THE UNIVERSITY OF ARIZONA

Cooperative Extension

Pinal County

PINAL COUNTY QUARTERLY NEWSLETTER

JANUARY—MARCH 2019 Volume 6, Issue 1

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Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jeffrey C. Silvertooth, Associate Dean & Director, Extension & Economic Development, Division of Agriculture, Life and Veterinary Sciences, and Cooperative Extension, The University of Arizona.

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Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting (Cooperative Extension, Pinal County, 820 East Cottonwood Lane, #C, Casa Grande, AZ 85122, 520.836.5221). Requests should be made as early as possible to allow time to arrange the accommodation.



Cooperative Extension, the outreach arm of the University of Arizona, brings the university to the people.

The faculty and staff in the Pinal County Extension office are part of a non-formal education network bringing research-based information into communities to help people improve their lives.

Cooperative Extension is committed to delivering high-quality, relevant educational programs and information to Pinal County citizens and communities.

As we begin a new year of Cooperative Extension programming, we first wish to thank all of you who participated in any of our 2018 programs. We sincerely hope that you found value and something that you could use in that experience.

In 2019, we will continue to offer our mainstay programs as we strive, at the same time, to identify additional areas of interest where we can help. No matter whether you are an agricultural producer learning about new crop varieties, a youth engaged in our 4-H youth development program, a Master Gardener volunteer serving your community, or a participant of any of our Family, Consumer, and Health Science programs, such as Strengthening Families, EFNEP, and SNAP-ED, we welcome you back once again. If you are new to Cooperative Extension programs, please feel free to stop by our office to see all that we do have to offer.

In the meantime, we wish to extend to everyone our best wishes for a happy and prosperous New Year!!

Rick Sibson



FAMILY, CONSUMER & HEALTH SCIENCES

NATIONAL WINTER SKIN RELIEF DAY

Submitted by Cathy L. Martinez, Family, Consumer & Health Sciences Agent

In winter, the humidity level can drop even lower than usual. With this change in our environment, comes dryer air which can make fine lines and wrinkles more noticeable. Dry skin at this time of year can itch, flake, crack, and even bleed.

Dry skin is a very common problem anyone can be affected. To deal with this, dermatologists recommend the following:

- Take steps to prevent your bath or shower from making dry skin worse by limiting your time in the shower or tub to 5-10 minutes using warm (not hot) water. Keep the bathroom door closed, use a gentle cleanser (but avoid using so much that you get a thick lather), blot dry gently with a towel, and then slather on the moisturizer.
- Apply your moisturizer immediately after washing, since moisturizers work by trapping existing moisture in your skin. So apply moisturizers within a few



minutes of drying off after your shower or bath, or after washing your face or hands.

- Use an ointment or cream rather than a lotion. They are more effective and less irritating than lotions. Ingredients to look for include oils (such as olive or jojoba), shea butter, lactic acid, urea, hyaluronic acid, dimethicone, glycerin, lanolin, mineral oil, and petrolatum. Carry a non-greasy hand cream with you and apply it after each hand washing; this will greatly relieve dry skin.
- Wear lip balm. Choose one that feels good on your lips. If your lips are irritated or tingle after you apply the balm, then switch to one that does not cause this reaction.
- Wear gloves. Because our hands are usually one of the first places we notice dry skin, we can reduce the dryness by wearing gloves when we go outdoors, perform tasks where your hands will get wet, or if you will be getting chemicals, greases, and other substances on your hands.
- Choose non-irritating clothes and laundry detergent. Use detergents labeled "hypoallergenic" and wear natural fibers such as cotton or silk under your clothing made from wool or other rough feeling materials.
- Don't sit too close to a fireplace or other heat source, since being close to a heat source can dry your skin.

For more information visit the American Academy of Dermatology website at <u>https://www.aad.org/public/skin-hair-nails/skin-care/dry-skin</u>

GARDEN & LANDSCAPE

GROWING TOMATOES

Submitted by Rick Gibson, Extension Agent, Agriculture

Mid February is an excellent time to transplant tomato seedlings for an early summer harvest. Tomatoes are not an easy crop to grow in the desert. Soil problems, watering requirements, and plant nutrition can be serious constraints to good production, but, as the many gardeners who successfully harvest excellent crops each year have proven, it is possible.

The secret to producing good tomatoes in the desert is to get them planted early and expect to finish harvesting before the heat of summer sets in. Planting early means putting out transplant sets in February, babying the plants through any late season frosts that might occur and pushing the plants hard to get maximum production before the high temperatures arrive in June. While frosts and freezes in February can make for anxious moments, planting early is definitely the best way.

Growing tomatoes in garden soil is definitely a challenge because tomatoes are simply not well adapted to the low deserts of Arizona. If they were, there would be a viable field-grown tomato industry in Arizona. Tomatoes do not do well in southern Arizona because of the high temperatures of summer, the alkalinity of the soil, and the bright sun that easily burns the tender fruit. If you want to produce a good eating tomato, you must contend with these obstacles.

Tomatoes set fruit only when night temperatures are above 55 degrees F and when day time temperatures do not exceed 90 degrees F. Because of these temperature limitations, the total production season of a tomato plant is quite narrow and the successful gardener must make good use of this time to get in a good crop.

The best way to plant tomatoes is to set out 6-inch transplants beginning in mid-February in the northern and central parts of the county and in mid-March in the southern and eastern parts of the county. The eastern and southern parts of the county are a little higher in elevation and the resulting cooler temperatures delay the planting window.

Tomatoes can be planted from seed successfully, but seeding requires an additional six weeks to get the plants germinated and up to size. This means that seed must be placed in the ground or in pots for transplants in January with adequate cold protection to ensure that the plants will be ready to produce fruit at the earliest possible time.



The short-season varieties which will produce fruit in less than seventy days are the best for our area. The Cherry-type varieties and Early Girl are good examples of short -season varieties. Columbia and Rosa are also good varieties but these plants are extremely hard to find. Longer-season varieties are quite risky because of the looming hot weather waiting to sear late developing fruit. Celebrity is a popular variety and has proven consistent from year to year. Many avid tomato gardeners like it for its quick growth, good fruit setting capability and flavorful fruit.

GARDEN & LANDSCAPE

continued from page 3

The larger fruited varieties, like Beefstake and Better Boy should probably be avoided because they seem to produce a lot of vines but little fruit. Now I know that there are some of you out there that absolutely love these varieties and can cox them into fruiting. All I am saying is that quite often, for many growers in our climate, they simply do not meet expectations.

To beat the summer heat, it is important that tomato plants get off to a good start quickly. Proper soil preparation before planting and good nutrition and timely irrigation during the growing season will help build a productive vine in a short amount of time.

All tomatoes require good light in order to produce effectively, but they must be protected from the harsh, burning sunlight of summer. Many successful tomato gardeners plant their vines with an eastern exposure so that the plants get adequate sunlight during the less harsh morning hours while being protected from the intense heat of the afternoon. If you prefer to plant out in the open, rig a shade cloth of nursery fabric or burlap over the plants to protect both the vines and the fruit from afternoon heat. Stay away from planting beds next to a masonry wall with a western exposure. These areas almost always spell disaster for tomatoes.

Good soil preparation will encourage the development of the deep root system necessary to provide water and nutrients during the fruiting season. Our desert soils can easily become compacted making it difficult for plants to develop an adequate foundation for later growth. Loosen the soil by spading or tilling down to at least twelve inches and work in two to four inches of composted manure to help keep the soil from compacting again after the next irrigation. Roots need not only water and nutrients, but also air. A compacted soil which limits the availability of these essentials will slow and stunt the development of tomato plants.

Good soil fertility is essential. The new crop will need adequate nitrogen for growth but too much can burn tender roots and slow development. It is best to work in ammonium phosphate fertilizer during final soil preparation and before planting. This will allow the plant to have adequate amounts of both nitrogen and phosphorus as it begins the season. Additional nitrogen can be added a little at a time during the growing season to ensure that the plant does not run short at critical times. Nitrogen is best added during irrigations so that the water will carry the nitrogen down into the root system.



Protect your young, tender plants from cold and frost damage by placing a tall cage made of construction wire around the plant and cover the cage with a clear plastic to give a greenhouse effect. The plastic should be loose enough to provide some air circulation but tight enough to prevent frosty air from touching the plant. During warm days, loosen the plastic or remove it so that the plants will not burn from too much heat. The plastic should only be in place long enough to prevent frost damage. Once the danger of frost is past, it should be removed.

GARDEN & LANDSCAPE



Other devices can be used to provide cold weather protection. There are a number of frost-related products sold in garden stores that will provide protection. Some people use plastic milk containers filled with water to provide early warmth and protection for small plants. During the day the sun heats the water inside the containers. The warm water, in turn, provides heat during the cold night time hours to protect the plant.

Proper irrigation is essential . Blossom-end rot on the fruit and fruit cracking are considered to be the result of growth spurts followed by growth checks. Growth checks are usually caused by heat and irregular irrigations. Ensure that the soil moisture is adequate during the entire growing season, but do not keep the soil too wet or root rot may occur. The decision to irrigate or not to irrigate is a critical step in the management of tomatoes.

The soil around tomato roots should remain moist, but not sloppy wet. The lush leaves and stems of the tomato require substantial amounts of water to support the process of transpiration, the life process that plants use to keep themselves cool. Because the roots are constantly picking up water, the supply needs to be replenished regularly. The frequency and duration of irrigations is specifically dependent upon the type of soil in which the plant is growing. Sandy soils require more frequent irrigations, perhaps on a daily or every other day cycle, while clay soils may need to be irrigated only once a week.

To determine when to irrigate in your garden, dig down with a shovel or probe with a soil auger to a depth of about six inches and check the moisture levels in the soil. If the soil forms a tight ball and leaves a wet outline on your hand when you squeeze it, hold off irrigating until the ball of soil, while still cool to the touch, begins to crumble at the edges. The length of irrigation should be long enough to fill the entire root zone of the plant. Most tomato roots will be found in a band from ground level to about eighteen to twenty-four inches. Each irrigation should send water to at least this depth. Check your moisture depth with a probe or shovel. A probe will slip easily into moist soil but stop abruptly when it reaches dry soil. Place your fingers at soil level before pulling out the probe and you will be able to measure the depth of your irrigation.

It will be highly important to also manage the concentration of naturally-occurring salts in the soil by watering deep enough to leach these water soluble chemicals down and out of the root zone. Tomatoes are quite sensitive to high salt levels in the water and soil.

Good tomatoes grown fresh on the vine are possible in the desert as long as we understand the basics of good plant care.



AZ HEALTH ZONE





February is the month of love, but it is also Heart-Month. Instead of focusing on chocolates and candy, try out some fun, healthy, heart-related games and activities with your family.

- Heart Relay Races: Fun twists to the old relay race! Try the Egg-n-Spoon with a gelatin heart, stack candy hearts on a popsicle stick, Don't Break My heart with clothespins and a tissue heart, Heart Lava with large paper hearts that teams use to move across the room without falling into the "hot lava".
- Jump Rope for Heart: Grab some jump ropes and have some fun! Who can jump the most in a minute, who can go the longest without tripping, or come up with some fun new tricks.
- Hugs & Kisses: A variation of the Simon Says game where "Hug" is where you hold your hands above your head to form a circle like an "O" and "Kiss" is where you move into a jumping jack position with your arms and your legs out like an "X".
- Valentine's Scavenger Hunt: Create a hunt around your house, neighborhood, or community. For extra fun, have seekers hold/perform a certain exercise to get the next clue.
- Balloons: Grab some red or pink balloons (2 or more per players). Object of the game is to keep the balloons from hitting the ground for one minute. Or one balloon between two people, which they must get across the finish line without using their hands (hitting with their heads, chest, feet, etc.).
- Valentine's Day Tag: Freeze tag but once someone is frozen, they have to use their hands to make a heart on their forehead. In order to become unfrozen, a free teammate must run to a basket with valentine cards (the ones that kids exchange) and read it to the frozen teammate. (An alternate option would be to give a nice compliment to unfreeze them.)
- Board Game: Work together to create a fun heart healthy exercise board game on poster board or create new cards for old games (Candyland, Chutes & Ladders). Rename basic exercises to fun Valentine names (cupid crunches, lovebird lunges).
- Yoga: Create your own yoga studio within your home. Find free online videos or check out a DVD or book from the library.

So, instead of sitting on the couch sharing a box of chocolates, get out, share some laughs and make some heart healthy memories.



AZ HEALTH ZONE

CHOOSE MYPLATE

Submitted by Mary Wirth, Instructional Specialist

Whether you have a New Year's Resolution or are just trying make healthier choices, March is the perfect time to refocus on those goals or create new ones.

March is National Nutrition Month[®] and this year the theme is in its name: focus on nutrition, focus on making healthy, informed food choices.

Help you and your family discover the importance of good nutrition and a helpful and sustainable eating plan.

Here are 10 tips to help you prepare for this year's National Nutrition Month[®].

10 tips Nutrition Education Series



Based on the Dietary Guidelines for Americans

Use MyPlate to build your healthy eating style and maintain it for a lifetime. Choose foods and beverages from each MyPlate food group. Make sure your choices are limited in sodium, saturated fat, and added sugars. Start with small changes to make healthier choices you can enjoy.

Find your healthy eating style

Creating a healthy style means regularly eating a variety of foods to get the nutrients and calories you need. MyPlate's tips help you create your own healthy eating solutions—"MyWins."

2 Make half your plate fruits and vegetables Eating colorful fruits and vegetables is important because they provide vitamins and minerals and most are low in calories.

Focus on whole fruits

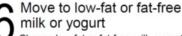
Choose whole fruits—fresh, frozen, dried, or canned in 100% juice. Enjoy fruit with meals, as snacks, or as a dessert.

Vary your veggies

Try adding fresh, frozen, or canned vegetables to salads, sides, and main dishes. Choose a variety of colorful vegetables prepared in healthful ways: steamed, sauteed, roasted, or raw.

K Make half your grains whole grains

on the ingredients list—try oatmeal, popcorn, whole-grain bread, and brown rice. Limit grain-based desserts and snacks, such as cakes, cookies, and pastries.



Choose low-fat or fat-free milk, yogurt, and soy beverages (soymilk) to cut back on saturated fat. Replace sour cream, cream, and could choose with low fat yogurt milk, and choose

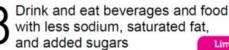


Vary your protein routine

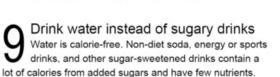
Mix up your protein foods to include seafood, beans and peas, unsalted nuts and seeds, soy products, eggs, and lean meats and poultry. Try main dishes made with beans or sea



and seeds, soy products, eggs, and lean meats and poultry. Try main dishes made with beans or seafood like tuna salad or bean chili.



Use the Nutrition Facts label and ingredients list to limit items high in sodium, saturated fat, and added sugars. Choose vegetable oils instead of butter, and oil-based sauces and dips instead of ones with butter, cream, or cheese.



10 Everything you eat and drink matters The right mix of foods can help you be healthier now and into the future. Turn small changes into your "MyPlate, MyWins."





FIRST SMILES





Oh, our weather outside's delightful, and the coughing's getting frightful!

My sincere apologies to Sammy Cahn for transposing the words to his song. The question being asked frequently right now is: "Is my toothbrush making me sick again?"

Our toothbrushes do an amazing job of removing bacteria from our teeth and tongue. Unfortunately, those bacteria don't all get rinsed down the sink. According to one study, there are about 100 million of the little creepy crawlies living on our toothbrushes. Some of those are from the 100-200 different kinds of bacteria that live in our mouths all of the time, some are viruses that are just passing through. Some of them are from the environment that we store our toothbrush in.

The viruses that cause colds and flu can live on a toothbrush for up to three days. The numbers that are living on the brush are very, very small when compared with what is in your body when you are sick. So, it is unlikely that you will re-infect yourself with a virus from your toothbrush. We can thank our immune systems for this!

Bacteria can live a bit longer on a toothbrush. And not all of the bacteria that make us sick, come from our mouths. Often toothbrushes are stored in a warm moist bathroom, which is a perfect "spa-like" environment for travelling germs! And speaking of travelling, when we flush the toilet in the warm, moist, "spa-like" bathroom, those bacteria **DO** travel. Studies done in the microbiology community say that bacteria can travel up to 6 feet when we flush.

So, take a look around your bathroom and see where you are storing the toothbrushes. For optimal toothbrush health, it would be best if they are stored more than 6 feet away from the toilet. It is best to keep them where they can air dry. Putting little caps on the toothbrush may seem like a good idea, but it keeps them too wet and that is a perfect environment for bacteria and virus creepy crawlies to thrive. Place toothbrushes where there is some space between them. Sharing is a wonderful thing to do, but not when it comes to toothbrushes and the things that can live on them.

Toothbrushes need to be replaced about every three months just because they wear out and are no longer effective. Children's toothbrushes may need to be replaced sooner if they tend to chew on them. If you've recently replaced a toothbrush and want to disinfect it, there are a few ways to do it. You can soak it in anti-bacterial mouthwash or hydrogen peroxide for about 20 minutes then rinse it with water and let it air dry completely. If it is not battery operated, it can be put into your dishwasher. Don't use dishwasher soap and be careful with the heat-dry setting as it may affect the plastic. During the cold and flu season particularly, it is good practice to disinfect toothbrushes about once a week.

These few simple practices can help us have healthy, happy smiles!

DEVELOPMENTAL & SENSORY SCREENING

井 FIRST THINGS FIRST

THANK YOU LETTER Submitted by Jennie Treadway, Program Coordinator

My Avery (the little one with glasses) got her eyes checked when she was 1 1/2 years old when you guys came out to Legacy Montessori Preschool to do your exams.

We are so very grateful for your service and identification of her deviation that day. If it had not been for you, we would never have known that she was also 6+ far sided.

Because of your exam, we followed your recommendation and took her to a pediatric ophthalmologist where she was diagnosed further. was prescribed glasses and patch wearing for the next 6 months and is now wearing glasses only and being rechecked every 3 months for vision or deviation changes.

She instantly became a new child after this diagnoses. As a baby, she would rarely smile, look at you or put her feet in her mouth like a normal progression. would not be interested in coloring, was an unhappy baby and seemed to not be aware of her surroundings, warried she may have some

not be aware of her surroundings. worried she may have some delay.

As parents, we felt a disconnect with her and at times felt very frustrated and worried about her.

After she got her glasses, that all changed. became immediately smiley, happy, interested in everything, colored, looked at our faces, and ate and slept better. is a very smart, loving, capable 2 1/2 year old now and currently loves her glasses.

We are forever grateful and appreciative of your service. It has changed her life and ours.

Thank you,

Celeste Templin



4-H YOUTH DEVELOPMENT

We're Social—Follow Us!

Submitted by Misti Todd, Program Coordinator

Like, Love, Comment, Share, Pin, Tag, Tweet, Repeat!

Let's Socialize! Be the first one to know what is happening with The University of Arizona, Cooperative Extension, Pinal County 4-H. Join our online community, stay in the know and get exclusive news/updates! Help us spread the word, you are just a scan away!



Website: http://extension.arizona.edu/4h/pinal



Instagram: pinalcounty4h



Twitter: @Pinal_County_4H



Facebook: @pinalcounty4h

GEARING UP FOR PINAL COUNTY FAIR

Pinal County 4-H Club leaders and members are gearing up for fair. Pinal County Fair will be held March 18th-24th for 4-H members.

We are excited to see all of you and recognize the hard work you have done on your projects!

Be sure to check our website and all our social media pages for the most up to date information.

PINAL COUNTY 4-H EXPO-MARCH 2, 2019

New this year...4-H members will be able to demonstrate their skills in Public Speaking, Performing Arts, Videography, Hippology, Fashion Review, CloverBud Displays and so much more!

Events will be held at Pinal County Fairgrounds.

Save the date and start preparing for these new opportunities. Check out our webpage for upcoming information.

https://extension.arizona.edu/4h/pinal

MASTER GARDENER

PLANT DIAGNOSIS CLINIC

Submitted by Rick Gibson, Extension Agent, Agriculture

Arizona Master Gardeners are University-Trained Volunteers who serve as community educators.

Master Gardeners work with the University of Arizona, providing research-based information on environmentally responsible gardening and landscaping to the public.

After completing a semester long course, concentrating on gardening and the environment, Master Gardeners Associates volunteer to serve their communities.

Master Gardeners hold plant sales in many counties across Arizona, host workshops, as well as answer questions related to plant identification and diagnosis.

Have a sick plant or just questions about caring for your plants?

Visit our Plant Diagnosis Clinic held every **third** Thursday of the month from 9am to Noon at the University of Arizona Cooperative Extension, Pinal 820 East Cottonwood Lane, #C Casa Grande, AZ 85122 Don't have time to stop by? Call or Email us!

Call the Maricopa Agricultural Center Master Gardeners at (520) 374-6263, Monday - Friday, 9am-Noon otherwise, please leave a message! -or-

Email the Master Gardeners at <u>macmastergardener@gmail.com</u>. Send a picture with any information you can provide about the plant and your contact information.

Master Gardener

GARDEN & LANDSCAPE SHORT COURSE

Submitted by Rick Gibson, Extension Agent, Agriculture

Learn How to Garden in the Desert

The Garden & Landscape Short Course is a study of gardening and landscaping in Pinal County. Materials will include the course curriculum and handouts from each class.

The next short course will run from February - June, sessions in Casa Grande, there is a registration fee of \$150/ person or \$225/2 people. For more information, please contact BJ Seemuth 520.431.6167/<u>bjseem@cox.net</u>.

Registration form and payment must be submitted to the Pinal County, Cooperative Extension Office at 820 East Cottonwood Lane, #C, Casa Grande, AZ 85122. Checks must be made payable to <u>The University of Arizona</u>. We are not set-up to accept payment via credit or debit cards. **Pre-Registration is required!**

Instruction will be given by Rick Gibson, County Extension Agent and guest speakers who are recognized experts in their fields.

Topics include (class topics are subject to change without notice):

Basic Botany	Soils	Native Plants	Vegetables and Flowers
Irrigation	Citrus	Turf	Arboriculture/Pruning
Plant Pathology	Plat Diagnosis	Entomology	Integrated Pest Management

Registration for the Garden & Landscape Short Course

Name:		Phone:		
Address:				
City:	State:	Zip:		
Email Address:				
□ Casa Grande (820 East Cottonwood Lane, #C, Casa Grande, AZ 85122)				

PINAL COUNTY OFFICE OUTREACH

PINAL COUNTY ELECTRIC LIGHT PARADES Submitted by Esther Turner, Program Coordinator, Sr.

Pinal County is home to many Holiday Parades and activities. We join families in our community to celebrate the festivities, share holiday cheer and promote our Cooperative Extension Programs.

For the past 5 years the University of Arizona, Cooperative Extension, Pinal County has participated in the Casa Grande & Eloy Electric Light Parades.

Experience the holiday joys in our communities and who knows...You might see us!



WE BELIEVE IN Making a <mark>Difference</mark>



3log: <u>ricksgardenspot.blogspot.com</u>

Webpage: CALS, Pinal County Twitter: @RickGibson4 ind Us. Like Us. Follow Us.

Facebook Pages:

- Pinal County Garden and Landscape Program
- <u>Maricopa Master Gardeners</u>
 - Pinal County 4-H
- hild Care Health Consultation for Pinal County, AZ

 - Sensory & Developmental Screening

Cathy L. Martinez, Cooperative Extension County Director Richard D. Gibson, Regional Director Victor Jimenez, 4-H Youth Development Agent Blase Evancho, Field Crops Systems Assistant in Extension clmartin@cals.arizona.edu gibsonrd@cals.arizona.edu vicjimenez@yahoo.com bee1@cals.arizona.edu

4-H provides educational opportunities for youth to become capable and contributing members of a global community. Children, ages 5-19, learn about healthy lifestyles, animals, plant sciences, and leadership. Contact: Misti Todd at (520) 836-5221, x213 or mltodd@email.arizona.edu

ASPIRE (Achieving Success by Promoting Readiness for Education and Employment) is a program designed to help foster independence in youths with disabilities between the ages of 14-16, and ultimately improve their educational and employment opportunities.

Contact: Cathy Martinez at (520) 836-5221, x203 or clmartin@cals.arizona.edu

AZ Health Zone is a program designed to influence healthy eating and active living in a positive way that promotes health and reduces disease among all people living in Arizona. Contact: Lori Lieder at (520) 836-5221, x216 or llieder@cals.arizona.edu

Child Care Health Consultations (CCHC) develops relationships with childcare facilities to provide training to staff that will improve their knowledge and practice in the childcare setting. Contact: Janet Jepsen at (520) 836-4651 or janetj@cals.arizona.edu

Choose Health Action Teen (CHAT) is designed to recruit teens to teach younger children the benefits of healthy eating and active living. Teens also participate in community service events. Contact: Esmeralda Castillo at (520) 836-5221 or ecastill@cals.arizona.edu

Developmental Program reaches out to families with children, ages 0-5, to screen for early developmental milestones such as gross and fine motor skills, communication, personal-social skills, and problem-solving capacities. Contact: Esther Turner at (520) 836-5221, x211 or eturner@cals.arizona.edu

Expanded Food and Nutrition Education Program (EFNEP) is a nutrition education class designed to assist limited resource families in eating smart and being active and in acquiring the knowledge, skills, and behavioral changes necessary to contribute to their personal development and the improvement of the total family diet, nutritional and physical well-being. Contact: Esmeralda Castillo at (520) 836-5221 or ecastill@cals.arizona.edu

Field Crops Systems uses research and education efforts to work to improve field crop productivity and global food and fiber supply, farm economic viability, and protecting the environment. Contact: Blasé Evancho at (520) 836-5221, x215 or bee1@cals.arizona.edu

First Smiles is an oral health program that provides preventative oral health education, oral screening, referral to dentists for children birth to age five and pregnant women; and fluoride varnishing for children with emergent teeth up to age five. Contact: Greeta Mills at (520) 836-4651 or gmills@email.arizona.edu

MAC (Maricopa Agricultural Center) Farm Ag-Ventures educational programs include a combination of videos, educational presenters, hands-on learning experiences and tractor-trailer rides around their 2,200 acre farm for a close-up view of what makes a working farm operate.

Contact: Victor Jimenez at (520) 374-6216 or vicjimenez@yahoo.com

Master Gardener Program trains volunteers to provide up-to-date, locally tested practical information to those desiring to improve the quality and effectiveness of desert gardens and landscapes. Contact: Rick Gibson at (520) 836-5221, x227 or gibsonrd@cals.arizona.edu

Project WET (Water Education for Teachers) is a program designed to teach educators how to better integrate water education, water conservation, and best management practices for water use into their curriculums. Contact: Chuck Dugan at (520) 836-5221, x210 or cld1@email.arizona.edu

Sensory Program provides free screenings of children, ages 0-5, for vision and hearing impairments that could affect developmental growth. Contact: Esther Turner at (520) 836-5221, x211 or eturner@cals.arizona.edu

Soil Fertility Research and Education is a program that focuses on the development of research and education on soil testing, nutrient management, and fertilizer and animal waste best management practices. Contact: Rick Gibson at (520) 836-5221, x227 or gibsonrd@cals.arizona.edu

Strengthening Families Program is a parenting and family strengthening program for families with children ages 3-5, that focuses on strengthening parental bonds with their children and learning more effective parenting skills. Contact: Esther Turner at (520) 836-5221, x211 or eturner@cals.arizona.edu