



Extension Education in Brooks County  
*Making a Difference*  
2010

## Improving Lives. Improving Texas.

The Texas AgriLife Extension Service has been dedicated to serving Texans

for nearly a century. The agency was established in 1915 under the Smith-Lever Act to deliver university knowledge and agricultural research findings directly to the people. Extension programs have continued ever since to address the emerging issues of the day, serving diverse rural and urban populations across the state.

Through a well-organized network of professional educators and more than 100,000 trained volunteers, Extension delivers practical research-based knowledge to Texans in all 254 counties. Our expertise and educational

outreach pertain to the food and fiber industry, natural resources, family and consumer sciences, nutrition and health, and community economic development. Among those served are the hundreds of thousands of young people who benefit annually from Extension's 4-H and youth development programs.

Texans turn to Extension for solutions. Its agents and specialists respond not only with answers, but also with resources and services that result in a significant return on investment to boost the Texas economy. The agency custom-designs its programs to each region of the state, relying on residents for input and for help with program delivery. Here are just a few highlights of Extension's impacts on this county and its people:

## Brooks County – Summary of Educational Contact

---

Total Educational Programs Conducted	326
Total Participants	50,383
Contact Hours	11,976
4-H Members	140
4-H Leaders	24
4-H Clubs	9
Special Interest Participants	712
Westside Extension Education Club Members	19
Office Contacts	1701
Site Visits	721
Phone Calls	2259
Newsletters	5756
Cash and In Kind Donations by AgriLife Supporters And Collaborators	<b><i>\$46,033.60</i></b>
○ Better Living for Texans	\$34,757.60
○ Cancer Mini Grant	\$526.00
○ Ed Rachel (Shooting Sports)	\$5,000.00
○ Mestena Uranium	\$1,000.00
○ Wal-Mart	\$750.00
○ 4-H Fundraising	\$ 4,000.00



## Water Quality – Outcome Summary

### Relevance

It is important to periodically screen or test water wells for the presence of fecal coliform, total nitrate-nitrogen concentrations, arsenic and salinity. Bacteria and nitrates are the two most common contaminants found in private water wells and can serve as an indication of contamination to the groundwater supply by septic systems, livestock waste or the use of fertilizers. Such contaminations are harmful to individual and public health. High concentrations of salinity in water can injure plants if used for irrigation and animals if used as a source of drinking water.

Fecal coliform bacteria are bacteria present in the intestinal tract of warm-blooded animals and can be found in their wastes. The presence of fecal coliform bacteria can indicate the presence of harmful pathogens that cause diseases such as intestinal infections, dysentery, hepatitis, typhoid fever, cholera and other illnesses.

Nitrate is a combination of nitrogen and oxygen. This ion is one part nitrogen and three parts oxygen ( $\text{NO}_3$ ). Consumption of groundwater with nitrate-nitrogen concentrations greater than 10 ppm is considered a health risk by the US-EPA. High levels of nitrates can be transformed to nitrite ( $\text{NO}_2$ ) in the digestive system. The nitrite oxidizes iron hemoglobin of red blood cells to form methemoglobin, which lacks the oxygen-carrying ability of hemoglobin. This creates the condition known as methemoglobinemia (sometimes called “blue baby syndrome”), in which blood lacks the ability to carry sufficient oxygen to the individual body cells. At extreme levels, methemoglobinemia can result in convulsions and death. Infants, under 6 months of age, pregnant women, nursing mothers, elderly people or individuals with a depressed immune system are most susceptible to this condition.

Salinity is an indication of the amount of salts dissolved in water. Salts in water influence the taste of water, can damage soils, cause salt burn in plants and at high enough levels can be toxic to plants and harmful to animals. Determining and knowing the concentration of total dissolved salts (TDS) in water enables the users of the water to better manage the use of their water for human consumption, livestock watering and/or irrigation. The US-EPA has set a secondary drinking water standard of 500 ppm for TDS. For livestock, TDS readings less than 3,000 ppm would pose little risk. Waters with TDS readings above 3,000 ppm should not be used to supply drinking water for lactating livestock and waters above 7,000 ppm should not be used for any livestock at all. For irrigation purposes, waters with TDS levels below 175 ppm are safe, 175 to 525 ppm will damage salinity sensitive plants, 525 to 1,400 ppm damage to low salinity tolerant plants, 1,400 to 2,100 damage to plants with high tolerance to salinity, and 2,100 ppm are considered unsuitable for irrigation purposes.

## Response

**Planning and Publicity:** Extension Agents in Jim Wells, Duval, Jim Hogg, Brooks and Live Oak Counties teamed up to coordinate a Multi-County Water Screening Workshop and Water Quality Awareness Program for well owners in their respective counties. In April, agents developed a news release and distributed to clientele and local media to inform well owners on the importance of screening water samples and testing wells for contaminants. Clientele were also informed of the upcoming water screening workshop and instructed on how to collect and submit water samples. Each agent targeted approximately 50 individual well owners to promote this program to.

**Screening Workshop:** On April 28, 2010, 78 water samples were collected from 57 cooperators and screened for the presence of fecal coliform bacteria, nitrates, arsenic and salinity. Mr. John Smith, Extension Program Specialist with the Texas A&M University Soil and Crop Sciences Department provided supplies and technical assistance in screening the water samples.

**Seminar:** After the workshop was conducted, a summary of the results was presented to six well owners from the area, including a reporter from the Alice Echo News. The presentation also included information on Well Head Protection, Correcting Problems in Contaminated Wells, and Rain Water Harvesting. The event was highlighted in the Alice Echo News which has a distribution of over 7,000 copies in the area.

**Result Demonstration Report and Educational Materials:** In September, a result demonstration report was developed discussing the results of the water screening workshop and the procedures used to test for contaminants. Each cooperator received a copy of the report along with their individual results. Cooperators also received printed information on how to shock chlorinate wells in order to reduce and prevent bacterial contamination.

**Evaluation:** On September 17, 2010, water samples from five wells in Jim Wells County which had tested positive for fecal coliform were re-tested to determine improvements in water quality based on the treatment strategies provided to the well owners.

**Interpretation:** The Jim Wells County Leadership Advisory Board Met on September 29, 2010. Board members received information on this program and discussed ways to expand and improve educational efforts in water quality.

## Results

A total of 78 water samples were submitted by 57 cooperators from the five county area and screened for bacteria, nitrates, arsenic and salinity during this program. All of the water samples were screened for bacteria, nitrates and salinity. Only 36 samples were screened for arsenic. The presence of fecal coliform bacteria was found in 16 (20.5%) of these samples. The average nitrate concentration for all samples screened was 3.73 ppm with only four samples testing 10 ppm or more (10–50 ppm). Six samples tested positive for arsenic but only one indicated a high level at 30 ppb. The average salinity of all the samples was 811 ppm with a range of 395-2095 ppm. Individual well owners with high level of contaminants were alerted to those problems and provided with information on how to correct them or to simply avoid use of that water.

A follow-up testing of five wells in Jim Wells County which had tested positive for fecal coliform indicated positive change in the quality of the water obtained from these wells. Four (80%) out of the five wells had been treated (shock chlorination) and tested negative for any bacteria. The fifth well had not been treated and remained positive. That well owner has since treated the well.

The 2011 Water Screening Workshop is scheduled for May 3-5, 2011.

## Outcome Summary – Redefining our Bodies

### Relevance

Physical activity was recently named as one of the 10 leading health indicators in Healthy People 2010. Physical inactivity is associated with an increased risk of a number of chronic health conditions including cardiovascular disease, diabetes, some cancers, high blood pressure, as well as overweight and obesity. In Texas, 25% of Texans are obese. Between 1988-1994 and 1999-2002, the prevalence of obesity among adults increased from 23% to 30%. The percentage of young people who are overweight has more than doubled in the last 20 years. In 1999-2002 16% of Americans ages 6-19 years were overweight. Sixty-one and a half percent of children aged 9-13 years do not participate in any organized physical activity during their non-school hours and that 22.6% do not engage in any free-time physical activity. Additionally, research indicates that only 25% of adults and 27% of high school students get regular, moderate exercise. 29% of American Adults are not physically active at all. Walk Across Texas is an eight week program designed to help people of all ages support one another to establish the habit of regular physical activity. Regular physical activity and controlling weight can significantly reduce the incidence and impact of chronic diseases like heart disease, stroke, diabetes, cancer, high blood pressure, and depression and is associated with a longer healthier life. In addition to the Walk Across Texas County Agent will enhance the program by utilizing the local gym 3 times a week morning and evening. Agent will provide a light lunch for participants to acquire additional information on eating light, and healthy. Agent will implement a weigh in and BMI reading for all participants and will be kept confidential, agent will utilize the concept of the Biggest loser. Agent will tap into additional resources to enhance the program.

### Response

Planning and Publicity agent worked in conjunction with my FCS planning committee to plan this outcome program. Agent broke the program into several phases each phase taking an 8 week program. Each phase would have a mail out of Dinner tonight which was done once a month. The first phase consisted of the Biggest Loser Phase 1 event date started on January 8, 2010. This phase consisted of weigh in, BMI, body measurements, and a cardio program.

With the Biggest Loser program we would host a Brown Baggit luncheon during the noon hour so that participants would have a light meal as well as recipes to take home with them. BLT program assistant would utilize the Fitness Connection through out the several phases.

Second Phase consisted of Walk Across Texas an 8 week program. FCS committee led this program as they recruited the members for their teams. 11 teams formed and 8 completed the program. This phase had a kick off March 5, 2010. In conjunction with WAT agent and Members incorporated a Cancer Prevention and Early Detection Exhibit during the county fair. WAT completion phase 2 ended on May 28, 2010. With WAT we completed this phase with an awards program and gifts provided by Health Department. T-Shirts, Pedometers, and reading materials were given to all members over the age of 45.

Phase 3 was a cardio program for youth. This phase was in conjunction with Kids in the Kitchen. A two week program was provided and physical activity was instrumental to complete this phase.

Phase 4 consisted of Zumba a cardio fitness program utilized by the agent for 8 weeks. After completion of the 8 week program the Zumba classes continued. Weigh-ins were done weekly as well as BMI and body measurements checked. As part of the phases a BLT program was provided to teach the importance of Reading labels, portions, and servings, food safety and stretching their food dollars. As part of phase 4 we also continue an existing program called Bodies in Motion. Bodies in Motion is a belly dance program in which

the participants will learn the importance of Belly Dance, History, and how it helps the body as we incorporate Yoga, stretching and cardio.

## Results

Biggest Loser phase 1 program we had over 30 females participating in the Biggest loser program. Lesson utilizing the BLT Series was provided for level of understanding such as understanding Get the Facts on Sodium, Fats, and servings. The ladies had a total of 70 pounds lost and 36 inches lost. Phase 2 Walk Across Texas program we had a total of 94 teams beginning the WAT program whereas, 64 completed the program with a total of 10,702.03 miles walked. The average age for WAT participants was 54 years of age. We had 87 Hispanics, 72 females, 22 males. When asked how physically active each member was 69 stated they were currently physical for 30 minutes a day 5 days a week. When asked which of the following fitness activities do you do now. 66 team members stated they walked. When asked where these activities take place the majority or 38 members stated they walked around their neighborhood. 35 stated they have different venues when exercising. With Phase 3 and Phase 4 the ladies were in an 8 week Cardio fitness program followed by the Bodies in motion.

The potential impact of walk across Texas in Brooks County is as follow: Females total female participants 45 with the average age of 56. Number of females that could avoid or delay developing diabetes was 10. Net present value per female is \$106, 525. The total net present cost value for health care cost savings for females is 1,070,421. The total net present value for wages lost for females is \$74,526 in which the total BPV for females is \$1,144,946. Now for total male participants we had 19 the average age for male participants was 54. The number of males that could avoid or delay developing diabetes was 4. The NPV per male is \$87, 480 the total NPV for health care cost savings for males is \$316,202. The total NPV for wages lost for males is \$39,639. Total NPV for Males is \$355,841. Total Impact for the participants is \$1,500,787.

**Clientele Feed Back:** Enjoyed the ZUMBA program that lasted 3 months. Ladies participating in the class really enjoyed the time away from home it gave them an outlet to be able to have some time away from everything and being able to do something for themselves. Grace Charles stated " I feel good about myself and my Husband sees a change in me that makes my self confidence go up" " I feel Sexier" "My High blood Pressure is under control" " I lost 16 pounds in three months and 6 inches". Elda Ramos stated she looks forward to exercising to something that is fun after spending all day with middle school students. Elisa Gonzalez stated its fun and exhilarating. Pat Saenz "even though I have a rod fusing my back together I was still able to dance to Zumba, I was able to loose 20 pounds in the past three months and I went down a dress size and it's all because of the Motivation we get". Olga Gutierrez " gave me an outlet from walking I felt muscle aching I didn't even know I had". Ila Perez " Zumba helped me with my Arthritis" Mary Flores " just hanging out with the girls" Jessica Hernandez " Zumba is fun and it works out all my body, a body I love" Diana Arevalo " I just enjoyed spending time with others and meeting new people".

## Future Goals

Continue to do this program to encourage physical fitness to all people who are looking for that motivation to lose a pound or 50. We have the resources and the ability to provide wonderful programming it is my future goal to continue providing these programs.

2010

## BLT Evaluation Report for Brooks County *Eat Better to Live Better*

### Situation

In Brooks County, an estimated 35% have incomes that are 185% of poverty or below; 2,729 receive food stamp benefits. Research has shown that individuals who live in poverty have dietary intakes that are not congruent with current recommendations (i.e. Dietary Guidelines or My Pyramid). This audience, like many, may not recognize their risk for food borne illness. Stretching resources so food is available throughout the month is also a challenge.

### Response – Better Living for Texans

The Better Living for Texans (BLT) Supplemental Nutrition Assistance Program (SNAP-Ed) project was initiated in 1995 as a cooperative endeavor among Texas AgriLife Extension Service, Texas Health and Human Services Commission (HHSC), and the Food and Nutrition Services (FNS) of USDA. The program is offered in every county that is served by a County Extension Agent - Family and Consumer Sciences (CEA-FCS), including Brooks County. A component of the Supplemental Nutrition Assistance Program (SNAP), BLT provides educational programs to food stamp recipients, applicants, and other approved audiences to help improve their ability to plan and prepare nutritious meals, stretch food dollars, and prepare and store food safely. In addition, BLT incorporates its programs with the Walk Across Texas program to promote physical activity. BLT is delivered through a variety of teaching methods that reflect audience needs. Teaching methods include, lesson series, single education events, one to one consultations, demonstrations, and tours. With the presence of BLT in almost every county in the state, Extension is poised to reach all areas of Texas, both rural and urban, and increase the likelihood of meeting the nutrition education needs of underserved Texans. During 2010, more than 40 Brooks County adults participated in the BLT *Eat Better to Live Better* series. This program focuses on meal planning, stretching food dollars, and adopting selected behaviors that can reduce the risk of food borne illness.

### Program evaluation

Evaluation of the Brooks County BLT program was conducted via the use of a pre, post, and 30-day follow-up survey. This allowed for the collection of data that reflected current behaviors, behaviors that participants intended to adopt, and extent to which behaviors were actually adopted. The instrument also allowed for the estimated of changes in out-of-pocket food expenses that may have occurred as a result of their participation in BLT. This report represents 29 adults who participated in the program and completed the pre, and post surveys. 18 of those participants completed the pre, post and 30-day follow-up surveys.

### Results

*Participant Characteristics* Most participants were female and Hispanic. Nearly 60% of participants had not completed high school; average household size was 4.4. Food pantries/banks and SNAP (food stamps) were utilized most often by participants.

### Program Impact:

Program impact is expressed in two ways: Intent to change behavior and reported changes in behavior. Intent to change behavior is documented by 29 participants who completed the pre and post surveys.

Meal planning and Food Resource management- intent to change behavior: Current behavior planning meals 62.1% stated they sometimes planned meals and the intent was 65.5 %. When asked “Shop with a list” 62.1 stated they always shopped with a list and the intent to change 79.3% stated they would shop with a list. When comparing prices 48.3% stated they sometimes compared prices whereas the intent to change 62.1 stated they would compare prices. When using unit pricing 51.7 stated they would use unit pricing. Whereas



not much of a change with the intent to change. Upon entry to the BLT program, a majority of the participants reported practicing meal planning, shopping with a list and comparing prices either “always” or “sometimes.” The practice of using unit pricing also was evident but to a lesser extent. At the end of the program, a majority of the participants reported intent to practice all four behaviors either “always” or “sometimes.”

**Food Safety- Intent to change Behavior** most participants were following targeted food safety behaviors when they entered the BLT program. Immediately after the program ended, there was a reported increase in how quickly foods were eaten/ stored after preparation. The number of participants who left prepared foods for longer than 2 hours dropped from 8 (pre-BLT) to (immediately after the program ended)

Program impact to assess program impact, we examined behaviors followed at the time of program entry, intent to change behavior, and the actual adoption of behaviors approximately 30 days after the program has ended. This is done by analyzing the data of the 18 of the 29 participants who completed the pre, post, and 30 day follow up surveys. Overall, most participants were planning meals and shopping with a list sometimes when they first entered the BLT program. Less than half were comparing prices or using unit pricing. Immediately after the program ended there was noted increase in the percentage of participants who intended to practice these behaviors always or sometimes. Thirty days later the percentage of participants practicing all four behaviors either always or sometimes was higher than when the program began.

## Food Safety – Adoption of behaviors

A majority of participants (>66%) were not following recommended practices when it came to hand washing and washing cutting boards and utensils after cutting up raw meat/poultry. In addition, one-third of participants (n=6) reported leaving prepared food sit out for longer than 2 hours when they entered the BLT program. Immediately after the program ended and thirty days later, more people were eating or storing prepared food within the recommended 2 hour period. None of the participants left prepared food out for longer than 2 hours. Significant changes in hand washing and washing cutting boards/utensils also were noted.

Other findings: all 29 participants (100%) reported that BLT was their first exposure to Texas AgriLife Extension. This suggests that the program is reaching new audiences who otherwise might not have the opportunity to benefit from Extension programs.

Average monthly out of pocket food expenses reported by participants:

Before BLT: \$225.00 After BLT: \$108.06

Based on 18 participants who reported monthly out of pocket food expenses at the beginning of BLT and 30 days after the program ended. Changes in out of pocket food expenses were significantly different. While the reduction in out of pocket expenses is encouraging and might signify an economic impact of an estimated \$25,272 for these 18 individuals, it is very possible that the reduction in out of pocket foods expenses is due to the increase in participation in selected food programs.

For all participants who completed the pre and follow up survey the percentage who rated their perceived ability to prepare nutritious meals as either good or very good was 83% before BLT and 88.9%. Of the 18 individuals who could be contacted 30 days after the program ended, 11 rated BLT program as excellent. Another 7 rated the program as good.

## Outcome Summary - Balancing Food & Play

### Introduction

The *Promoting Healthy Weight Initiative* was established in 2006 as a way to collectively pool resources within Texas AgriLife Extension Service to address the rising rates of childhood overweight. A multi-disciplinary team developed an integrated interactive third grade enrichment curriculum on nutrition and physical activity. The curriculum is based on the Texas Essential Knowledge and Skills (TEKS), and is titled *Balancing Food & Play*.

### The Issue

- ◆ Nationally, 19 percent of children ages 6 to 11 years are obese (95<sup>th</sup> percentile for body mass index [BMI] by age/sex).

### Background

- ◆ My Pyramid for Kids, released by the U.S. Department of Agriculture, describes a healthful diet and encourages physical activity for children ages 6 to 11 years.
- ◆ Some research suggests consumption of regular soda may be associated with decreased milk consumption and decreased diet quality.
- ◆ About 1/3 of Texas children do not get the recommended amount of 60 minutes of physical activity each day.

### Our Response

The *Balancing Food & Play* curriculum was designed to improve knowledge and behaviors related to the following four educational constructs:

- ❖ snacking on fruits and vegetables,
- ❖ drinking milk with meals and water with snacks,
- ❖ encouraging 60 minutes of physical activity each day, and
- ❖ Limiting screen time to two hours or less per day.

The curriculum contained four elements: 20 lesson plans, 8 take-home reading assignments, 4 parent letters, and a 41 page journal for each student. In addition parent letters and take home reading assignments are available in Spanish.

During 2010 Texas AgriLife Extension Service agents recruited local third grade classroom teachers to participate in the program. Brooks County Extension agent, Celia Salinas contacted Brooks County ISD School and obtained permission to implement the 3<sup>rd</sup> grade school enrichment curriculum.

## Mean Number Correct out of 4 Knowledge Questions

Sample	N	Pre-Survey	Post- Survey
Students	37	37	40

- Student knowledge gains were noted for 40 of 4 knowledge questions.
- The percentage of students who correctly identified how much of a dinner plate should be covered with vegetables or fruits and vegetables increased from 46% (17) to 85% (34).
- The percentage of students who correctly identified the number of teaspoons of sugar in a regular (not diet) soda increased from 27% (10) to 80% (32).
- The percentage of students who reported always or almost always drinking regular (non-diet) soda decreased from 14% (5) to 20% (8).
- The percentage of students who correctly identified 60 minutes as the recommended amount of daily physical activity increased from 46% (17) to 95% (38).
- The percentage of students who correctly identified the recommended screen time limit of 2 hours or less increased from 27% (10) to 100% (40).
- The percentage of students who reported having 60 minutes or more of physical activity increased from 32% (12) to 45% (18).
- The percentage of students who reported having excessive screen time (4 hours or more) decreased from 19% (7) to 5% (2).

What Changes have you made since starting Balance Food and Play.

1. I get more physical activity
2. I am eating healthier because it makes you feel better.
3. I have to watch what I eat.
4. I have lost weight I felt my heart beating faster when I exercise. My screen time has been cut down to two hours or less and my physical activity has been more time
5. eating healthy and playing
6. trying vegetables
7. go outside and play
8. I stop eating greasy foods
9. I stop eating to much
10. I started eating my vegetables and healthy food and drink diet soda now
11. eat right
12. start eating healthy
13. we kind of stop eating sweets
14. play outside and eat corn
15. I stopped eating sugars; I stopped watching TV more than two hours. I am healthier.
16. Exercising more.
17. play outside sometimes
18. have more fruits and vegetables on my plate
19. I started drinking milk.
20. play outside
21. started going outside and playing
22. play
23. eat yogurt
24. yogurt
25. I have been getting more physical activity everyday
26. drink milk
27. I play more outside
28. I'm drinking more juice and milk.

## Outcome Summary-Kids in the Kitchen Evaluation Report for Brooks County

### **Situation:**

According to the Center of Disease Control (CDC), about 16 percent of all children in the US are overweight. Many children are not getting the 60 minutes of daily physical activity as recommended by my pyramid and dietary guidelines for Americans. Many children are not consuming the variety of healthful foods as depicted by My pyramid. Lifestyle modifications, including the adoption of improved food selection and increasing daily physical activity can improve health and may reverse this trend. In Brooks County Agent Salinas is implementing physical fitness programs that will increase physical awareness to our youth as well as to teach the importance of Nutrition for everyday living.

### **Response:**

To encourage youth to utilize My Pyramid as their daily plan for healthy living and to increase physical activity into their daily lives. Increase in Fruit and Vegetable intake Increase physical activity.

Kids in the kitchen is delivered through a variety of teaching methods that reflect audience needs. Teaching methods included a 10 lesson series that was made up from my previous BLT Program Assistant. Lessons included:

- Grains make half your whole grains
- Vegetables vary your veggies
- Fruits Focus on Fruits
- Milk get calcium rich foods
- Meat and Beans – go lean with proteins
- Oils and low nutrition foods without a group
- Go with the flow – Drink those fluids
- Portion Control- It's how much you eat that counts
- Pre-Test evaluation

During the 2010 summer program more than 29 Brooks county youth participated in the Kids in the Kitchen Summer program. This program focuses on my pyramid, physical activity and understanding healthy living.

### **Program Evaluation:**

Evaluation of the Brooks County Kids in the Kitchen Program was conducted via the use of a pre and post survey. This allowed for the collection of data that would reflect the current behavior of understanding and behavior changes. The instrument also allowed for level of understanding and Behavior changes. This report represents 29 youths who participated in the program and completed the pre and post surveys.

### **Results:**

Participant Characteristics as for gender we had 19 females and 10 males. Ethnicities 100% were of Hispanic origin. 100% were 10 or younger, and all lived in a town under 10,000 populations.

## Program Impact

Level of Understanding	Before		After	
	N	%	N	%
<b><i>My understanding of my pyramid</i></b>				
Poor	5	17	0	
Average	5	17	6	21
Good	7	24	7	24
Excellent	12	41.3	15	52
<b><i>My understanding of food nutrients and the functions</i></b>				
Poor	1	.03	0	
Average	4	14	1	.03
Good	11	38	7	24
Excellent	13	45	20	69
<b><i>My understanding of the importance of Food Safety</i></b>				

Upon entry of the Kids in the Kitchen program, a majority of the youth participants reported that their level of understanding of the six questions was always either excellent or Good a slight difference was made with the before and after survey.

### Intent to change Behavior

Behavior Change	N	%
I have planned or prepared a recipe at home based on what I have learned.	24	83
I have altered a recipe according to dietary needs based on what I have learned.	24	83
I have made healthier food choices based on what I have learned.	26	90
I have changed the way I handle and prepare food based on what I have learned.	28	97
I am more comfortable with speaking with others because I have participated in Kids in the kitchen.	28	97
I am more comfortable working in a team because I have participated in the Kids in the Kitchen	27	93
I am more comfortable with serving in a leadership role because I have participated in the kids in the kitchen.	27	93
I am more willing to listen to others because I have participated in the kids in the kitchen.	25	86
I am going to do a better job of following through on obligations because I have participated in the Kids in the Kitchen.	25	86

Approximately all our youth increased the intent to change their behavior after had gone through a summer camp with many components from leadership abilities, to food safety, working in the kitchen and even team preparation. A high percentage rate was determined when working with 29 youth.

With program such as Kids in the Kitchen will and can enhance the knowledge gained from each of the 29 youth participating. All our youth participating in the Kids in the Kitchen summer program were 10 years and

younger. Working with our youth gave them empowerment to be able to work and feel confident when helping or preparing a meal with Mom or Dad. This program was an interactive eight day program.

Collaborators:

- Commissioners court
- Community Ministries
- Housing Authority
- Independent School District
- 4-H & Youth County Programs



# Texas AgriLife Extension Service

## Brooks County

### Staff

---

Celia Salinas, CEA-FCS  
Brooks County

Nikolo Guerra, CEA/ANR  
Brooks County

Belen Ramos, BLT-PA  
Brooks County

Gloria Perez, Administrative Assistant  
Brooks County

**Contact Us**  
**219 Calixto Mora Ave**  
**Falfurrias, Texas**  
**(361)325-4402**  
**(361) 325-4157**  
**brooks@ag.tamu.edu**