Eat Smart. Be Active.

Terri Gibson, MSN RN-BC
Tricia McCarty, BSN RN, CDE
Jennie McCary, MS RD LD
NMDAC Dec 2014
Objectives

- Describe the development of community partnerships in implementing a family-focused lifestyle change program.
- Identify the components of the Live Fit Family Challenge (LFFC) childhood obesity intervention/prevention program.
- Identify the research process as utilized in implementing the LFFC study.
Live Fit Family Challenge

- Community-based
- Family-centered
- Collaborative
- Childhood obesity prevention-intervention

Healthy, Active Families
CHILDHOOD OBESITY

Overweight adolescents have a 70 percent chance of becoming overweight adults.

1/3 of all children and adolescents are overweight or obese.
FAMILY
Program timeline

- Fall 2009
- Two Spring 2010
- Spring 2011
- Fall 2011
- Fall & Spring 2012
- Winter 2013
- 2014 – research & funding
- Winter 2015
Community Partnerships

- Envision NM
- Cooperative Extension
- UNM Nutrition Club
- CNM Culinary Students
- APS School Nurses
Community Sites

- Community Centers
  - West Mesa Community Center
  - Jewish Community Center
  - Santa Barbara Martinez Town
  - Mesa Verde Community Center
  - Horn YMCA
  - NMSU Bernalillo County Cooperative Extension 4H Center
  - Los Duranes Community Center
Current Partnership

- University of NM
  - Dr. Aceves, School of Medicine, Pediatric Department Chair
  - Dr. Negrete, Healthy and Fit Children’s Clinic
  - Jeanne Dalen, PhD, Psychology, Research Assistant Professor, Pediatric Department
  - Dr. Deborah Cohen, DCN, RD, Assistant Professor, Nutrition Program
  - Renee Euler, Nutrition Student
“The greatest challenge in medicine today is to be found in motivating people to assume more responsibility for a health-affirming lifestyle.”

—C Everett Koop, MD former US Surgeon General
PROGRAM COMPONENTS
Weekly Format

6:00-6:30  Group Physical Activity
6:30-6:50  Share a Balanced Meal
6:50-7:50  Weekly Topic
7:50-8:10  Team Time
Physical Activities

- Active Play
- Family Games
- Dance
- Zumba
- Jump rope
- Yoga
- Take home tools
Family Mealtime
Weekly Topic

- MyPlate
- Go-Slow-Whoa
- Energy balance
- Portions
- Hunger
- Kids Cook
- Screen Time
- Family Meals
- Mindful Eating
- Meal planning, shopping on a budget
- Kids Cook
- Label reading
Learning Methods

• Games
• Food demo
• Kids cooking
• Hands-on
• Interactive teaching
• Small group discussion
• Interactive stations
• Coaching
Weekly Challenge
**Challenge Log**

**Lesson 1: Know Your Numbers**

<table>
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<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
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</table>

**Healthy Eating**

Complete a food log for 1 day this week

Completed □

**I Drank Water**

Yes □ No □ Yes □ No □ Yes □ No □ Yes □ No □ Yes □ No □ Yes □ No □ Yes □ No □

**Active Play**

List Activities and Minutes each day

<p>| | | | |</p>
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</thead>
</table>

**Family Time**

Complete Family Poster

Completed □

**Family Goal**

Take time to talk about why your family is taking this challenge.

Explain here:

<p>| | |</p>
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</table>

**Earn Stars**

- Complete Log ✿
- Return Family Poster ✿
- Complete 1 Day Food Log ✿
- Be Present for Activity Next Week

**ZIP CODE TO HEALTH 75210**
Thanks to Volunteers

- UNM Nutrition Club
- UNMH Nurses
- APS Nurses
- Cindy Davies, Bernalillo County Cooperative Extension
- Community volunteers
What families say

I learned how important portion sizes are and to cook healthier foods.

I am glad that I attended this program.

Because of what we learned, I/we plan to:

Exercise can be fun!

Make exercise a priority now that I know how to make it a family activity.

Eat healthy food and drink water instead of junk food and soda.
PROGRAM RESEARCH UPDATE
Program Update

August 2011
UNM Vision 2020 Grant, HRPO# 11-316

June 2013
Study Complete, Data input/analysis 2013

December 2013
UNM SOM Partnership begins

September 2014
Finally have IRB & MOU approval

December 2014
IRB Modifications and Program planning
REDCap

- Secure
- Web-based application for
  - Building and
  - Managing online surveys and
  - Databases
- Allows Statistical Analysis

https://hsc-ctscapps.health.unm.edu/redcap
Measurements/Assessments

- Collect data at 1, 8 and 24 weeks
  - Height
  - Weight
  - Waist circumference
  - A1c
  - Acanthosis Nigricans
  - Lifestyle profile
  - Self-esteem/Self-efficacy for teens

- Added 24 week follow-up with research study
- Added waist and A1c measurement
- Added self-esteem and self-efficacy questionnaires
Analysis

- 8 programs (4 in IRB project)
- 2 high school control groups

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<th>N=30</th>
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<td>Experimental Teen</td>
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<tr>
<td>Female</td>
<td>13</td>
<td>12</td>
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<td>6</td>
</tr>
<tr>
<td>Mean Age years</td>
<td>15.79</td>
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<td>1</td>
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<tr>
<td>Hispanic</td>
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<td>0</td>
<td>2</td>
<td>NR</td>
</tr>
<tr>
<td>TLC (Teen Lifestyle Change) Questionnaire:</td>
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<td>N=14</td>
<td></td>
<td></td>
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<td>------------------------------------------</td>
<td>------</td>
<td>------</td>
<td></td>
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<tr>
<td>Eats less fast food</td>
<td>&gt;0.0098</td>
<td>&gt;0.0313</td>
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<tr>
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<td>&gt;0.0137</td>
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<tr>
<td>Gets more daily physical activity</td>
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<td>&gt;0.0234</td>
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<tr>
<td>Eats more fruits and veggies daily</td>
<td>&gt;0.0002</td>
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A Pilot Study to Measure the Effect of the Live Fit Family Challenge on Health-Related Outcomes on Adolescents

Terri Gibson, MSN RN-BC, Patricia McCarty, BSN RN CDE, Jennie McCary, MS RD LD, Kathy Lopez-Bushnell, EdD MPH MSN APRN RN-BC

The Live Fit Family Challenge Program –a 2013 Gage Award “Remarkable Project”

Problem:
According to the World Health Organization global overweight and obesity rates across all populations have increased significantly in the last 30 years. The literature provides a plethora of proposed interventions designed to address the problem, yet the numbers of obese individuals continues to increase. The cost of obesity is enormous and the associated co-morbidities that result are of significant concern.

Literature Review:
According to the CDC one third of the U.S. population is overweight or obese. In New Mexico, there is a combined rate of 38.5% of children and youth with overweight/obesity issues. The American Nurses Association suggests that given the major threat childhood obesity poses in terms of health and financial concerns, an imperative of the nursing profession is to address the epidemic through health promotion and disease prevention. This was a quasi-experimental, evidence-based community participatory and family-focused intervention program. It was designed to include interactive teaching, physical activity sessions, nutritious meals, kids cooking, and small group break-out sessions. The experimental subjects attended weekly meetings lasting 2.5 hours, over the course of 8 consecutive weeks. The target audience was families with school-age children, including teenagers, located in a southwestern urban community. Teen control subjects were recruited from two separate high schools and were measured with the same tools at the same time intervals and did not attend the program. Data collection included anthropometric measurements and Likert scale questionnaires relating to lifestyle habits. Data collection took place at 1-, 6-, and 24-week intervals.

Specific Aims and Goals:
The goal of this evidence-based research project was to:
1. Pilot the effect of a health promotion program and peer education program on overweight, under-served adolescents.
2. Measure the effect of a health promotion program and peer education program on adolescents’ health knowledge, activity levels, nutrition patterns, lifestyle changes, self-esteem, and self-efficacy.

Hypothesis:
Adolescents that participated in this program would have greater health promotion in the areas of physical activity, nutrition, self-efficacy and self-esteem, than those not participating in the program.

Methodology and Intervention:
This 2013 IRB-approved study resulted in significant changes in the lifestyle habits of adults and teens. See Table 1.

Findings:
Table 2. N=14

Table 2. N=14

<table>
<thead>
<tr>
<th>Demographic Item</th>
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<td>Ethnicity</td>
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Conclusions:
The Live Fit Family Challenge Obesity Intervention shows promise of positively impacting the lifestyle habits of families. Activity habits, fast food, fresh fruits & veggie consumption, family meals, and screen time results indicate positive improvement for some study participants. Qualitative results indicate families are delighted with the format and educational interaction. Individuals report that they learned how to make healthier foods, the meals were tasty, they learned how to read labels and will use that information for future shopping. They also expressed appreciation for the introduction to fun ways to be active as a family and that they plan to continue to be more active in the future.

Recommendations:
Continue this program to refine data collection and promote attendance and retention of families. Continue interprofessional collaboration and community participatory engagement to make this type of program more available and accessible to all community families. Identify additional support structures to help families complete lifestyle modification programs such as this.

References
Please see attached sheet for a list of References.
Research Challenges

- Control group
- Long-term commitment from families
- Volunteers
- Measuring lifestyle changes
- NAPH 2013 Gage Awards- "Remarkable Project"
- NMNA Presentation Sept 2013
- WIN Conference Poster April 2014
Where are we now?

- Recent IRB Approval for continued research
  - Added FFQ and Knowledge questionnaire
- Jan 2015 Program at Los Duranes CC
- Mindfulness training
- Bilingual cookbook
Ongoing Challenges

- Reaching busy families
- Varying ages
- Need for interpreter
- Need a home
- Rely on volunteers
- Equipment
- Funding
Video
Questions or comments?

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272-5687

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