COOPERATIVE EXTENSION
SDA NEWSLETTER
Cooperative Extension Program - Reaching. Teaching. Serving the community.

July 2015
Volume 4, Issue 7

SPRING FARM FEST 2015
A special “Thank you” to the Leon, Gadsden and surrounding counties as well as the FAMU community, for your support of the 2015 Spring Farm Festival Agri-Showcase. We had over 450 people in attendance.

See you all next year!
Protecting Yourself and Your Family from Extra Salt in Diet

Contributors: Aliyar Fouladkhah, Jenelle Robinson, and Vonda Richardson

Sodium chloride, commonly known as salt, is essential for health and has historically been part of our diet. It is also an indispensable part of food manufacturing, and an ingredient in a wide array of manufactured packaged food products in market. Higher than recommended amounts of salt in diet, however, have considerable deleterious effects on our health. At current time, American adults of nearly all ages, consume considerably higher than recommended amount, the level that is currently recognized as safe for maintaining health (3). Extra salt in diet, is strongly linked to elevated levels of blood pressure and other chronic diseases (2). Unfortunately, hypertension (high blood pressure) in adults is one of the leading underlying causes of preventable and premature deaths, both nationally and internationally (3).

At current time, 26% of people around the world suffer from hypertension, one of the direct consequences of extra salt in diet. As high as 27% of U.S. adults are also currently suffering from hypertension and another 31% have a condition called prehypertension that can lead to hypertension. Overall, in American adults, lifetime probability of developing these conditions is approaching 90% (4). So stakes are very high and many people are negatively affected by extra salt in diet. New studies also show that extra amount of salt in our diet could be responsible for increased likelihood of other health complications such as cardiovascular diseases, several types of cancer, obesity incidences, and development of asthma (5). Now that we know the extent of the problem, let’s see where the extra salt in diet comes from, and how we can avoid extra dietary salt to prevent or reduce these health complications for ourselves and our families.

USDA Dietary Guidelines estimate about 75% of dietary sodium comes from the consumption of processed foods and ready-to-eat products, items that we buy from supermarket (1). Salt is one of the cheapest ingredients (around 15 cents per pound) and also improves taste and increases shelf-life of many products. So for taste, quality, and also economic reasons, salt is a very common ingredient in many packaged foods we buy from supermarket. Another study similarly estimated that 77% of salt in western diets comes from consumption of processed foods, 12% from existing salt in natural foods, 6% from added salt during dining, and 5% from added salt during cooking (4). Just to give an example, natural sodium content of beef (topside roast) and raw salmon are about 48 and 110 mg in 3-oz (100 g) portions, but the sodium content of canned corned beef and smoked salmon is about 950 and 1880 mg in same portion sizes of 3-oz. We can all reduce salt intake by reading the nutrition labels on the back of packaged products prior to purchase. So with moderation and balance in consumption of high-sodium foods or if possible, by avoiding them from diet, it is possible to protect our health meaningfully from the above-mentioned health complications. Of course we can try what public health professionals call “stealth approach,” by trying to reduce extra salt in diet gradually to adopt our taste to a diet with moderate amount of sodium. Interestingly, avoiding salt entirely in our diet could also lead to negative health consequences, so just like many other health and nutrition practices, moderation and balance is the key.

Do you know what the main high-sodium food products are? Review of recent studies show that processed meats, breads, cheeses, sauces, and spreads are some of the main contributors of extra dietary sodium (5). More specifically, around 40% of sodium in a typical western diet comes from breads and rolls, cold cuts/cured meats, pizza, poultry, soups, sandwiches, cheese, pasta mixed dishes, meat mixed dishes, and savory snacks (6,7). So by minimizing consumption of these high-sodium foods, by carefully examining the nutritional labels of packaged food, trying to gradually adopt our taste to a diet with lower amount of salt, and with moderation and balance we can move towards even healthier lifestyles. FAMU Cooperative Extension, appreciates the opportunity of hearing from you, delivering our health and nutrition information to you and your family, as part of our land-grant mission, and our legacy of caring for and returning to community.

Please feel free to contact us with your questions and visit our website at: http://www.famu.edu/cep

For more information about sodium and health you can visit:

Centers for Diseases and Control and Prevention:  http://www.cdc.gov/salt/
United States Department of Agriculture, Center for Nutrition Policy and Promotion:

References:

Photo courtesy: American Heart Association Factsheet of High Blood Pressure
USDA Publishes Updated Interagency Strategic and Surveillance Plans for Avian Influenza Migratory Birds

July 2, 2015 — Today, the U.S. Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service (APHIS) released two updated interagency plans related to the surveillance of avian influenza in wild birds. As part of USDA’s on-going preparation efforts for highly pathogenic avian influenza (HPAI), these updated plans will help USDA with further monitoring of wild birds for the HPAI virus during the fall migration. Between now and March 2016, HPAI surveillance in wild birds will increase as APHIS Wildlife Services biologists and their State partners collect approximately 41,000 samples from apparently healthy wild birds from targeted areas throughout the United States.

The first updated plan—U.S. Interagency Strategic Plan for Early Detection and Monitoring for Avian Influenzas of Significance in Wild Birds—describes a unified national system for migratory wild bird sampling involving Federal, State, university and non-governmental organizations. The second updated plan—2015 Surveillance Plan for Highly Pathogenic Avian Influenza in Waterfowl in the United States—outlines specific wild bird surveillance efforts for 2015-2016. These efforts were led by the Interagency Steering Committee for Surveillance for HPAI in Wild Birds. This committee is comprised of experts from USDA APHIS, the Department of the Interior’s U.S. Geological Survey and U.S. Fish and Wildlife Service, the U.S. Department of Health and Human Services’ Centers for Disease Control and Prevention (CDC) and the National Flyway Council.

“The early detection of avian influenza remains key to controlling its spread and minimizing its effects,” said Dr. John Clifford, USDA chief veterinary officer. “Many of the activities outlined in these plans are already being implemented and help warn us of any re-assortments or changes in low or highly pathogenic avian influenza viruses in wild birds which could be detrimental to our domestic flocks.”

Samples will be collected primarily from live-captured and hunter-harvested dabbling ducks, such as American black duck, American green-winged teal, mallard and Northern pintail. Additionally, environmental fecal samples from waterfowl and samples from morbidity and mortality events of all wild bird species also will be collected. Results from the surveillance effort will be incorporated into national risk assessments as well as preparedness and response planning efforts so that HPAI risks are reduced in commercial poultry, backyard poultry, game bird farms, wild birds, wild bird rehabilitation facilities, falconry birds, and captive bird collections in zoos/aviaries.

Avian influenza viruses can be classified as HPAI or low pathogenic (LPAI) strains based on the severity of the illness they cause. LPAI typically causes only minor illness, and sometimes manifests no clinical signs. However, some LPAI virus strains are capable of mutating under field conditions into HPAI viruses. Wild birds can shed both LPAI and HPAI virus into the environment through their oral and nasal secretions and feces. Once in the environment, these viruses can infect backyard poultry through the environment or through direct contact with infected wild birds. Through breeches in biosecurity, HPAI viruses also can move from the environment into poultry facilities.

Since December 2014, the USDA has confirmed cases of HPAI H5 in the Pacific, Central and Mississippi flyways (or migratory bird paths). The disease has been found in wild birds, as well as in more than 200 backyard and commercial poultry flocks. While wild dabbling ducks appear to have no ill effects from the virus, HPAI H5 is lethal to raptors and its impacts to other wild birds are unknown. HPAI H5 can cause severe disease and death in domestic birds. The CDC considers the risk to people from these HPAI H5 infections to be low. No human cases of these HPAI H5 viruses have been detected in the United States, Canada, or internationally.

The United States has the strongest AI surveillance program in the world so that the food supply and our people remain safe. Properly prepared and cooked poultry and eggs are safe to eat. As USDA and its Federal, State and industry partners continue to respond to this current outbreak, all continue to stress the importance of enhanced biosecurity measures for backyard and commercial poultry owners.

Additional information about USDA avian influenza surveillance and emergency response efforts can be found at www.usda.gov/avianinfluenza.
2015 SUMMER PROGRAM: AGDISCOVERY

GULF MARINE SPECIMEN LAB

GOAT DRESSING CONTEST
LEON COUNTY ANIMAL SHELTER

FAMU QUINCY FARM:
PERFORMING COW PALPATIONS
USDA Announces Commodity Credit Corporation Lending Rates for July 2015

Release No. 0052.15
Contact: Isabel Benemelis
(202) 720-7809

WASHINGTON, July 1, 2015 — The U.S. Department of Agriculture's Commodity Credit Corporation (CCC) today announced interest rates for July 2015. The CCC borrowing rate-based charge for July is 0.250 percent, unchanged from 0.250 percent in June.

The interest rate for crop year commodity loans less than one year disbursed during July is 1.250 percent, unchanged from 1.250 percent in June.

Interest rates for Farm Storage Facility Loans approved for July are as follows, 2.000 percent with seven-year loan terms, up from 1.875 percent in June; 2.250 percent with 10-year loan terms, up from 2.125 percent in June and; 2.375 percent with 12-year loan terms, up from 2.250 percent in June. The interest rate for 15-year Sugar Storage Facility Loans for July is 2.625 percent, up from 2.375 percent in June.

Further program information is available from USDA Farm Service Agency's (FSA) Financial Management Division at 202-772-6041.

USDA is an equal opportunity provider and employer. To file a complaint of discrimination, write: USDA, Office of the Assistant Secretary for Civil Rights, Office of Adjudication, 1400 Independence Ave., SW, Washington, DC 20250-9410 or call (866) 632-9992 (Toll-free Customer Service), (800) 877-8339 (Local or Federal relay), (866) 377-8642 (Relay voice users).

To get info on the 2014 Farm Bill and news of upcoming events, please log onto http://www.fsa.usda.gov/FSA/
FLEA FACTS!

Did you know that only a portion of a flea’s life is spent on your pet? Did you know a female flea can lay 50 eggs a day?

- There are 1900 species of fleas in the world, the cat flea “Ctenocephalides felis” is the one responsible for 99.9% cases of fleas on pets!
- Average life of an adult flea is 4 to 6 weeks
- For every one you find on your animal, there are hundreds more in your home!
- Over 90% live in the environment; they live in carpets, on floors, in pet’s bedding, closets, on furniture, in vacuum cleaner bags and in cracks and crevices.
- Fleas can jump 150 times their own height! That would be like a human leaping over a building!
- A female flea can lay 2,000 eggs in a lifetime
- Fleas can cause pets to become allergic to the flea saliva and cause severe itchiness.
- Fleas are also a way of transmitting tapeworm infestation to your pet.

FLEA LIFE CYCLE

Understanding the flea life cycle may help to explain why it’s so difficult to get rid of them! The total process from egg to reproductive maturity can take anywhere from 3 weeks to 2 years, depending on temperature, humidity and availability of food (blood!)

EGGS: After biting your pet (or other body), the female flea gets her blood meal and lays eggs that go everywhere! (carpets, bedding, cracks, etc) These eggs are extremely tough! They can withstand dryness, changes in temperature and insecticides.

LARVAE: The eggs hatch into larvae, which resemble small caterpillars. They live on the ground and in your carpet. They feed on adult flea droppings.

PUPAE: The larvae spin cocoons to form the pupae stage. The pupae are like the egg stage in that they are extremely tough! Most insecticides are not effective.

ADULT: The pupae are sensitive to vibrations from animal movement which causes them to pop out as fully grown fleas. They jump onto the nearest pet (or warm ankle if the pets are away) for their first blood meal.

TREATING THE FLEAS!

Which ever combination of methods is used, remember home, pet and other animals may need to be treated at the same time. Repeat treatments may be necessary to make your fleas flee!

Treating the Environment
- Remove the all bedding. (pet and human beds) Wash in hot and soapy water.
- Vacuum and mop house thoroughly
- After floors are dry, spray entire house (under furniture, along baseboards, etc) with a flea control premise or space spray.
- Repeat if problem persists. Frequency depends on flea product used.
- Do not steam clean carpets until flea problem is totally cleared up. The steam cleaning will wash the flea spray away.
- Vacuum often. The vibrations caused by the vacuum will encourage the adult flea to hatch from the pupae. (flea products are not effective on the pupae)

Treating the Pet
- Treatment of the pet will depend on which type of product is chosen.
- Each one has advantages and disadvantages. Products include: flea collar, mousse, shampoo, sprays, topical and oral medications.

Flea treatment options should be discussed with your Veterinarian professionals!
Calculating The Nutrient Requirements For Your Hot Pepper Crop

Meeting the nutrient requirements of your hot pepper crop is essential for optimizing crop production and yield. However, based on soil types and conditions, different fields will require different rates of the major nutrients nitrogen (N), phosphorous (P), and potassium (K). These nutrients are essential for healthy crop growth. It is always wise to have a soil test done to establish the initial nutrient status of your soil before embarking on a fertilizer regime since both inadequate and excessive fertilizer rates can be damaging to your crop. You will need the following information in order to calculate the required amount of fertilizer for your crop:

1. The N, P, and K content of the material from the label on the fertilizer package
2. Your target rate: normally, this is obtained from your soil test. If you are not skilled at soil testing, have a soil test done at your local extension office. It is okay to simply specify ‘peppers’ when asked for the type of crop to be grown
3. The size of your planting area and
4. The density of the material if a liquid fertilizer is to be applied.

Example 1: Assuming an 18-0-18 mixed fertilizer is to be applied to supply 1.0 pound of N per 1,000 square feet. Calculate the rate of fertilizer to apply to obtain the proper N rate. Recall that there is 18% N in an 18-0-18 fertilizer. i.e. 0.18 pound of N per pound of fertilizer.

Calculation:
Amount of fertilizer to apply 1 lb N/1,000 sq ft = 1.0 lb N ÷ 0.18 = 5.56 lb 18-0-18/1,000 sq ft.

Example 2: Applying Liquid fertilizer: Assuming a liquid N fertilizer (30% UAN) is to be used as the N source for 500 acres of hot pepper. Calculate the N application rate in gallons per acre and the total tons of fertilizer needed to apply 160 pounds of N per acre. The fertilizer weighs 10.86 pounds per gallon and contains 30% N by weight. Now the 30% UAN has 30% N by weight, which means 0.30 pound of N per pound of fertilizer.

Calculation:
Lb N/gal of fertilizer solution = 10.86 lb/gal x 0.30 lb N/lb of fertilizer = 3.26 lb N/gal. Gal of UAN/acre = 160 lb N/acre ÷ 3.26 lb N/gal = 49.1 gal/acre. Tons for 500 acres = (49.1 gal/acre x 500 acres x 10.86 lb/gal) ÷ 2000 = 133.3 tons.

Note: 1 ton = 2000 pounds.

So there you have it. Any of the above fertilizer rate calculation techniques can be used to help you optimize growth and yield of your hot pepper crop.
LITTLE KNOWN GINGER FACTS

Even though ginger is mostly known as a spice, flavor is not its only virtue! It has been used for medicinal purposes for centuries:

TO EASE DIGESTION
If you're having difficulty digesting, chewing on some raw ginger can be soothing to your tummy.

TO STOP VOMITING
Pregnant women can rely heavily on ginger when it comes to morning sickness. It's effectiveness against nausea and vomiting is due to the gingerol, zingerone and shogaols that ginger contains. You can even bring it along on a boat, train or car ride if you tend to get motion sickness!

POST CHEMO HELP
Thanks to its role in reducing vomiting and nausea, ginger can be really helpful when it comes to chemotherapy. It can also help increase appetite, which is important when you're going through or have just gone through chemo.

IT'S AN ANTIOXIDANT
That means that ginger has the power to fight free radicals. Yet another strong point for this delicious root!

IT'LL WARM YOU UP
Ginger will literally warm you up! It plays a role in increasing your body temperature by increasing vascular constriction

AN APHRODISIAC
Ginger has the ability to warm your body up—sexual organs included! It's also known for stimulating virility and endurance...or basically just increasing your libido!

SOOTHE A COUGH
Ginger is an expectorant, which means it can help reduce and soothe a cough. Once again, that's due to the gingerol that it contains

REDUCE YOUR CHOLESTEROL
According to recent studies, ginger can help lower LDL cholesterol level and can increase HDL cholesterol. That means it's really important for people suffering from high cholesterol.

SWEAT HEALTHILY
Eating ginger can help free natural agents called dermcidin in your sweat? These agents have an antibacterial effect, which means that your sweat won't smell too strongly

SOOTHE YOUR JOINTS
Gingerol and zingerone can actually help joint pain that's due to arthritis

HELPS PERIOD PAIN
Ginger does seem to help with painful periods. In one study, more than 60% of women felt that ginger lessened pain.

USED IN SKIN CARE PRODUCTS
Ginger is also used to prevent skin aging and possibly skin cancer due to its anti-oxidant properties. Ginger can be used to restore youthful radiance to the skin, to smooth out rough skin, and as an anti-fungal product.
The CAFS Cooperative Extension Food Science Summer Enrichment Program (FSSEP) held from June 8-12, 2015 introduced 10 students to the studies and career opportunities in the field of Food Science.

For this one week, students participated in various hands-on experiments with the focus around pizza and they also had the opportunity to visit two different processing plants: The Ocheesee Creamery Dairy Farm/Plant and Flowers Bakery. In addition, students were able to relate Marine Life to Food Science through Food Safety.
Students with College of Agriculture and Food Sciences Dean, Dr. Robert Taylor.
### 2015 FAMU CEP Calendar of Events

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<th>January</th>
<th>February</th>
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<td>January 15th – Master Goat/Sheep Program and Master Farmer Online Registration starts – <a href="http://www.famu.edu/goats">http://www.famu.edu/goats</a> Contacts: Mr. Gilbert Queeley – 850-412-5255 Mrs. Angela McKenzie-Jakes - 850-875-8552</td>
<td>Aquaponic Seminar February 23rd, 6– 8:00 pm- Fee: $20 early reg./ $25 day of Event Sponsored by Gadsden County Extension Office at the FAMU Teleconference Center Vineyard Management &amp; Pesticide Safety Workshop February 11th– 1—4:30 pm at Center for Viticulture &amp; Small Fruit Research. Call (850) 599-3996 to register. Feral Swine Workshop-February 13th in Ocala, FL; Feb 27th, Quincy</td>
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<td>FAMU CEP Master Farmer Program March 13-14 and March 24-28</td>
<td>FAMU CEP Master Farmer Program- April 10-11 –POSTPONED</td>
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<td>Feral Swine Workshop- March 9th, Monticello, FL; March 26th – Marianna, FL</td>
<td>CROP Block Party– FAMU Teleconference Center Date : April 15th - 9-3:00 pm. FAMU Teleconference Center</td>
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<td>FAMU CEP Master Goat and Sheep Certification Program May 1-2 May 15-16 May 29-30 May 7– 8th : HACCP Course</td>
<td>FAMU CEP Spring Agri-Showcase – Date: June 13th *Master Goat/Sheep &amp; Master Farmer Programs Graduation Ag Discovery Summer Program– June 7-20, 2015 Contacts: Dr. Mobley, Dr. Wright, Mrs. Lyttle-N’Guessan 2015 Master Goat and Sheep Certification Program <em>Bonus Session</em> June 20th: 9– 4 pm</td>
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<td>2015 Master Goat and Sheep Certification Program <em>Bonus Session</em> July 25th: 9– 4 pm</td>
<td>FAMU CEP Open House– Perry Paige Courtyard/ Date: August 26, 2015– 9 a.m.– 1 p.m. Grape Harvest Festival– August 29, 2015 2015 Master Goat and Sheep Certification Program <em>Bonus Session</em> August 15th : 9– 4 pm</td>
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<td>1890 Land Grant 125th celebration- Washington, DC– July 13-17th</td>
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<td>Ag Tech Century 21 Program– July 12-17, 2015 Contacts: Dr. Mobley, Dr. Wright, Mrs. Lyttle-N’Guessan</td>
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<td>Agroforestry Seminar– July 20th, 7:30 am—4:00 pm</td>
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<th>September</th>
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<td>EVENTS COMING SOON</td>
<td>FAMU CEP Fall Agri-Showcase– Date: October 24th FAMU Research &amp; Extension Center, Quincy, FL (Tentative)</td>
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Upcoming Events

FLORIDA A&M UNIVERSITY

TRAINERS’ TRAINING IN AGROFORESTRY PRACTICES IN THE SOUTHEASTERN REGION WORKSHOP

Monday, July 20, 2015
7:30 a.m.—4:30 p.m.

FAMU Cooperative Extension Program, in partnership with the 1890 Agroforestry Consortium, USDA/NIFA and Southern SARE is hosting a

FREE ONE DAY WORKSHOP

FOR SMALL, BEGINNING AND LIMITED RESOURCE FARMERS

FAMU RESEARCH AND EXTENSION CENTER
4259 Bainbridge Highway
Quincy, FL 32352

Potential Program Topics

• Establishment and management of trees in Silvopasture
• Suitable animal species and facilities for Silvopasture
• Forest farming
• Riparian buffers
• Windbreaks
• Economic assessment
• Accessing credit for Agroforestry
• Site tour and hands-on training

Note: Program topics are subject to change

Host Hotel

Hampton Inn Quincy
165 Spooner Road
Quincy, FL 32351
(850) 627-7555

Room Rates: $99/single—$109/ double

Deadline to lock in rate is July 10, 2015

To attend workshop for small, beginning and limited Resource Farmers

Please register by July 10, 2015

By Mail: FAMU Cooperative Extension *c/o Dr. Onkpike/ Mrs. Jakes
1740 S. MLK Jr. Blvd, Tallahassee, FL 32307

By Phone: Call: 850-599-3546 or Dr. Onkpike (850) 561-2217 / Mrs. Jakes (850) 875-8552

Lunch and workshop are free

Registration is required to ensure that meals, materials and certificates are available for all participants

Name: __________________________ Email address: __________________________

Street Address: __________________________

City: __________________________ State: __________ Zip code: __________ County: __________

Farmer: Yes____ No____ If so, please list Crops/Livestock: __________________________

OPTIONAL: Race/Ethnic Origin: __________________________ Male ________ Female ________
GRAPE HARVEST FESTIVAL

SATURDAY, AUGUST 29, 2015

FAMU CENTER FOR VITICULTURE AND SMALL FRUIT RESEARCH

6505 MAHAN DRIVE

TALLAHASSEE, FL 32317
Cooperative Extension Program

OPEN HOUSE

WEDNESDAY, AUGUST 26, 2015
9 AM– 1 PM
PERRY PAIGE COURTYARD
(ON THE CAMPUS OF FLORIDA A&M UNIVERSITY)

• 4-H YOUTH DEVELOPMENT
• AGRICULTURE AND NATURAL RESOURCES

* FAMILY AND CONSUMER SCIENCE
* COMMUNITY RESOURCE DEVELOPMENT

COOPERATIVE EXTENSION PROGRAM: REACHING. TEACHING. SERVING.
2015
A&M
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BRAGG
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www.famuathletics.com
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1740 S. Martin Luther King Jr, Blvd
215 Perry Paige Building South
Tallahassee, FL 32308
Phone: 850-599-3546
Fax: 850-561-2151
TDD: 850-561-2704

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