attending any two year or four year institution and majoring in Family and Consumer Sciences and/or Allied Health Fields.

BBQ 101



The four main U.S. BBQ styles are Texas, Kansas City, Memphis and Carolina.

Texas Style: The State where beef is king and brisket is the crown prince. Beef ribs aren't bad either. Texans like their barbecue "naked", or with side sauces that tend to be a blend of tomato thinned with vinegar and Worcestershire. They are the least sweet of the tomato based sauces.

Memphis Style: Memphis style barbecue is known for wet marinated pork ribs that are also basted while smoking. Another style of ribs is to apply dry rub during or right after they've been cooked. Pork shoulders, and butts are done the same way. Mild, sweet and spicy rubs, as well as mopping sauces, are basted on periodically during cooking.

Kansas City Style: This is where southern barbecue influences are artfully combined with Western Beef and Pork. The meat is liberally seasoned with savory spices, sweet rubs and sauces then smoked in a hickory-stoked pit for hours. Thick and sticky sweet sauces are slathered onto pork ribs and tangy briskets.

Carolina Style: The State that's gone whole hog over barbecue. More signs with dancing pink pigs are found here than anywhere else! Pig pickin's and pulled pork are mixed with thin vinegar based sauces to make an incredibly flavorful and juicy barbecue!



Dry Rub for BBQ, Brisket, and Pulled Pork

- | | |
|--------------------------|--------------------------|
| 4 T. sweet paprika | 2 T. ground cumin |
| 2 T. chili powder | 2 T. dark brown sugar |
| 1 T. dried oregano | 2 T. salt |
| 1T. Sugar | 1 T. ground white pepper |
| 1 T. ground black pepper | 1-2 tsp. cayenne powder |

Combine all ingredients. Can be stored in an airtight container for 2 weeks. Makes 8 servings.
 Nutritional Value per serving (2 tablespoons): Cal 50, fat 1g., cholesterol 0 mg, sodium 1700 mg, carbs

Cultivating the County

Allen Baker, CEA, ANR

Mulching Tomatoes

Soils are warm enough now that tomatoes can benefit from mulching. Tomatoes prefer even levels of soil moisture and mulches provide such by preventing excessive evaporation. Other benefits of mulching include weed suppression, moderating soil temperatures and preventing the formation of a hard crust on the soil. Crusted soils restrict air movement into and out of the soil and slow the water infiltration rate.

Hay and straw mulches are very popular for tomatoes but may contain weed or volunteer grain seeds. Grass clippings can also be used but should be applied as a relatively thin layer - only 2 to 3 inches thick. Clippings should also be dry as wet clipping can mold and become so hard that water can't pass through. Also, do not use clippings from lawns that have been treated with a weed killer until some time has passed. With most types of weed killers, clippings from the fourth mowing after treatment may be used. If the lawn was treated with a product containing quinclorac (Drive), the clippings should not be used as mulch. If the weed killer used has a crabgrass killer, it likely contains quinclorac.

Cucumber Beetles and Bacterial Wilt

If you had cucumbers or muskmelons that suddenly turned brown and died last year, you may have had a disease known as bacterial wilt. The cucumber beetle carries this disease. Once a plant is infected, there is no cure, so prevention is the key. Because cucumber beetles overwinter as adults, early control measures are essential. There are two types of cucumber beetles: striped and spotted. The striped cucumber beetle is the most common. The 1/4-inch-long beetles are conspicuously colored: black head and antennae, straw-yellow thorax, and yellowish wing covers with three distinct parallel and longitudinal black stripes. Young plants can be protected with row covers, cones, or other types of mechanical barriers. Edges must be sealed to ensure that the beetles do not find a place to enter. Plants will eventually outgrow these barriers, or they will need to be removed to allow insect pollination of the flowers. Apply insecticides before beetles are noticed in the planting. Continue to spray weekly throughout the season.

Homeowners can use permethrin (numerous trade names). Once plants have started flowering, spray in the evening after bees have returned to the hive. Check labels for waiting periods between when you spray and when the fruit can be picked.

Moving Houseplants Outside for the Summer

It is often helpful to set many houseplants outside for the summer so they can recover from the low light levels endured during the winter months. As soon as night temperatures stay consistently above 55 degrees F, houseplants can be moved to their summer home. Choose a spot that has dappled shade, is protected from the wind and is close to water. A porch or a spot that receives shade from trees or buildings will work well. Putting houseplants in full sun will cause the leaves to photooxidize or sunburn because the leaves have become adapted to low light levels inside the house. Where possible, sink the pots into the ground to help moderate root temperatures and reduce watering frequency.

If you have a number of plants, dig a trench 6 to 8 inches deep (or deeper if you have larger pots) and long enough to accommodate all of your plants without crowding. Place peat moss under and around the pots. Peat moss holds water, helps keep the pots cool and reduces evaporation from clay pots. About every two weeks, rotate the pots a quarter turn to break off any roots that have penetrated the peat moss surrounding the pot and to equalize the light received on all sides of the pot. Water as needed. If the potting soil is dry a half-inch deep in the pot, it is time to water.

Protecting New Vegetable Transplants from the Wind

New transplants, even those hardened off in a cold frame, may need protection from strong winds when set out. Wooden shingles placed to block the wind used to be the standard recommendation but are now difficult to find. Try a plastic milk jug or a 2-liter soda bottle with both the bottom and top cut off. Push the jug or bottle into the soil far enough so it won't blow away. In windy conditions, it may need to be stabilized with a wooden dowel or metal rod.

17-Year Cicadas: 2015 is the Year

By the end of May and into June, the "buzz" created by massive numbers of newly emerged 17-year periodical cicadas will create quite a "buzz" mainly amongst citizens of eastern Kansas.

With their distinctive appearance (black body, blood-red beady eyes and orange-veined clear/transparent wings), there can be no mistaking periodical cicadas for any other insect.

Whereas there is a tendency to lump/consider periodical cicadas as "one," there actually are three separate species of 17-year periodical cicadas. Only *Magicicada cassinii* and *M. septendecim* have been officially documented as occurring in Kansas. Of the 4,437 periodicals that I collected from 37 counties in 1998, 98.7% were *cassinii*.

Without seeing an actual specimen, one can discern whether *cassinii* or *septendecim* is present. That is, the call produced by *cassinii* is a continuous or somewhat high-pitched buzzing possibly with some ticks interspersed, while the call of *septendecim* is a more hollow "weeeee whoa weeeee whoa" (sometimes people say it sounds like "pharaoh" Only males are capable of calling/chorusing -- the purpose being to attract females for mating purposes.

Probably the main complaints lodged by people against periodical cicadas have to do with the appearance of emergence holes in the ground, occasionally mud turrets produced by nymphs prior to their emergence, large number of nymphal exuvia ("skins") from which adult cicadas emerged, and the noise created by the clusters of congregated males

Also, the egg-laying activities can kill tips of branches, thus causing the appearance of dead branch tips which is but an aesthetical briefer and inconsequential event.

All this being said, the 2015 emergence of Brood IV periodical cicadas (which includes portions of Iowa, Nebraska, Missouri and Oklahoma) was initiated in 1998 when 1st instar nymphs hatched, dropped to the ground and burrowed in. During the past 16 years, they fed by inserting their piercing, sucking mouthparts into the xylem tissues of tree and woody shrub hosts. The now fully-developed 5th instar nymphs currently are waiting for soil temperatures to reach the proper temperature (cited to be 64 degrees F) which signals them that the time has come that they should emerge from their underground habitat. After emerging, the skin down its back will split, and a "new adult" will emerge. Initially it will be white and soft. Over the next several hours, it will darken and take on its characteristic coloration. However, the exoskeleton will still be soft. An additional 4-5 days will be required for the exoskeleton to harden. It is at this point that cicadas will take flight, males will call, females will respond and mating will occur.

The female then will use her serrated ovipositor to slice into and create cavities in twigs into which she will insert up to 20 eggs. She will repeat this activity as many times as is required for her to deposit her full complement of eggs which may total up to 600. Six to 10 weeks later (a time at which all of the periodical cicadas will have died), the newly hatched nymphs drop to the soil burrow into the ground, feed for 16 years and reappear/emerge in 2032! (Bob Bauernfeind)

Time to Fertilize Warm-Season Grasses

June is the time to fertilize warm-season lawn grasses such as buffalograss and zoysiagrass. These species all thrive in warmer summer weather, so this is the time they respond best to fertilization. The most important nutrient is nitrogen (N), and these three species need it in varying amounts.

Zoysiagrass grows more slowly than bermudagrass and is prone to develop thatch. Consequently, it does not need as much nitrogen. In fact, too much is worse than too little. One and one-half to 2 pounds N per 1,000 sq. ft. during the season is sufficient. Split the total in two and apply once in early June and again around mid-July. Slow-release N is preferable but quick-release is acceptable.

Buffalograss requires the least nitrogen of all lawn species commonly grown in Kansas. It will survive and persist with no supplemental nitrogen, but giving it 1 lb. N per 1,000 sq. ft. will improve color and density. This application should be made in early June. For a little darker color, fertilize it as described for zoysiagrass in the previous paragraph, but do not apply more than a total of 2 lb. N per 1,000 sq. ft. in one season. Buffalograss tends to get weedy when given too much nitrogen. As with zoysia, slow-release N is preferable, but fast-release is also OK. As for all turfgrasses, phosphorus and potassium are best applied according to soil test results because many soils already have adequate amounts of these nutrients for turfgrass growth. If you need to apply phosphorus or potassium, it is best to core aerate beforehand to insure the nutrients reach the roots.

Causes of White Heads in Wheat

White heads may appear in some wheat fields around the state this year. Sometimes the white heads are just single tillers scattered throughout part or all of a field. And sometimes the white heads occur in small to large patches. There are many causes of white heads. Here are some of the most common causes and their diagnosis.

Premature dying (drowning, hot dry winds, etc.). As wheat begins to mature, plants in some areas of the field may have an off-white color similar to take-all. This is premature dying, which could be due to drowning, hot dry winds, or some other stress. The pattern of off-colored heads will often follow soil types or topography. The grain will be shriveled and have low test weight.

Freeze injury to stem or crown. Depending on the stage of growth at the time of a late spring freeze, parts or all of the heads may die and turn white. In years when the freeze occurs about the boot stage or a little earlier, there can be injury to the lower stem, which then cuts off water and nutrients to the developing head. In years when the wheat is in the early heading stage at the time of the freeze, the freeze can damage the heads directly. Often, wheat on north-facing slopes, on ridge tops, or in low-lying areas will be most affected by freeze injury. But freeze injury can also be so severe that it occurs throughout the fields, in no particular pattern. Crown rot is another potential problem that can be traced back to freeze injury. When the crown is damaged by cold temperatures or a freeze, part or all of the tillers can die. If the tiller from a damaged crown forms a head, this head will almost always be white. The crown will have internal browning, and stands will usually be thinner than normal.

Hail. Hail can occasionally damage just a portion of a head, and cause that damaged portion to turn white.

Dryland root rot (also known as dryland foot rot). This disease, caused by the Fusarium fungus, causes white heads and often turns the base of the plants pinkish. As with take-all, dryland root rot causes all the tillers on an infected plant to have white heads. This disease is usually most common under drought stress conditions, and is often mistaken for either drought stress or take-all.

Head scab. When there are periods of rainy weather or sprinkler irrigation applications made while the wheat is flowering, some heads may become infected with Fusarium head blight and turn white. The heads of some red-chaffed varieties turn a darker red when infected with scab, but the heads of most varieties turn white. Often, only the upper half of the head is white. Head scab is most common where wheat is grown after corn, or after a wheat crop that had head scab the previous year.

Take-all. This disease often causes patches of white heads scattered throughout the field. It occurs most frequently in continuous wheat, and where there is a moderate to high level of surface residue. To diagnose take-all, pull up a plant and scrape back the leaf sheaths at the base of a tiller. If the base of the tiller is shiny and either black or dark brown, it is take-all. All tillers on a plant infected with take-all will have white heads. Plants will pull up easily.

Sharp eyespot. This disease is common in Kansas, but rarely causes significant yield loss. Sharp eyespot causes lesions with light tan centers and dark brown margins on the lower stems. The ends of the lesions are typically pointed. If the stems are girdled by the fungus, the tiller may be stunted with a white head. Each tiller on a plant may be affected differently.

Wheat stem maggot. Wheat stem maggot damage is common every year in Kansas, but rarely results in significant yield loss. It usually causes a single white head on a tiller, scattered more or less randomly through part or all of a field. If you can grab the head and pull the stem up easily just above the uppermost node, the tiller has probably been infested with wheat stem maggot.

Too Wet to Mow the Lawn

What do you do when the lawn can't be cut because of constant rain?

The best thing to do is to set your mower as high as possible and bring it down in steps. It is always best never to take more than one third of the grass blade off at one time. If more is taken, the plant reacts by using stored energy reserves to quickly send up new growth. This reduces the amount of energy available for the plant to deal with stress or damage done by insects or disease. However, sometimes it is just not possible to keep the "one-third rule." In such cases, cut as high as possible even though it may mean you are cutting off more than one third of the blade. Bring the height down gradually by cutting more often and at progressively lower heights until you reach the target height.

Trees Not Leafing Out

There have been numerous reports of trees not leafing out or putting out only a fraction of the leaves normally borne. We believe much of this is due to the quick drop in temperature from November 10 to 11 last year. Many trees had not hardened off and were damaged.

If a tree hasn't leafed out at all, check the stems. If they are dry and brittle, that part of the tree is dead. However, sometimes the tips of the branches are dead but the tree is alive further back. Take a knife and shave off the outer bark on several small-diameter, young branches. If the tissue underneath is water soaked or dark brown to black in color, then it is likely dead. This cambium layer should be a greenish-white color. As long as the twigs remain supple and the tissue under the bark isn't dark, there is hope.

So, what should we do for these trees? Help them avoid stress. This means watering during dry weather so the tree has good sap flow. Trees transplanted within the last couple of years should be watered every week during dry weather. More established trees should be watered every two weeks if there is no rainfall.

On young trees, kill all the grass under the tree and mulch. Reducing root competition makes for a healthier tree that is more likely to recover.

And finally, remove any dead wood so that insects and disease do not have a point of entry. Dead wood can be removed any time of year.

Recent Rains Trigger Mushroom Development

The frequent, heavy rains in certain areas of the state have resulted in the appearance of mushrooms in home lawns and landscape beds. Although mushrooms are often spectacular in size and color, most are relatively harmless to plant life. Some of these mushrooms are associated with arc-like or circular patterns in turfgrass called fairy rings. The ring pattern is caused by the outward growth of fungal mycelium. The mycelium forms a dense, mat-like structure in the soil that decomposes organic matter. This decomposition releases nitrate into the soil, which in turn stimulates the growth of the grass at the outer portion of the ring. This results in a dark green appearance of the grass at the margin of the ring.

Unfortunately, the thick fungal mat formed by the fungus interferes with water infiltration. The fungus also may release certain byproducts that are toxic to the turf. This can lead to dieback of the turf close to the ring. Fairy rings are difficult to control. You can sometimes eliminate the ring by digging to a depth of 6 to 12 inches and 12 inches wide on both sides of the ring, refilling the hole with non-infested soil. Or you can try to mask the symptoms by fertilizing the rest of the lawn so that it is as dark green as the ring. This often isn't a good idea because it tends to promote other turf problems. Commercial people can use certain fungicides to control fairy rings but these products are not available to homeowners.

Some mushrooms in lawns are not associated with fairy rings. These may be mycorrhizal (symbiotic association with tree roots) or saprophytic (live on dead organic matter such as wood, etc.) in the soil. Because some of these mushrooms are beneficial, you don't really want to kill them. Besides, a fungicide spray to the mushroom itself does little good. Remember the mushroom is simply the fruiting structure of the organism. Most of the fungus is below ground and inaccessible to the chemical. If mushrooms are a nuisance, pick them and dispose of them as soon as they appear. Remove sources of large organic debris from the soil. Also, mushrooms tend to go away as soil dries. Patience may be the best control. Some of the mushrooms in the lawn are edible, but others are poisonous. Never eat mushrooms unless you are sure of their identity.

Chiggers

Chiggers are mites, not insects. And like all mites, the adults have eight legs. However, the larva only has six legs. Though the bright red female adult is tiny (about 1/20th of an inch) the larva is much smaller (about 1/150th of an inch). Only the larvae are parasitic and attack animals. The larva injects digestive juices into the skin, which causes a rapid swelling. In the center of the swelling is a "feeding tube" from which the chigger sucks out liquefied skin cells. Feeding usually continues for 2 to 4 days.

Protection from chiggers uses two approaches. The use of a repellent can discourage chiggers from attacking. The most effective repellents are Deet and permethrin. Both are applied to clothing. The second approach seeks to reduce chigger populations. Keeping the lawn mowed regularly can help, but large populations may require the use of an acaricide. Effective products include bifenthrin (Talstar, Hi-Yield Bug Blaster II, Hi-Yield Bug Blaster Bifenthrin, and Ortho Lawn Insect Killer Granules), cyfluthrin (Tempo 20, Bayer Vegetable & Garden Insect Spray) and carbaryl (Sevin).

Wichita County Extension June 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3 <i>Community Gardens Tour 5-6pm</i>	4	5	6 <i>Flap Jacks For the Track At Community Building At 7: 30am</i>
7	8 <i>Exec Board Mtg. 10:00am at Ext. Office</i> <i>Fair Board Mtg. 12:00pm at Ext. Office</i>	9 <i>4-H Campers Meet on Northside of Court House at 7:45am</i>	10	11	12	13
			4-H Camp at Rock Springs			
14  <i>Flag Day</i>	15 <i>Extension Budget Mtg. with Commissioners at 8:30am</i> <i>Fair Board Budget Mtg. with Commissioners at 8:45am</i>	16	17	18	19	20
21 	22	23	24	25	26	27
28	29	30				

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4-H Calendar 2015

June

- 9-12 4-H Camp at Rock Springs
18 Goat meeting @ Show arena at 4:00pm (bring goats
and/or sheep)
25-27 Jr. Sewing Camp

July

- 25 4-H Dog Show
27 Pre Fair Clean up and Set up
28 4-H Consultation Judging & Horse Show
29 4-H Consultation Judging cont., Fashion Revue
Official Opening of Wichita Co.Fair
30 4-H Swine Show, Rocket Launch, & Free Bar-B-Q
31 4-H Beef, Sheep, & Goat Show, Round Robin, Live
stock & Food sale

Aug

- 1 Parade, Exhibits released
2 Post Fair Clean up

