Seeking Rio Arriba Cooperative Extension Service Advisory Council Members

We are happy to say that spring will be here soon! The birds are already chirping in the trees, and we see tulips appearing in the flower beds. First of all, we would like to thank all of our e-newsletter readers, whether you are reading online or hard copy. We hope you find the information useful, and we look forward to any requests for information that we are able to provide.

Many of you may know the Rio Arriba Cooperative Extension Service hosts a quarterly Rio Arriba Cooperative Extension Service Advisory Council meeting. Cooperative Extension Service is the educational outreach organization for New Mexico State University. The Rio Arriba Cooperative Extension Service Advisory Council assists our office with program direction on a grassroots level. Representation from all parts of the county is key to assisting our organization in tapping into the needs of the community. Therefore, we invite those of you that are interested to attend our next meeting at the Rural Event Center in Abiquiu, NM at 12:30 pm. on March 18, 2015.

A light lunch will be served beginning at 12:00 noon. Please RSVP by calling 505-685-4523. Thank you for your consideration of this request.
Happy New Year folks. As I travel around the county I see an abundance of sagebrush (Chamizo) as we call it here in Rio Arriba County. Thought this experiment may be of some interest.

Many areas in the Western United States are dominated by sagebrush. The increase in sagebrush density over the past century is generally attributed to:

1. reduced numbers of mixed feeders and browsers such as deer, antelope, goats and sheep,
2. increased numbers of cattle and elk,
3. repeatedly grazing the same grasses and forbs, particularly during spring, and
4. fire suppression.

Though the decline in diversity is due in part to grazing, grazing may in fact be the answer to improving plant diversity and wildlife habitat in sagebrush-steppe ecosystems. For example, if sheep and cattle graze sagebrush during the fall, when grasses and forbs are dormant, we reduce sagebrush’s competitive advantage, leaving more room and resources for the grasses and forbs in the next growing season.

Research at Utah State University has shown that energy and protein supplements in the form of hay and alfalfa pellets or range cubes help livestock detoxify the terpenes found in sagebrush and can even double the amount of sagebrush they eat. In addition, some studies suggest that rumen microbes may need to adapt to sagebrush in order to use it. Researcher Chuck Peterson used this information to help cattle on Agee Smith’s Wells, Nevada ranch to begin eating sagebrush. After learning about this at a talk by Utah State University’s Dr. Fred Provenza, Mat Carter, an Oregon rancher, decided to try to use sagebrush as winter-feed and as a way to grow more grass for his cows.

That following winter, he corralled 150 cow-calf pairs with electric fence on 5 to 10 acres for 3 days and fed them 15 to 20 lbs of meadow hay. The pastures were a mix of low and big sagebrush, gray and green rabbitbrush, bitterbrush and an understory of grasses. Grazing decreased the amount of brush and increased grass and new sagebrush seedlings.

The following year, Mat used 400 dry pregnant cows. That year snow cover was light so he fed 3 to 10 lbs/hd/day of meadow hay and moved his cows about every 3 days. The amount of hay fed depended on weather and available forage. Mat noted that as he turned his cattle onto a new strip some ate grass, others bitterbrush and others sagebrush.

In 2007-08, he grazed rangeland where the canopy cover of big sagebrush was 50 to 70%. Some of the shrubs stood 4 to 6 feet tall. Snow was deep that year, 2 to 4 feet. For about a month his cattle were fed 10 to 15 lbs/hd/day of hay. The rest of their diet was sagebrush.

In 2008, he leased some cattle and trained them to eat sagebrush. Snow was deep so only sagebrush was available. He started feeding 20 lbs of hay and over a 2-week period he reduced hay to 6 lbs/hd/day. Cattle were in good body condition when they came to the ranch and remained in good condition throughout the winter.

Besides saving on hay and increasing the amount of grasses and forbs on his rangeland, Mat has noted several other benefits to using sagebrush as winter forage. His cattle eat sagebrush even when other forage is available. They also eat plants he had never seen them eat before like stinging nettle, whitetop, lupine and various wild flowers. Finally, when cattle graze sagebrush rather than hay, they require less water.
If you’re considering trying this, be sure to consider the kinds of animals you’ll be using. Mat calves in June so during the middle of winter his cows have relatively low nutrient requirements. Browsing sagebrush has had no adverse effect on his calf crop and his cattle seem to breed back just fine and he’s found no down side to encouraging his cattle to eat sagebrush. But you should be aware that not all animals will gain weight well. Chuck Peterson found that calves tended to gain weight during the feeding trials, smaller framed cows generally maintained their weight or gained, and larger framed cattle tended to lose weight, and animals inexperienced with grazing sagebrush lost more weight.

The upside with helping cattle become better sagebrush grazers are changes in the forage in pasture. Chuck Peterson found that Fall grazing was increasing the understory of grasses and forbs and changing the age class structure of the sagebrush in the treatment plots. The graphs below show data from Chuck’s plots (grazed and not grazed) that were grazed in 2007 and then sampled in July of 2009 for percent cover, production, and % species composition. In general, grazed plots contained more grasses and forbs and less sagebrush and other shrubs.

This is good news for both cattle and the other wildlife that share their habitat.
Spring time is around the corner fellow farmers! From time to time I get questions asking how they can have their soil samples tested for molybdenum, cobalt, or selenium. Each of these elements, along with many others that aren’t tested routinely in soils, is important. In some cases, these nutrients are required by the plants, while in others they may be required by us for food, by our livestock for feed, by other organisms that live in the soil, or a combination of these. So should we ask for soil tests to determine whether we need to do that? Maybe yes, maybe no.

**Molybdenum** is a key element in enzymes that plants need to be able to metabolize nitrogen. It’s a component of the nitrogenase enzyme that *Rhizobial* bacteria in legume roots use to fix atmospheric nitrogen and it’s essential for every plant to be able to grow. Molybdenum is required by plants in concentrations that are among the lowest of any of the plant-essential nutrients. Most micronutrients are more available to plants at acidic (low) pH levels, but molybdenum actually becomes more available as soil pH comes up. Except for extremely sandy soils and some acidic peat soils, most soils will supply enough molybdenum for good plant growth if the pH is above 6. Soils that are derived from granite, shale, and young volcanic materials often have higher levels of molybdenum, and so do mineral soils with high organic matter levels. Because the level of molybdenum that plants need in the soil is so low, it makes it harder to test for, so plant analysis is a more reliable way to know if you need to apply this micronutrient.

**Cobalt** is another element that’s needed by plants at very low concentrations. It’s also a component of the nitrogenase enzyme that *Rhizobial* bacteria in legume roots use to fix atmospheric nitrogen and has recently been recognized as being essential for all plants to live. It’s also a component of Vitamin B12, so it’s essential for plants to be able to produce the quality of food and feed we all need for good nutrition. So far, we don’t know how to interpret soil tests for cobalt, so it probably doesn’t pay to have soils tested for this nutrient.

**Selenium** is different from molybdenum and cobalt in that it’s not universally required for plant growth, but it is an extremely important nutrient for livestock and human health, and probably used by many other soil organisms as well. It can be a tricky element to balance in rations because the concentration where it’s “just right” is narrow, and too much can be as bad as, or even worse than, too little. Various regions in the United States have low, variable, or high levels of selenium that are reflected in the selenium content of the forages and grain crops from those areas. Because selenium isn’t needed by the plants themselves, it’s better to rely on feed testing to know if your soil is supplying enough selenium. If it doesn’t, we’ve traditionally relied on supplementing selenium to livestock instead of fertilizing the soil with it, but recently we’re becoming aware that adding selenium to soils where it’s deficient may indeed be practical. Even so, feed testing is still more reliable than soil testing to see if the crops we raise are getting enough of this vital nutrient.

Although all of these elements are very important, so far it doesn’t make sense to use soil testing to determine if we should apply them to the soil. Even though it’s technically possible to test soil samples for each of these, we can’t tell if they are deficient in the soils based on those tests. Testing feed or plant tissue samples to see if they have adequate levels is a better approach.

We can send plant tissue samples down to our main campus for diagnostics. If that is a need please feel free to give me call. Happy Planting!
Rio Arriba County 4-H
Submitted By: Marcella Talamante, RAC CES 4-H Agent

TEACHING THEM HOW TO THINK; NOT WHAT TO THINK...

SENIOR FELLOWSHIP LOCK-IN

COUNTY LEADERSHIP TRAINING

4-H DAY AT THE ROUNDHOUSE

New Mexico State University is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating.
TOP TEN SIGNS THE U.S. IS BUILDING A CULTURE OF HEALTH

Submitted By: Desaree Jimenez
RAC CES Home Economist

Last January the Robert Wood Johnson Foundation (RWJF) alerted the world to its new strategy: To build a Culture of Health for all, one that would allow every one of us to make healthy choices no matter where you live. We are now asking the question -- How are we doing? Answer: Pretty good, as it turns out. Here are the top 10 signs that America is moving towards a Culture of Health.

10. Kids are beginning to slim down.
Research published in February shows continued signs of progress toward reversing the childhood obesity epidemic: Obesity prevalence among 2 to 5 year olds dropped by approximately 40 percent in eight years, a remarkable turnaround. There is still lost of work to do in this area, but at least our youngest kids can look forward to a healthier future.

9. Kids are also eating healthier lunches—and liking them.
In July, a study funded by RWJF revealed that 70 percent of elementary school leaders nationwide said their students generally like the healthier school lunches that rolled out in fall 2012. Middle school students (70 percent) and high school students (63 percent) also reported liking the meals.

8. Mobile Health (mHealth) has arrived! Silicon Valley is working on developing mobile apps that will help us get healthier.
When Apple introduced its latest iPhone in June 2014, much of the excitement was around Healthkit, a new mobile app that will help consumers track their health. Google, Samsung, and Microsoft also rolled out health tracking devices and/or platforms this year. These metrics are intended to motivate consumers to take more responsibility for their own healthcare and wellness – results remain to be seen.

7. The new trend in offices—sitting is bad, walking is good.
A Washington Post illustration showing the dangers to our health of sitting all day became wildly popular this year, and more people started taking their meetings on foot. New Mexico State University employees are finding the treadmill desk increases activity and pumps fresh blood and oxygen through the brain reducing “foggy brain.”

6. Cycling.
2014 could be called the year of the bicycle. At least 36 urban areas now have bike sharing programs, up from just six four years ago. Even small cities and towns are embracing pedal power. New Mexico has a tremendous biking culture with strong participation in all forms of cycling: road, mountain, cyclocross, BMX, tri-, cruiser, commuter, competitive and recreational.

5. Workplace wellness programs are spreading—even cigarette makers are getting with the program.
Over the next three to five years, 48 percent of employers intend to put in place workplace wellness programs that improve productivity and reduce absences. Among the more surprising ones—in October, Reynolds American, the second-largest U.S. cigarette company, announced that smoking is banned inside its facilities. “We believe this is the right thing to do and the right time to do it,” a Reynolds American spokesman told U.S. News & World Report.

4. CVS Health kicks the cigarette habit and demonstrates that good health is also good business.
In September CVS stopped selling all tobacco products in its 7,700 stores nationwide, forgoing $2 billion in annual sales. It is the only national drugstore chain so far to take this important step. “Tobacco just doesn’t fit in,” said CVS’s chief medical officer. CVS’s stock price rose on the news.
TOP TEN SIGNS THE U.S. IS BUILDING A CULTURE OF HEALTH — CONTINUED

3. California voters pass the nation’s first city tax on soda.
In November voters in Berkeley, Calif., passed the nation’s very first tax on sugary drinks. Proponents of the Berkeley tax say the fee will help curb consumption of sodas, energy drinks and sweetened iced teas, drinks that are believed to be contributing to the nation’s obesity epidemic.

2. College campuses are becoming hotbeds of health.
There are now 1,477 tobacco-free college campuses (Oct. 2014), up from 446 just four years ago. Of these, 975 are 100% tobacco-free, and 291 prohibit the use of e-cigarettes anywhere on campus. In New Mexico, UNM became a tobacco-free campus in 2009. NMSU and most other campuses have a smoking policy. Currently, NMSU is considering a ban on all tobacco products.

The infamous Freshman 15 has shrunk to a Freshman 3 to 6 at many campuses. (It is worth noting that this weight gain trend is scientifically unsubstantiated.) The Princeton Review now rates college health facilities. A sign perhaps, that the 20-something generation will create their own Culture of Health.

And finally, the Number One sign that we are making progress:

1. Thanks to the Affordable Care Act, some 13 million formerly uninsured people are now covered by health insurance.
The rate of uninsured people in the U.S. dropped by more than 30 percent from September 2013 to September 2014. As of December 2014, more than 17 thousand New Mexico Residents had completed their enrollments through the Exchange. Health insurance carriers in the NM exchange are predicting up to 55,000 enrollees in 2015. There were 34,000 enrolled in 2014.


SATISFY YOUR SWEET TOOTH

Craving something sweet? Instead of candy try having dried fruits like cranberries, cherries, or raisins.

Source: Choose My Plate

Healthy Habits

We don’t have to be athletes to make physical activity a lifetime habit. Instead, focus on having fun & learning new skills.

Source: My Plate
http://www.choosemyplate.gov/physical-activity/increase-physical-activity.html
EMERGENCY PREPAREDNESS FOR FEBRUARY/MARCH
Submitted By: Desaree Jimenez, RAC CES Home Economist
Source: http://www.fema.gov/

When it comes to being prepared for emergencies, there is an exciting web-based program out designed to prepare your family for emergencies throughout the year. The theme for February is “Do One Thing.”

Water is an essential element to survival and a necessary item in an emergency supply kit. During the month of February, take action to store three days worth of water for your household.

“Do 1 Thing” offers the following list of ways to achieve this goal:

- Purchase and store a 72-hour supply of commercially bottled water.
- Bottle a 72-hour supply of water at home.
- Learn how to provide a safe supply of drinking water for your household in a disaster.

By completing one of these actions, you’ll be better prepared for the unexpected emergency. Also, you will be participating in America’s PrepareAthon!, a national campaign to prepare for hazards specific to your community through drills, group discussions, and exercises. Register your action on the campaign’s website. Be counted among the two million preparedness actions already taken by families, business and organizations across the country leading up to National PrepareAthon Day on April 30, 2015.

SAVE MONEY WITH EASE
Looking to save money? Go for water next time you’re thirsty—it’s usually easy on the wallet. Keep reusable containers full of water in your fridge for easy access at home or on the go.

Source: Choose My Plate

SMILING CHANGES OUR MOOD
Next time you are feeling down, try putting on a smile. There’s a good chance your mood will change for the better. Smiling can trick the body into helping you change your mood.

http://longevity.about.com/od/lifelongbeauty/tp/smiling.htm

HANDLE WITH CARE

Keep your food safe!
Wash your hands, utensils & cutting boards before and after contact with raw meat, poultry, seafood & eggs.

Source: Keep Your Food Safe
Soup Up Your Meals For People with Diabetes

A great way to warm up during the cold winter and spring days is to enjoy a bowl of steaming soup. While they are often served as appetizers or side dishes, soups also make satisfying main dishes. They are generally easy to prepare and clean up, plus there are countless ways to pack them with the nutrition your body craves. Use some vegetables from your refrigerator, freezer, or cabinets, and add other ingredients you have around that need to be used. You will often find that soup costs you less than $0.50 per serving!

How does soup fit into meals for people with diabetes? Soups can help you meet your body’s nutrition needs and appetite while keeping carbohydrates in check. Prepare a soup with low-carbohydrate vegetables, lean protein, and optional high-carbohydrate ingredients (e.g., beans, whole grains, or starchy vegetables). Add a salad and perhaps a slice of whole-grain bread, and your meal is ready.

Aren’t soups high in sodium? Many soups from cans and restaurants are high in sodium. Because people with diabetes have a higher risk of cardiovascular disease, use low-sodium ingredients when preparing soups. Fresh and frozen vegetables are low in sodium. Canned vegetables can also be a good option. Buy cans that say “no salt added” on the label when possible, or drain and rinse the vegetables before using them. Choose reduced-sodium broths as the liquid, or make your own broth and season it with herbs and spices.

Is fat a concern? Those at risk of cardiovascular disease should choose fats wisely. Minimize saturated and trans fats. If using meat or poultry as the protein in the soup, buy lean cuts and trim visible fat first. You can stretch the flavor of meat and poultry in soups while keeping portion sizes reasonable by cutting them into small pieces rather than chunks.

Cooked or canned beans may be added to boost the protein and fiber of soups or can replace the meat and poultry for a meatless meal. When using canned beans, buy low-sodium ones when possible. Rinse all canned beans before adding them to the soup. Remember that beans are a high-carbohydrate food, so balance the rest of your meal accordingly.

Several other sources of fat may be found in soups. Broth-based soups are usually lower in fat and calories than cream-based soups. If you like creamy soups, consider adding a little fat-free evaporated milk or a dollop of fat-free or light sour cream to a broth-based soup before serving. Many people like to add cheese to their soup. Some part-skim cheeses like mozzarella melt nicely, while other reduced-fat cheeses do not. If you like cheese in your soup but want to keep fat to a minimum, try adding a small amount of a strong-flavored cheese. For example, sprinkle on a little extra sharp cheddar or parmesan cheese.

How much time does soup take to make? This is the best part. Many soups take less than thirty minutes to prepare and serve. If you want your soup to simmer for hours to enhance the flavors, consider using a slow cooker. It uses less electricity than an oven, will not overheat your kitchen in the summer, makes less-expensive cuts of meat tender, and you can put the ingredients in and leave it for hours until it is time to eat. Most slow cookers will cook food in four to six hours on the high setting and six to 10 hours on the low setting. Because vegetables take longer to cook, put them in the slow cooker first, followed by any meat or poultry and then the liquid.

Safety. As with all food preparation, wash your hands before and after and whenever you switch food types (e.g., after cutting meat) or touch anything that could contaminate food (e.g., your clothing or phone). Use clean equipment, utensils, counters, and cutting boards. If you are using a slow cooker, meat and poultry must be thawed before cooking. Thaw them in the refrigerator, not on the counter. Cut meat and poultry into small pieces to make sure they cook thoroughly. Use a separate cutting board and knife to cut vegetables. Fill the slow cooker at least half full and no more than two-thirds full. Keep the lid on during cooking. If possible, use the high setting for the first hour of cooking and then use the setting that fits your schedule. Refrigerate any leftovers in shallow containers, not deep ones like the slow cooker or pot. Do not reheat leftovers in your slow cooker. Use the stove or microwave to reheat them to 165°F and then transfer them to the slow cooker if you want to keep them warm during serving.

Source: Cassandra Vanderpool, MS, RDN, LD, NMSU Extension Diabetes Coordinator
Jump Rope for Hearts
By: Grace Keilbach

“We jump. We shoot. We save.” That is the motto for the month of February’s service project. The past few weeks, students have been working hard in gym class to not only help their hearts, but others too. During gym students have not only participated in a variety of heart healthy physical activities, but we have also been learning about the heart and how to stay healthy. We have been raising money for the American Heart Association to help children who aren’t as fortunate as us. If you would like to donate, please send whatever you can to school with your child to give to Miss Roybal. If you donate $5 or more, you get a rubber duck. We would also like to give a huge thank you to Miss Roybal’s mom, Anna Roybal, for coming from New Mexico to help educate us on healthy nutrition. Thank you!
**RECIPE FOR FAVORITE VEGETABLE SOUP**

**INGREDIENTS**

½ lb ground chuck (this is a cut of beef)  
7 cups peeled, chopped fresh tomatoes or  
2, 28-oz. cans no salt added diced tomatoes  
4 cups water  
1, 14.5-oz can no salt added cut green beans, drained, rinsed  
1, 15-oz can no salt added peas, drained, rinsed  
1, 15.25-oz can no salt added corn, drained, rinsed  
2 medium carrots (3 oz each), peeled and chopped  
3 medium potatoes (5 oz each), peeled and diced  
1 medium onion (5 oz), diced  
1/4 cup dry rice  
1/8 teaspoon ground black pepper  
1/8 teaspoon red pepper flakes  
1/2 teaspoon salt  
1/2 teaspoon garlic powder

**INSTRUCTIONS**

1. Place ground chuck in a 2-gallon stockpot and brown over medium heat. Remove meat and drain it well. Wipe drippings from pot.
2. Return meat to stockpot, then add tomatoes and water. Bring to a simmer and cook, covered, until tomatoes are soft and a juicy broth is created, about 20 minutes.
3. Add remaining ingredients, cover, and continue cooking 60 additional minutes to allow flavors to blend.

Recipe serves 14. Each 1 cup served provides:

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Kitchen Creations
A cooking school for people with diabetes

Have fun as you learn how to enjoy your favorite foods in a healthy way and prepare new recipes from the 4-Ingredient Diabetes Cookbook and New Mexico Recipes.

A SERIES OF 4 COOKING CLASSES

- Learn to plan healthy meals
- Prepare delicious dishes that manage carbohydrates
- Reduce fat, sugar, and sodium in cooking without cutting taste

In addition to preparing and tasting healthy dishes, class participants will receive a workbook and recipe books.

Class location TBA
Registrants must attend all 4 classes.
Class dates: April 6, 9, 14 & 16, 2015
5:30 to 8:30 pm
Contact person: Desaree Jimenez

Pre-registration is required, so please call the Extension Office today!
505-685-4523

People with diabetes have first priority. This program is funded by the NM Department of Health Diabetes Prevention and Control Program and the NMSU Cooperative Extension Service.
Rio Arriba Cooperative Extension Service, the City of Española and the Lucero Center present:

**THE STRONG WOMEN STRONG BONES PROGRAM**

A Research Based Strength Training Program for Women and Men 50 Years of Age and Older – anyone over 18 may participate

12 Weeks
Mondays & Wednesdays
January 12th
To April 8th, 2015
10:00-11:15 a.m.
Cost $45.00

Includes
24 sessions
All Equipment will be provided

Series taught by:
Professionals trained in the
Strong Women Program

**Location:** Lucero Center
313 Paseo de Onate
Española, NM

**Benefits of Regular Strength Training include:**
- Improved bone density
- Increased muscle mass and strength
- Reduced risk for osteoporosis and related fractures
- Improved self-confidence, sleep and vitality
- Reduced risk for diabetes, heart disease, arthritis, depression & obesity

Pre-registration for the 12-week series is requested and each class is limited to 25. **Registration deadline** is February 25, 2015. A doctor’s release is required. Call 505-685-4523 for more information.

For more information on the Strong Women’s Program contact Desaree Jimenez, Rio Arriba Cooperative Extension Service, 505-685-4523.

If you are a person in need of special services, call the number above two (2) weeks before the program.

New Mexico State University is an equal opportunity educator and employer.
NMSU, Rio Arriba County and the U.S. Department of Agriculture cooperating.
The mission of the Cooperative Extension Service (CES) is to provide the people of New Mexico with practical, research-based knowledge and programs to improve their quality of life. The base programs of the Cooperative Extension Service are agriculture and natural resources, consumer and family issues, youth development, and community economic development.

The Cooperative Extension Service is the community education arm of New Mexico State University (NMSU). CES faculty members are attached to all 33 county governments and many tribal areas in New Mexico. Backed by state, federal and local funding and statewide faculty specialists, the Cooperative Extension Service is a cooperative effort between NMSU, the U.S. Department of Agriculture, and county governments.