Dallas County
Annual Report

Courthouse, P.O. Box 1070
Buffalo, MO  65622
Tel: 417-345-7551
http://extension.missouri.edu/dallas/
Office Hours: Mon - Fri., 8:00 - 12:00 &1:00 to 4:00

University of Missouri Extension does not discriminate on the basis of race, color, national origin, sex, sexual orientation, religion, age, disability or status as a Vietnam-era veteran in employment or programs.
Extension’s Program Guidance Comes From You

The University of Missouri Extension council and staff would like to thank the Dallas County Commissioners for their support and funding for programs during this past year. In turn, the council and staff remain committed to improving people’s lives by helping them meet the opportunities and challenges of the 21st century with research-based education and information.

County residents decide the direction of extension’s educational programming. Current emphasis areas in Dallas County focus on:

- Agricultural Profitability and Viability
- Productivity of Horticultural Crops
- Community and Economic Development
- Children, Youth, and Family Development
- Health and Wellness Education
- Business Development

The mission of University of Missouri Extension is to: "serve Missouri by extending the unbiased research-based knowledge and problem-solving resources of the University of Missouri to focus on high-priority needs of people throughout the state."

The contents of this report are a brief summary of some of the highlights of our educational efforts during the past year. We hope that this report provides a greater understanding about University of Missouri Extension programming in Dallas County.

Submitted by,

Greg Whipple  Carrie Hulsey  Andy McCorkill
Greg Whipple  Carrie Hulsey  Andy McCorkill
Council Chairman  Council Secretary  County Program Director
January 5, 2017

Dear County Commissioners and Friends of MU Extension:

The past year was a busy one for University of Missouri Extension. As a long-time extension professional and newcomer to Missouri, I have found the support from people like you to be remarkable. Missouri is a special place with a promising future.

Through the efforts of faculty, staff and amazing volunteers, MU Extension connects millions of Missourians with knowledge they put into action in their daily lives. Using a range of learning experiences, we reach people of all ages and backgrounds, in every corner of the state.

In response to direct input received from local councils and the unique nature of each county, extension programs vary slightly across the state. This strength of local flexibility and public engagement enables county-based Mizzou faculty to provide local learning experiences that improve lives and community vitality. For example:

- MU Extension business specialists helped local Missouri businesses achieve sales increases of $186 million while creating or retaining 7,766 jobs.
- Helping assure access to health care in local communities, MU Nursing Outreach made it possible for 2,094 nurses keep their skills up to date.
- Our 4-H youth development specialists and other extension team members worked with volunteers and community leaders to reach 269,000 youths ages 5 to 18 across the state.
- Anticipating the needs of Missouri’s aging farm population, extension faculty developed workshops that target estate planning, succession and retirement planning specific to farmers.

These are just a few examples of how Mizzou’s commitment to extension and engagement benefitted Missourians this past year.

In the interest of better serving Missourians, we are conducting a statewide needs assessment. It will include extensive input from local communities and stakeholders. It will result in stronger alignment between extension programs and local needs.

I encourage you to read the attached annual report from your county office to gain an understanding of how MU Extension has worked this past year to serve your community.

Your support of MU Extension and our efforts in your community is greatly appreciated. As always, I welcome your input on how the University of Missouri can better serve the people.

Sincerely,

Marshall Stewart, Ed.D.
Vice Chancellor for Extension
Experienced and Committed Staff

The staff of the University of Missouri Extension serving Dallas County represent a variety of backgrounds, experiences and knowledge. Staff members are committed to providing science-based knowledge to help people solve problems and make informed decisions.
Missouri 4-H, University of Missouri Extension's youth development program, helps to create opportunities for young people to be valued, contributing members of their community. Providing opportunities for youth to develop positive self-esteem, leadership skills, decision-making skills, citizenship and practical life-skills are objectives of the Extension youth program. Missouri 4-H connects kids with caring adults for learning-by-doing experience in organized clubs, enrichment programs, special-interest groups, camps and school-aged child care programs.

**Dallas County 4-H Club Activity:** Five county 4-H clubs provided educational opportunities to learn life skills such as public speaking, planning events, leading meetings, and sportsmanship while working with others in their clubs. Parents and volunteers served as mentors and caring adults as they led eight countywide project areas. Member chosen projects offered were archery, beef, clothing and textiles, dairy, horses, shotguns, photography, and robotics. Community service involved serving at the Dallas County Alumni reunion, helping at the Lion’s Club Rodeo, participating in hidden rock project, and recycling aluminum cans to assist members with cost of dues and fees. Efforts made to improve the quality of meetings has paid off with increased member participation and improved programs. Members participate in contests in their respective project areas as they work towards mastery of skills. 4-H members participated in county, regional, and state 4-H activities learning about leadership, sportsmanship, and community service. Entering exhibits in the Dallas County, Ozark Empire, and Missouri State Fairs allows them to demonstrate skills gained throughout the year. Our 4-H’s are involved in the community through many service projects such as Back to School Fair, Parktacular, and assisting in STEM activities with after school groups. Club recreational activities offer opportunities requiring planning and group interaction. 4-H members highlighted in the media for accomplishments such as making the cut for the national public speaking contest add a positive light to the community. The youth and adult relationships that grow from 4-H activities create a more harmonious relationship between generations. The Dallas County 4-H program is meeting the 4-H vision and goal. Our mission: Engaging youth as valued, contributing members of their communities in partnership with caring adults. Our vision: A world in which youth and adults learn, grow and work together for positive change.
Dallas County is primarily a rural, agricultural community. The purpose of the Dallas County Extension agriculture program is to provide producers and landowners with the information they need to manage their operations and increase the profitability and viability of their enterprises. Economically strong farmers mean strong rural communities. With the academic support of the MU College of Agriculture, Food and Natural Resources, the Extension Center works with local land owners. Whether in the form of educational programs or one-on-one visits, the Extension Center does everything it can to ensure that the next generation will still see agriculture as an enjoyable, economically viable way of life.

Current programming focuses on increasing the profitability of beef cattle enterprises, forage production and management, livestock marketing, and risk management. Other program areas include soil-testing, endophyte-infected fescue alternatives and management, fertilizer and pesticide recommendations, weed, insect and disease identification and control, forage testing information, pesticide-use training, nitrate testing for forages and variety selection.

Impact in 2016

**Agriculture Programming Efforts & Recognition Include:**
- 93rd Soils & Crops Conference
- Private Pesticide Applicator Training
- One-one-One Agricultural Consultations
- Dallas County Century Farm and Farm Family of the Year
- Pasture Management/Weed and Brush Control Workshops
- Beef Performance Evaluation
- Beef Cattle Nutrition and Understanding Hay
- Nitrate and Prussic Acid issues in Forages
- Soil Testing
- Heifer Development and Artificial Insemination

**93rd Dallas County Soils and Crops Conference:**
The purpose of this annual conference is to address agricultural issues producers and growers are currently facing— from weeds and forages to beef genetics and legislation. We present a variety of topics from year to year in an effort to educate and provide solutions to our clientele so their operations may become more sustainable, both economically and environmentally, as they adapt in an ever-changing society. Topics for this year’s conference included: “Beef Cattle Genomic Predictions” by Jared Decker, MU Extension Beef Genetics Specialist Reports from the local SWCD, NRCS, and FSA were given, and MU and SWCD awards were presented to Century Farms, Grassland Farmer of the Year, and Cooperator of the Year and Leader’s Honor Roll. Bob Schultheis, Ag Engineering Specialist brought several water quality and infiltration demonstrations and did a short discussion. A total of 54 area producers attended the conference.

Based on survey results, 67% of respondents said they planned to make some sort of change or addition to their farming operation because of this conference.
Private Pesticide Applicator Training:
Pesticides that have the potential to harm surface water, are highly toxic to humans and animals, or have environmental ramifications are classified as restricted-use pesticides. In order to purchase and apply these pesticides, producers in Missouri must attend a training session or view the training video. **32 Dallas County residents obtained or recertified their licenses** during a face-to-face training session and another 8 by viewing the video in the office. Participants learned how to properly calibrate equipment and mix chemicals, how to calculate chemical needs for different methods of application, how much chemical is needed to control specific weeds, and about record-keeping requirements when applying restricted-use pesticides.

Dallas County Cattlemen’s Programs:
The Dallas County Cattlemen’s Association is one of the strongest local Cattlemen’s Associations in the state. Attendance at the groups monthly meetings generally runs somewhere between 100 and 130 people, providing a good venue for educational programs to benefit beef cattle producers of the area. Throughout 2016, Livestock Specialist Andy McCorkill worked with the executive committee of the group to develop and deliver several timely programs in conjunction with their regularly scheduled meetings. Dallas County was recognized as the runner up on county affiliate in the state for award in 2016 partly because of the activities and involvement the partnership between the University of Missouri Extension and the Dallas County Cattlemen’s Association has allowed.

Soil Testing:
Without proper maintenance, Dallas County’s soil is often lacking in many of the essential nutrients needed to produce healthy crops, forages, and vegetables. The Dallas County Extension Center seeks to promote soil testing and proper application of fertilizer and lime to ensure that plants receive the precise nutrients needed to grow. Soil tests often times save money and reduce the level of excess plant nutrients making their way into drinking water and the many waterways used for recreational purposes within Dallas County.

The Dallas County Extension Center analyzed and gave recommendations for 103 soil tests in 2016.
Agriculture Impact in 2016 cont.

Beef Performance Evaluation: Five Dallas County producers are active in the Southwest Missouri Beef Cattle Improvement Association’s Performance Testing Program. This program educates beef cattle producers on the interaction between genetic value and production efficiency to enhance their management skills. Producers in the program have an opportunity to market their top bulls at the SWMO All-Breed Performance Tested Bull Sale held twice each year. Commercial beef cattle producers further benefit by producing higher quality feeder calves that are more desirable to the market, ultimately increasing market value. Producers who sold bulls at the March and October 2016 sales at the Springfield Livestock Marketing Center received an averaged price of just over $3700 even in the down market we saw throughout the year.

Nitrate Testing for Forages: The Dallas County Extension Center provides a “quick” test for nitrates in forages using the chemical diphenylamine. This test analyzes nitrates stored in plant material. High nitrate levels in certain forages can be lethal to livestock. Providing nitrate testing helps area hay producers harvest nitrate-safe hay and gives reassurance to livestock producers that their livestock will not be at risk by grazing higher risk forages. Although Nitrates were not a major issue in 2016, 4 area farmers sought out advice on dealing with potentially high nitrate forages.

University of Missouri Extension Awards and Recognition:

Century Farms Awards: In 2016, Lyndol and Pam Sturdevant were honored as Century Farm recipients. To qualify for the Century Farm award from the University of Missouri, at least 40 acres of the original land acquisition must be owned by the same family for 100 consecutive years and must contribute to the overall farm income. Sturdevant’s 120 acre farm has been in their family since 1913.

Farm Family Recognition: David and Stephanie Turner along with their children, Bryliee and Morgan was honored as the Dallas County Farm Family of the Year at the Missouri State Fair in August. The Turners were selected by the Dallas County University of Missouri Extension Council and Dallas County Farm Bureau based on set criteria, which includes the family to be active supporters and cooperators of MU Extension, active in community and leadership activities, have a child involved with youth activities, and respected by their neighbors.
Show Me Select Heifer Development Program: Missouri ranks second in the nation in total number of beef cows with more than 2 million cows on 60,000 farms across the state. Income from the forage-based beef cattle industry represents the largest source of agricultural revenue within Missouri and presents significant potential to further increase Missouri’s on-farm income and total agricultural revenue. Show Me Select has been developed with the hopes of increasing the adoption of management practices that potentially improve the long term reproductive efficiency and productivity of females bred and raised in Missouri. The program also has a marketing component that provides a value added outlet for properly managed high quality bred heifers. In 2016, two Dallas County farms participated in the Show Me Select Program enrolling over 50 head in the program improving profitability of the farms. The heifers sold had a profitability of approximately $600 per head and sold for roughly $300 per head over what comparable heifers would have sold for in a normal “Special Cow Sale” held the next day in the same location.

Master Beekeepers/Beginning Beekeeping Course: This year, MU Extension introduced a new program statewide to combat the decline in the number of honey bees that has been seen over the last decade called the Master Beekeepers. The program begins with a beginner beekeeping course which provides beginning or aspiring beekeepers to learn the basics of beekeeping including equipment required, how to keep your bees healthy and productive, honey harvesting techniques, and even how to trap your own “wild” bees to uses in a hive. The course is taught in preparation of a certification program that has been developed for beekeepers similar to an apprenticeship program in working trades. The beginning course provides a facilitation for group interaction and mentorship with more experienced bee keepers. We held our first beginning course in Dallas County in October of 2016 and had 30 participants representing separate families from Dallas and surrounding counties. Terry Halleran, MU Extension Regional Agronomy Specialist facilitated the course and had assistance from several experienced beekeepers from the surrounding area in teaching the course.

Pasture Plant Identification Class: Forage and livestock production are the backbone of Dallas County Agriculture. In August, Agronomy Specialist, Terry Halleran conducted a class with the objective of educating producers on how to identify various plants that are found on their farms, determining whether they are beneficial or considered a useless weed, and how to adjust your management to reduce or eliminate undesirable plant species while improving the odds of having the forage stand you desire. 16 Dallas County farmers attended the two night course held in the Dallas County Courthouse.

Pasture and Hay Management/Beef Cow Nutrition Workshop: Excessive rains through much of 2016 made forage harvesting a challenge. In October Livestock and Agronomy Specialists came together to develop a series of workshops around the area to discuss the challenges seen and how to overcome the reduced hay quality that was seen due to late harvested hay when feeding cattle this winter. Topics discussed included understanding hay test results, developing a supplement to meet the needs of the cattle they will be feeding, and general pasture management strategies. Nine Dallas County producers attended the workshop held at the Dallas County School’s Alumni Center in Buffalo. Andy McCorkill talks about interpreting and using hay test results at the workshop.
Horticulture

Growing fresh and healthy vegetables and fruits in home gardens is a necessity for many area families. Training workshops, seminars and guidance from MU Extension programs aid local residence with their gardening endeavors. In addition to produce gardening, many residents also enjoy landscaping. The Dallas County Master Gardener Chapter has made strides to beautify Dallas County and has assisted MU Extension in increasing public knowledge of vegetable and fruit gardening.

Impact in 2016

Horticultural Programming Efforts Included:
- One-On-One Consultations
- Community Garden for city residents to produce their own fresh vegetables
- Pressure-canner Testing

One-on-One Consultations:
The Dallas County MU Extension office provides services, information and education to many Dallas County residents on a one-on-one basis. Some questions and problems addressed by the Extension office were as follows: vegetable diseases and planting dates; turfgrass management and diseases; control of garden insects; fertilizing garden and lawn soil; pruning fruit trees; fruit tree diseases; and dry weather management concerns with the vegetable garden. Of particular concern this year were wet weather effects on plants, and mass invasion by Japanese Beetles. This year's weather proved to be challenging to both backyard and commercial gardeners. We faced periods of unusually wet weather in early spring followed by a short dry spell and one of the wettest summers on record. Late fall was unusually dry, however it stayed warmer in late fall making for a good fall growing season if irrigation was available.

Buffalo Community Garden: Grow Well Missouri:
The city of Buffalo has been generous enough to set aside a plot for a community garden in one of the city’s parks. Efforts with the community garden are coordinated by the Dallas County Extension Center. The plot provides for 16 separate garden plots for planting flowers and vegetables. Because of the wet weather, location and soil type of our Community garden, it was difficult to get started this year. This year, Dallas County was fortunate enough to be selected as one of 5 counties across the state to receive a Grow Well Missouri Grant to help promote gardening as a health inexpensive way to put fresh fruits and vegetables on the tables of low income families. Dallas County Extension partnered with the Dallas County Ozarks Area Community Action Corporation group, Heart to Heart Ministries and the Calvary Baptist Church Food Pantry to provide free seeds to low income families to grow their own produce as well as a garden plots for them to plant their garden. In exchange for the seeds and garden space, participants gave ten percent of the produce they raised back to the local food pantries or the Engle's Senior Center as a way to give back to the community from what they received. As part of the program, MU Extension faculty provided educational classes to the participants on plant selection, planting, and other timely topics such as pest control throughout the growing season as well as food preservation, canning, and cooking at harvest time. The program has worked well at bringing individuals and service minded groups around town together for the mutual benefit of the people of the Buffalo Community. Seeds were given to over 100 low income and elderly families. For the first time in several years all 16 community garden plots were occupied.
Business Development

There are approximately 500,000 small businesses in Missouri. Nearly 98 percent of all businesses with employees are categorized as small businesses. In assisting the owners and managers of those businesses, MU Extension contributes to a county’s economic development through growth in jobs, sales, innovation, technology development and commercialization.

Business Development Impact in 2016

For the 17 counties that comprise the West Central Region, MU Extension Business Development Program counselors provided start-up and management counseling, training and other assistance to 2,347 individuals and companies.

Individuals received assistance in topics ranging from:
- Starting a business
- Business & Strategic Planning
- Marketing and Management
- Doing Business with the Government
- Understanding Financial Statements and International Trade

Businesses participating in counseling or training sessions learned:
- Effective tips and techniques to successfully start or manage their businesses
- Additional resources and business assistance services that exist that can be accessed to support business development & growth—such as the Missouri Small Business & Technology Development Centers, Missouri Procurement Technical Assistance Centers, Missouri Career Options Project and the Missouri Environmental Program

As a result of assistance provided the MU Extension Business Development program businesses the WC Region in FY2016 generated the following economic impact:
- Started 16 new businesses
- Created 110 new jobs
- Generated sales increases of $6,800,513
- Received government contract awards of $18,556,219
- Secured new investment (loans or owner equity) of $4,808,256
- Acquired Assets worth $1,187,009

Across the state of Missouri, the total impact for all businesses assisted by the MO Business Development Program was:
- 279 new businesses, 1,751 new jobs and 1,811 jobs retained
- $157,306,766 in increased sales and $944,855 in government contracts
- $110,460,065 in loans and investments in business
- $205,000 in Grant Research proposals
- 2,723 client/companies receiving a total of 22,453 hours of business counseling
- 7,617 business training/conference attendees

Contact: Jackie Rasmussen, Business Development Specialist  Camden County Extension Center  Phone: 573-346-2644  Email: rasmussenj@missouri.edu
Health & Nutrition Education Program

Healthy bodies come in many shapes and sizes. Mother Nature gave us our height, bone size and basic body shape. If you want to be fit for life, choose healthy habits. Eat smart. Cut fat by eating more fruits, vegetables and fiber. Get moving. Your body will love you for it. Think positively. It will help you get fit and stay fit for life.

Do you want to feel great? Chances are, you do. So how do you get there? Healthy habits can bridge the way to feeling great. Read on to find out what the Nutrition and Health Education Extension Specialist is doing to promote better health in Dallas County.

Health & Nutrition Impact in 2016

**A Matter of Balance:** This program has shown that older adults can remain independent and reduce their chances of falling. Participants, who exercise regularly, review medications with their health care team, have their eyes checked, and make their homes safer report less falls. Money saved from doctor visits and hospital stays will lead to less money spent on health care resulting in a stronger state economy. People who take this course will have exercises to improve strength, flexibility, improve blood pressure, and increase alertness, improved balance and coordination, lessen depression. improved health-related quality of life, fewer unhealthy physical days, and fewer unhealthy mental days, improve self-confidence. These classes result in better health management resulting in less money being spent on healthcare.

**Topics covered throughout the course included:** Help older adults to learn more about fall prevention, follow personal plans to carry out fall prevention strategies, Importance of making or maintaining changes in the participants daily lives which will help reduce the fear of falling, Fear of falling impacts negatively on the mental health and overall well-being of older adults, Recognize three important physical risk factors for falls: low blood pressure, leg weakness, and poor flexibility/balance, Understand the relationship between assertive behavior and fall prevention, Learn to shift from self-defeating to self-motivating thoughts, Recognize potential fall hazards in the home and community.

**Actions reported via participant evaluations:** I am surprised; I expected the exercises to be more challenging. They are simple. I want a copy of your overview of the exercises, as it is easy to follow. My feet feel stronger since the stroke, I have little feeling below the waist, We really enjoyed the class. Dallas county had 11 participants and 114 hours of collective workshop participation.

**Stay Strong Stay Healthy:** Missouri’s Stay Strong, Stay Healthy (SSSH) program is designed to increase aging adults’ access to a safe, structured and effective strength-training program. Over 8 weeks, participants learn exercises to improve their strength, flexibility and balance. During each session, a prescribed set of 8 upper- and lower body-strengthening exercises along with warm-up and cool-down stretches. Participants are encouraged to feel comfortable regardless of their current fitness level so they can safely participate and gradually build the strength beneficial to health. SSSH is modeled after the evidenced-based Strong Women program developed by researchers at the Friedman School of Nutrition Science at Tufts University. While the original Tufts program includes only women, University of Missouri Extension has adapted the curriculum to include men.

This program has shown in statewide results. Participants report better health by building muscle and increasing bone density, thereby helping to prevent frailty and osteoporosis, which should lead to less money spent on health care resulting in a stronger state economy.
Stay Strong Stay Healthy Continued: People who take this course will have Arthritis relief, Improved balance, Enhanced flexibility, Stronger bones, Weight loss, Less depression, Less stress, Reduced risk for heart disease, Improved health-related quality of life, fewer unhealthy physical days, and fewer unhealthy mental days, Better self-confidence. These classes result in better management of health resulting in less money being spent on healthcare which should improve county economy.

According to pre- and post-surveys, more participants had shown improvement in three to five fitness assessments. Actions reported via participant evaluations, This is the class I’ve been waiting for. I feel stronger and better. I enjoy exercising with a group and I like the way the instructor counts out loud. Dallas county had 28 participants and 323 hours of collective workshop participation.

Disease Self-Management: This program has shown in statewide results, participants report better management of their diabetes through improving understanding of the disease, confidence in their self-management of tasks related to Diabetes, and reducing related concerns. People who take this course will have: Improved diabetes knowledge, Improved self-care behavior, Improved clinical outcomes such as lower A1c, lower self-reported weight, improved quality of life, healthy coping skills and lower average medical costs, Improved communication with doctors. These classes result in better management of health resulting in less money being spent on healthcare which should improve county economy.

Topics covered: Overview of self-management and Diabetes, Making an action plan, Monitoring, Nutrition Healthy Eating, Feedback/Problem-Solving, Preventing low blood sugar, Preventing complications, Fitness Exercise, Stress Management, Relaxation Techniques, Difficult Emotions, Monitoring blood sugar, Depression, Positive Thinking, Communication, Medications, Working with your Health Care Provider, Working with the health care system, Sick days, Skin/Foot care and Future plans. Dallas County had 11 participants and 120 hours of collective workshop participation.

Food Preservation: Interest in home food preservation has increased with the farm to table movement. Classes provides up-to-date, research-based procedural recommendations, tested recipes, and hands-on approach that assist the consumer in safely preserving produce and other products. Classes focus on pressure, steam, and boiling water canning basics, vegetables and other low-acid products, pickling, salsas, fruits, sweet spreads, dehydration, freezing, and storage of produce.

People who take this course will have increased knowledge of home canning and product safety, tested recipes, hands-on knowledge, understanding of proper storage of vegetables to maintain quality, practice the proper way to raw pack and hot pack vegetables, review of resources to use for the home preparation of safely canned, frozen, or dried products, understand the boiling water, steam canning, or pressure canning process, understand key ingredients needed to make high-quality products, self-confidence in food preservation, these classes result in the ability of the family to harvest, store, and can, freeze, or dry products resulting in less money being spent on store bought items. Also should lead to less money spent on health care resulting in a stronger state economy.

Actions reported via participant evaluations: Use tested recipes, product safety, using part of under ripe berries provides natural pectin, how to use a pressure canner, reasons we pressure can, temperature matters, steam canning is easy, I didn’t know how to blanch vegetables and when to use a pressure canner. Dallas county had 75 participants and 195 hours of collective workshop participation.
Cooking Matters for Adults (CMA) Cooking Matters at the Store (CMAST):

Improving health status and eating healthier results in less money spent on health care costs resulting in more money to spend on other things therefore strengthening Missouri economy. People who take this course will have improved self-confidence in providing healthy meals for their families. Increased awareness of ingredients in food products. Ability to build a meal using ingredients on hand or from food pantry or commodity distribution. Ability to figure unit pricing and get the best buy for the product they want. Plan meals for a week and budget to purchase the ingredients. These classes result in participants learning how to save money when grocery shopping while planning nutritional meals for themselves and their families.

Topics covered: Proper hand washing, Basic knife safety, Preparing recipes from multiple food groups. Discuss using recipes as framework that can be adjusted to save time and money. Practice reading food labels. Discuss ways to enjoy a variety of fruits and vegetables. Discuss the pros and cons of fresh, frozen, and canned fruits and vegetables. Practice identifying whole grain foods by reading the food label ingredient list. Identify healthier choices when eating convenience foods or eating away from home. Prepare healthier versions of popular convenience foods. Discuss the difference between healthy and unhealthy fats. Discuss making healthier choices in the Protein and Dairy groups. Practice planning meals in advance. Discuss the benefits of shopping with a list. Prepare recipes using herbs and spices instead of salt. Practice comparing unit prices. Practice the skills they’ve learned in class to save money and make healthier.

According to pre- and post-surveys, more participants were choosing more whole grains, lean proteins, low-fat milk options, and products with less salt. Participants were eating at home more and eating more fruits and vegetables.

Actions reported via participant evaluations, Learned different ways to add fresh veggies to recipes. I really like the book. I have new healthier choices. I want to make healthier foods after learning more detail about some foods like oils and butter. I have tried more foods than I normally would. Understand substitution of vegetables and spices. Tried different recipes and helped to try different types of food that I wouldn’t eat otherwise. Healthy alternatives to the having the same meals all the time. Dallas county had 17 CMA participants and 17 CMAST participants. Hours of collective workshop participation was 459 hours.
University of Missouri Extension (UME) Family Nutrition Education Programs (FNEP) reached 2,364 low-income participants with nutrition education in Dallas County during 2016. FNEP provides information on nutrition, food safety, and physical activity for lifelong health and fitness.

Nutrition education for youths provides information in kid-friendly terms and lessons with hands-on activities. Activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. Education for adults includes nutrition, food safety, physical activity, and food resource management.

During 2016, 30 youths and 2,334 adults were served through schools, community groups and agencies. The following is a list of the locations where participants were served:

Schools:

Buffalo Mallory Elementary
Buffalo Head Start (OACAC)

Agencies:

Helping Hands Shop
Prairie Chapel United Methodist Church

Evaluation data collected across the entire state reflects the positive impacts that occur in every county with FNEP. Within FNEP are two key programs, each with its own system for evaluating impact: the Family Nutrition Program (FNP) and the Expanded Food and Nutrition Education Program (EFNEP).

For youths who participated in FNP, results summarized for the state revealed the following positive impacts:

- Two thousand, five hundred eight (2,508) teachers gave us feedback.
- 52 percent have participated in FNP for three or more years.
- 98 percent (2,461 teachers) reported one or more changes in students after FNP.

Adults who participated in FNP also made significant improvements in each area addressed.

**Dietary Quality and Physical Activity**

**Food Safety**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percent of respondents reporting improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let meat and dairy foods sit out for more than 2 hours</td>
<td>61%</td>
</tr>
<tr>
<td>Thaw frozen foods at room temperature</td>
<td>75%</td>
</tr>
</tbody>
</table>
### Student changes reported by teachers

<table>
<thead>
<tr>
<th>Student changes</th>
<th>Percent of teachers who observed each type of student change</th>
<th>Percent of teachers whose students talked about this change</th>
</tr>
</thead>
<tbody>
<tr>
<td>More aware of nutrition</td>
<td>90%</td>
<td>89%</td>
</tr>
<tr>
<td>Make healthier meal and/or snack choices</td>
<td>67%</td>
<td>80%</td>
</tr>
<tr>
<td>Eat breakfast more often</td>
<td>50%</td>
<td>55%</td>
</tr>
<tr>
<td>More willing to try new foods</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Improved hand washing</td>
<td>83%</td>
<td>79%</td>
</tr>
<tr>
<td>Improved food safety other than hand washing</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>Increased physical activity</td>
<td>65%</td>
<td>68%</td>
</tr>
</tbody>
</table>

### Teachers’ Changes (self-reported)

<table>
<thead>
<tr>
<th>Behavioral change</th>
<th>Percent of teachers who made each type of change</th>
<th>Percent of teachers already practicing the behavior</th>
<th>Percent of teachers who model or talk about the behavior in front of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>More aware of nutrition</td>
<td>51%</td>
<td>48%</td>
<td>95%</td>
</tr>
<tr>
<td>Make healthier meal and/or snack choices</td>
<td>50%</td>
<td>45%</td>
<td>93%</td>
</tr>
<tr>
<td>Eat breakfast more often</td>
<td>36%</td>
<td>55%</td>
<td>82%</td>
</tr>
<tr>
<td>More willing to try new foods</td>
<td>44%</td>
<td>49%</td>
<td>90%</td>
</tr>
<tr>
<td>Improved hand washing</td>
<td>32%</td>
<td>67%</td>
<td>93%</td>
</tr>
<tr>
<td>Improved food safety other than hand washing</td>
<td>34%</td>
<td>60%</td>
<td>77%</td>
</tr>
<tr>
<td>Increased physical activity</td>
<td>39%</td>
<td>45%</td>
<td>87%</td>
</tr>
<tr>
<td>Make/offer healthier food choices for students</td>
<td>52%</td>
<td>38%</td>
<td></td>
</tr>
</tbody>
</table>

*Evaluation data was collected on students who participated in a variety of curricula from Pre-Kindergarten through Grade 12.
Dietary Quality and Physical Activity

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percent of respondents reporting improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Think about healthy food choices when deciding what to feed your family</td>
<td>56%</td>
</tr>
<tr>
<td>Use the “Nutrition Facts” label to make food choices</td>
<td>71%</td>
</tr>
<tr>
<td>Consume something within 2 hours of waking</td>
<td>53%</td>
</tr>
<tr>
<td>Consume the equivalent of 3 cups of milk, yogurt, and cheese each day</td>
<td>47%</td>
</tr>
<tr>
<td>Eat more than one kind of vegetable each day</td>
<td>57%</td>
</tr>
<tr>
<td>Eat more than one kind of fruit each day</td>
<td>58%</td>
</tr>
<tr>
<td>Exercise for a total of 30 minutes each day</td>
<td>43%</td>
</tr>
</tbody>
</table>

Food Resource Management

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percent of respondents reporting improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan meals ahead of time</td>
<td>68%</td>
</tr>
<tr>
<td>Compare prices before bought food</td>
<td>53%</td>
</tr>
<tr>
<td>Shop with a grocery list</td>
<td>59%</td>
</tr>
</tbody>
</table>

In addition to the numbers, local success stories demonstrate program impact:

During a Kids in the Kitchen program, two 5th grade students took what they had learned in a lesson about beans to make the Ole frijoles dip for their families. Both students shared that the dip was a success and that it “was much better than just opening a jar of salsa”. They were able to explain to their parents how adding beans increased the nutrition of the dip and because of the fiber, why it was more filling and satisfying. While they noted that on occasion, they might opt for just salsa, the bean dip was going to be their first choice when having tortilla chips or veggies. Jan Gerstlauer, Nutrition Program Associate, Dallas and Hickory Counties

While the Family Nutrition Education Program’s (FNEP) Nutrition Program Associate (NPA) was passing out materials to be used in during the current week’s nutrition lesson, a 3rd grade teacher in Dallas County shared the following anecdote. The previous week, her students had been given an assignment to write a paragraph on what they could do to be healthy/healthier. Having recently started their FNEP lessons, the teacher was interested in what the students would say. Their first nutrition lesson had focused on the six main nutrients and their role and importance to good health. The students set to work on their paragraphs and soon turned in their work. The teacher was impressed with the level of detail in the students’ work and it was obvious that many had incorporated what they had learned during their initial nutrition lesson. During a subsequent review with the NPA, the students were able to correctly recall all of the nutrients previously discussed. They could give a simple explanation of what calories are and were also able to identify which of the six main nutrients provide calories. Jan Gerstlauer, Nutrition Program Associate, Dallas and Hickory Counties

In summary, it has been a successful year in Dallas County for FNEP.
Dallas County is home to a diverse, growing population with varied interests. The goal of the Dallas County University of Missouri Extension Center is to extend the unbiased research-based knowledge and problem-solving resources of the University of Missouri to the community. Whatever the question may be, the Dallas County Extension Center is here to help. With the resources of the entire University of Missouri System behind them, experts in practically every field are available to answer questions. The Dallas County Extension Center is a resource to the community, ready and willing to help.

Impact in 2016

Questions addressed throughout the year were grouped into the following topics:

- Pond & Pasture Weed Identification
- Herbicide Recommendations
- Vegetable Gardening
- Soil Testing & Recommendations
- Vegetable & Fruit Planting Guides
- Insect Identification & Control
- Plant Diseases Identification & Control
- Pasture Rental Rates
- Custom Rates for Farming Practices
- Rental Agreements
- Farm Income Taxes
- Cattle Price Forecasts
- Beef Ration Balancing
- Supplements for Cattle On Pasture
- Nitrate Poisoning in Cattle
- Brand Registration
- Mole Control (sometimes other varmints)
- Fruit Spray Schedules
- Livestock Information
- 4-H Club Activities
- Mushroom Edibility
- Canning Food & Pressure Cooker Testing

Additional Services

Pressure-Canner Gauge Testing:
Proper pressure is essential for safely preserving foods and to help keep the operator safe during the canning process. The Dallas County Extension office tests pressure-canner gauges free of charge. More than 50 gauges were tested during 2016.

Continuing Education Program:
Continuing and distance education programs include degrees, certificates and a range of individual courses and series of courses, both noncredit and for credit. Programs are available in a variety of formats, including the traditional classroom setting, online “virtual classrooms” and interactive television. The University's schools and colleges offer nearly 30 online degree options through MU Direct. From education and nursing to journalism and health administration, students from across Missouri and all over the world are earning Mizzou degrees.

73 Dallas County residents were enrolled with MU’s Continuing Education Program
Dallas County Extension Council

Unique partnership

Dallas County’s University of Missouri Extension County Council is a full partner with Missouri’s land-grant universities. Council members strive to bring high-quality education and research-based information to Dallas County, which helps local residents solve real-world problems and take advantage of opportunities.

Council members:
- Work with Extension specialists to provide the county with quality educational programs;
- Manage finances of local Extension operations;
- Provide personnel to carry out Extension activities; and
- Elect and organize the local Extension council.

Chairman
Grep Whipple, elected member, term ends 2018

Vice Chairman
John Crawford, elected member, term ends 2018

Secretary
Carrie Hulsey, elected member, term ends 2018

Treasurer
John Freeman, elected member, term ends 2018

Additional Council Members:
Pete Barclay, appointed member, term ends 2017
Pat Deome, elected member, term ends 2018
Kelsey Doty, elected member, term ends 2017
Brad Evans, elected member, term ends 2017
Norma Hutchison, elected member, term ends 2017
Shawna Moriarty, elected member, term ends 2018
Terri Reed, appointed member, term ends 2017
Gloria Stroud, elected member, term ends 2017
Larry Turner, appointed member, term ends 2018

Dallas County Commissioner's

DALLAS COUNTY COMMISSIONERS
(2016)

Kevin Sharp
Presiding Commissioner

Pete Barclay
Northern District Commissioner

Owen Kjar
Southern District Commissioner
State, Federal and County Funding for Extension

University of Missouri Extension programs in Dallas County are funded by county, state and federal appropriations. Local funding for support of the Dallas County Extension Center is provided by the Dallas County Commission. They provide office space, funds for office expenses, clerical salaries and travel expenses of Extension specialists who conduct educational programs in Dallas County.

Special acknowledgement and appreciation is given to the Dallas County Commission for financial assistance, office space and their personal support.

### Financial Statement

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUE</strong></td>
<td></td>
</tr>
<tr>
<td>County Appropriations</td>
<td>$32,000.00</td>
</tr>
<tr>
<td>Secretary Benefits</td>
<td>$3,750.00</td>
</tr>
<tr>
<td>Balance Transfer</td>
<td></td>
</tr>
<tr>
<td>(from short courses, fees &amp; soil tests)</td>
<td></td>
</tr>
<tr>
<td>Transfer from Working Capital</td>
<td>$171.15</td>
</tr>
<tr>
<td><strong>TOTAL REVENUE</strong></td>
<td>$35,921.15</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
</tr>
<tr>
<td>Secretary Salary</td>
<td>$20,400.00</td>
</tr>
<tr>
<td>Council Paid Benefits</td>
<td>0.00</td>
</tr>
<tr>
<td>4-H Youth Associate</td>
<td>$4,634.10</td>
</tr>
<tr>
<td>Employer Share of FICA Taxes</td>
<td>$1,560.00</td>
</tr>
<tr>
<td>Travel</td>
<td>$5,400.00</td>
</tr>
<tr>
<td>Communications</td>
<td>$1,386.10</td>
</tr>
<tr>
<td>Supplies and Service</td>
<td>$1,734.45</td>
</tr>
<tr>
<td>Publications</td>
<td>$806.50</td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES</strong></td>
<td>$35,921.15</td>
</tr>
</tbody>
</table>

University of Missouri’s Contribution to Dallas County Extension Program

University of Missouri provides the salary, benefits, training and equipment expenses for two specialist housed in Dallas County as well as matching funds for a part time Youth Program Associate.