IMPLEMENTING GROUP NUTRITION EDUCATION IN OGDEN, KANSAS

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Overview

- Background
  - EFNEP
  - Ogden
  - Abbreviated design
- Program descriptions
- Promotional methods
- Results and feedback
- Implications for Public Health
- Reflection

EFNEP Background

- Expanded Food & Nutrition Education Program (EFNEP)
  - Funded by NIFA (formally CSREES)
  - Limited resource populations
  - 10-12 week adult program length
  - "Gold Standard"

EFNEP Outcomes

- Increased nutrition knowledge and improved food and nutrition practices (Greenwell et al., 2000).

- Positive health behaviors practiced by Kansas EFNEP participants:
  - 56% more likely to thaw foods safely
  - 71% used food labels more often when making food choices
  - 87% improve in one or more areas of food resource management
  - 95% improve in one or more nutrition practice
  - 43% showed increase in physical activity
  - 47% increased number of meals eaten together
    (EFNEP Kansas Annual Report, 2010)

- Economic impact:
  - **$10.64** savings in health care costs and **$2.48** savings on food costs for every **$1** spent on EFNEP (Rajgopal et al., 2002).

Abbreviated Design

K·STATE Research and Extension → $$ → **Ogden Adult Program** ← **materials** ← EFNEP Expanded Food and Nutrition Education Program

4 lessons   10-12 lessons

- Shorter duration, EFNEP curriculum
- Goal: observe outcomes related to health behavior changes with same curriculum, but with shorter format to mitigate issues of long programs

Income and SNAP Participation Comparison of Riley County

	Riley County	Ogden	Leonardville	Riley	Randolph	Manhattan
Population	69,035	2,449	397	1,303	193	50,606
Families Below Poverty	11.3%	12.2%	9.7%	2.4%	0%	10.1%
Mean Income (past 12 months)	$52,196	$46,690	$37,924	$58,503	$64,004	$50,453
Median Income (past 12 months)	$39,257	$39,611	$36,624	$57,109	$63,125	$36,630
Participation in SNAP	4.0%	5.1%	5.5%	3.9%	<1%	4.1%

2010 U.S. Census Bureau Data

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Adult Program

- Two, four-week sessions
- Participant guides developed from "EFNEP Families – Eating Smart and Moving More" scripts
- Class recipe and "Move More" breaks

Adult Program

- ◉ <u>Session One</u>

Class One: Introduction of EFNEP and "Fix It Safe"

Class Two: "Know What's for Dinner"

Class Three: MyPlate

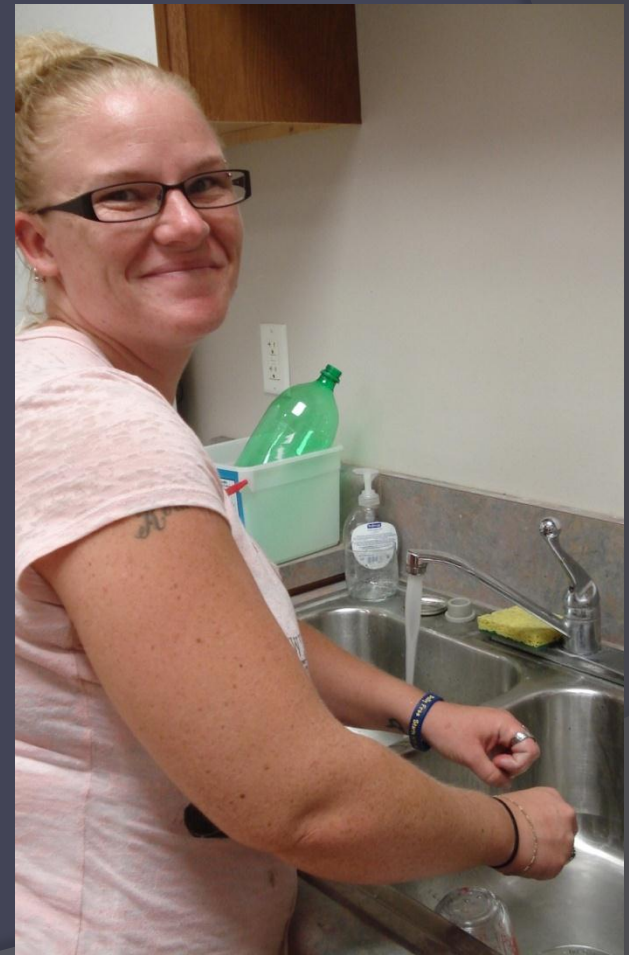Class Four: "Shop For Value, Check the Facts"

Adult Program

- <u>Session Two</u>

Class One: Introduction of EFNEP and "Fix It Safe"

Class Two: "Know What's for Dinner"

Class Three: "Fix It Fast"

Class Four: "Smart Size Your Portions and Right Size You"

Kids Program

Kids Program

Each class = take home message + recipe + physical activity "break"

- Class 1: Eat the Rainbow
- Class 2: Grains
- Class 3: Fruits
- Class 4: Dairy
- Class 5: Vegetables

- Class 6: Proteins
- Class 7: Healthy Snacks/Serving Sizes
- Class 8: Limiting Fat and Sugar
- Class 9: MyPlate

Methods of Evaluation

- Adult Program:
  - Pre and post 24 hour recall (and one month follow up for Session 1)

Client's 24-Hour Diet Recall

Name: _____

Date Taken: _____

Pregnant: ☐ Yes   Nursing: ☐ Yes

☐ No   ☐ No

Taking Nutritional Supplements: ☐ Yes

If Yes, list type: _____ ☐ No

Amount spent on food last month: _____

Check which food record:

☐ Entry

☐ Exit

Activity Level: ☐ Less than 30 min.

☐ 30-60 minutes

☐ More than 60 min.

Meal Type:
1 = Morning
2 = Mid-Morning
3 = Noon
4 = Afternoon
5 = Evening
6 = Late Evening

Serving Abbreviations:
Tablespoon = TBSP
Cup = c
Teaspoon = tsp
Pound = lb
Ounce = oz
Slice = sl

What did the client eat and drink in the last 24 hours? (be thorough)

Foods and Beverages consumed. Describe in detail. List one food per line.	AMOUNT EATEN	MEAL TYPE

Methods of Evaluation

- Adult Program:
  - Pre and post 24 hour recall (and one month follow up for Session 1)
  - Pre and post behavioral survey (and one month follow up for Session 1)

EFNEP Eating Right Survey

Name: _____

Date: _____

This is a survey about ways you plan and fix foods for your family. As you read each question, think about the recent past. This is not a test! There are not any wrong answers.

For these questions, think about how you usually do things. Please put a check in the box that best answers each question.	Not Applicable	Do Not Do	Seldom	Sometimes	Most of the Time	Almost Always
	0	1	2	3	4	5
1. How often do you plan meals ahead of time?						
2. How often do you compare prices before you buy food?						
3. How often do you run out of food before the end of the month?						
4. How often do you shop with a grocery list?						
5. This question is about meat and dairy foods. How often do you let these foods sit out for more than two hours?						
6. How often do you thaw frozen foods at room temperature?						
7. When deciding what to feed your family, how often do you think about healthy food choices?						
8. How often have you prepared foods without adding salt?						
9. How often do you use the "Nutrition Facts" on the food label to make food choices?						
10. How often do your children eat something in the morning within two hours of waking up?						
11. How often do you eat meals or snacks with one or more family members?						

For Office Use Only:

Extension Staff Member: _____   Check Type of Recall: ☐ Entry

Client ID #: _____   ☐ Exit

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Methods of Evaluation

- **Adult Program:**
  - Pre and post 24 hour recall (and one month follow up for Session 1)
  - Pre and post behavioral survey (and one month follow up for Session 1)
- **Kids Program:**
  - Adult Feedback Questionnaire

Adult Feedback
Kids Cooking/Nutrition classes
Ogden Community Center

1) Has your child told you they enjoy coming to the classes?   YES   NO

2) Has your child spoke about the classes at home or outside or class?   YES   NO

3) Has he or she asked for some different foods at home?   YES   NO

   If so, what types of foods?

4) Have you noticed any changes in his or her nutrition knowledge or eating habits?   YES   NO

   If so, what have you noticed?

Any additional comments?
_____
_____
_____
_____

------------------(cut below this line – return top portion and keep invitation)------------------------

YOU'RE INVITED!

Wednesdays in September (5th, 12th, 19th, 26th)
(Come and join us even if you didn't make it to the first class!)
6pm, Ogden Community Center

Cook and eat new recipes such as stir-fry, quiche, pasta bakes, etc...
Get easy meal ideas, feel good about the foods you and your family eat and much more!
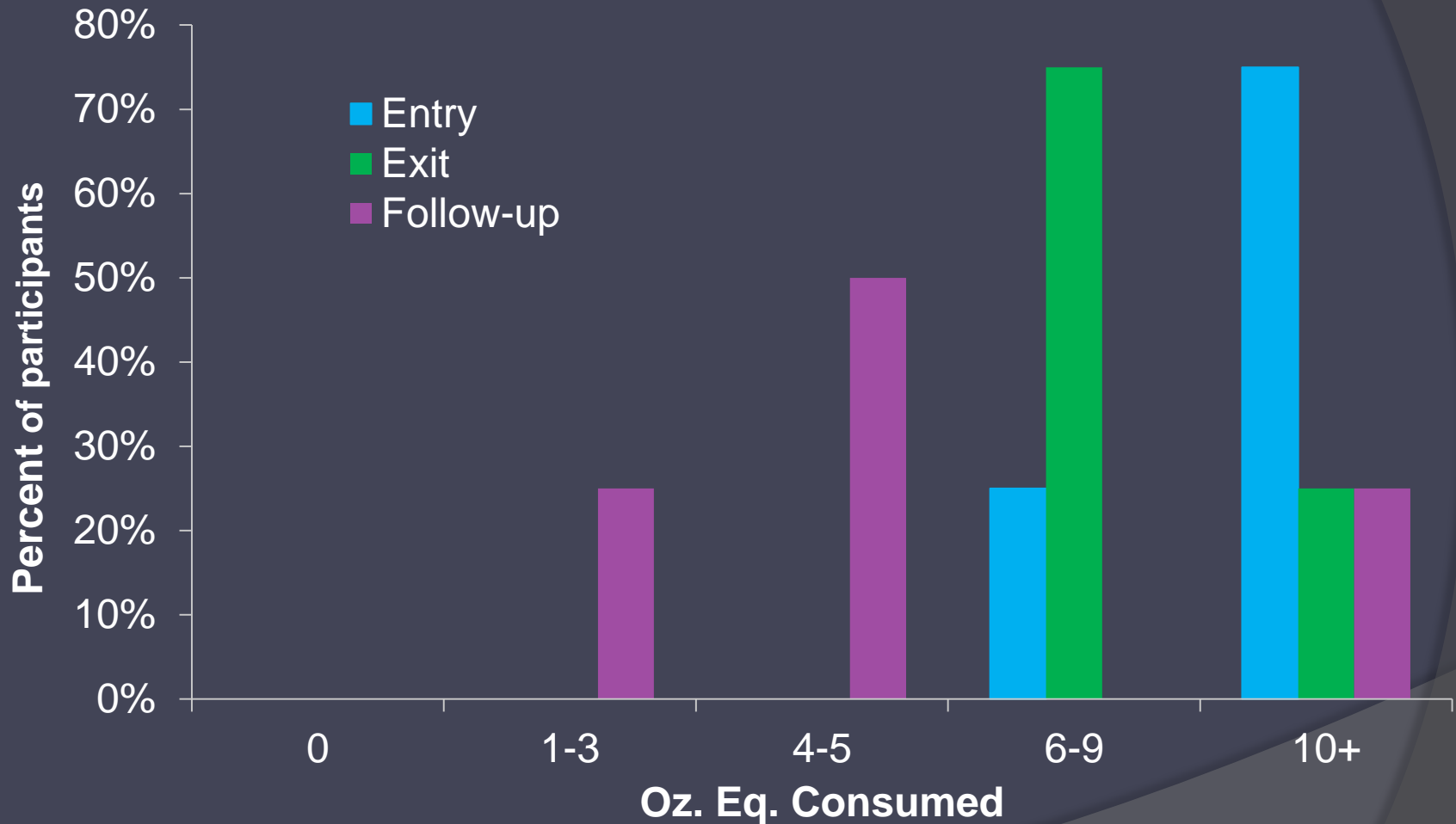Call (785) 537-0351 to sign up or just come on by for this FREE program. Hope to see you there!

EFNEP
K-STATE
Research and Extension

Program Promotion

- Flyers (mail outs & handouts)
- Follow-up calls
- Newsletter
- Samples
- Stickers

Session 1: Grain Consumption

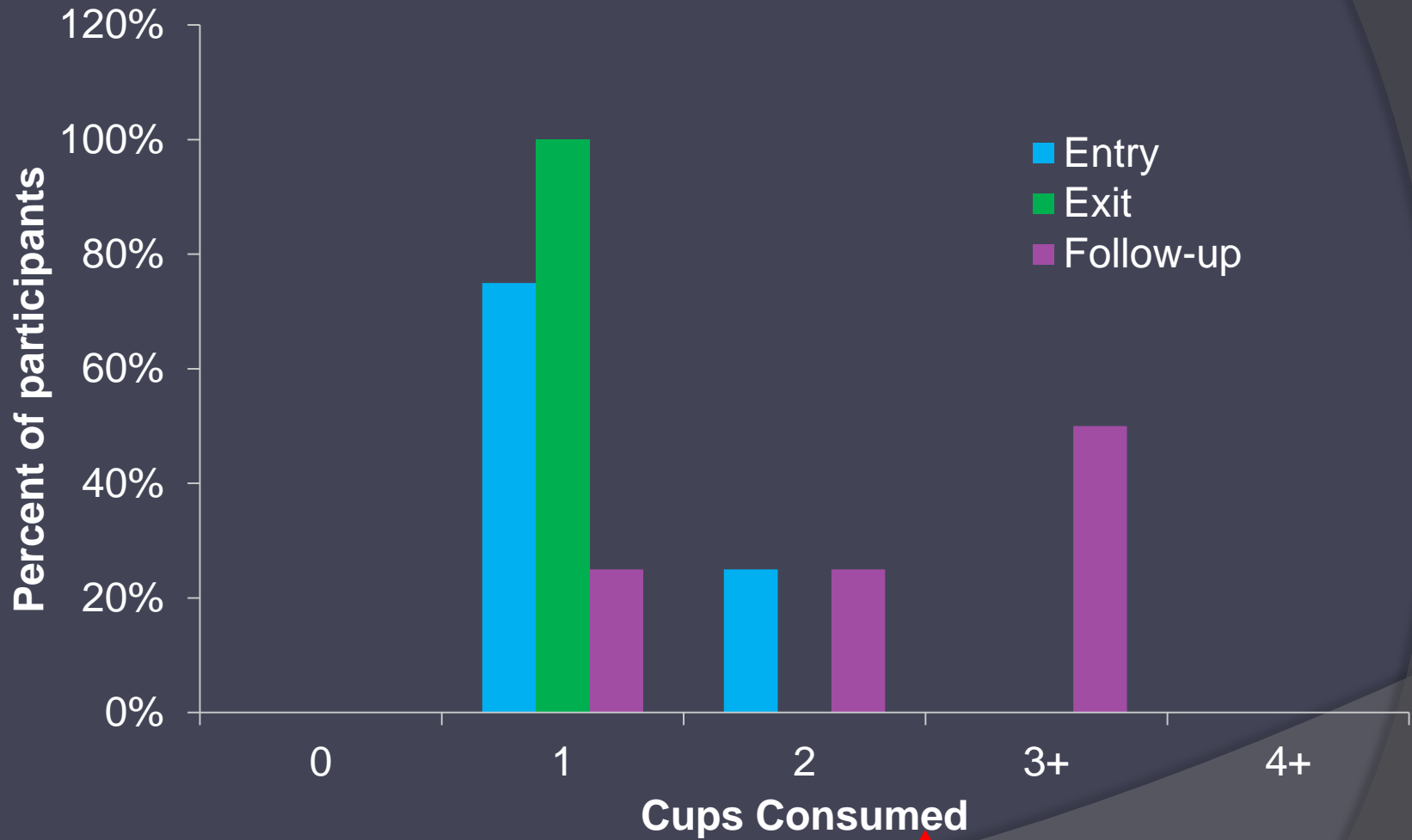**% positive change = 100**

n = 4

Session 1: Fruit Consumption

% positive change = 50

n = 4

18

Session 1: Vegetable Consumption

% positive change = 100

n = 4
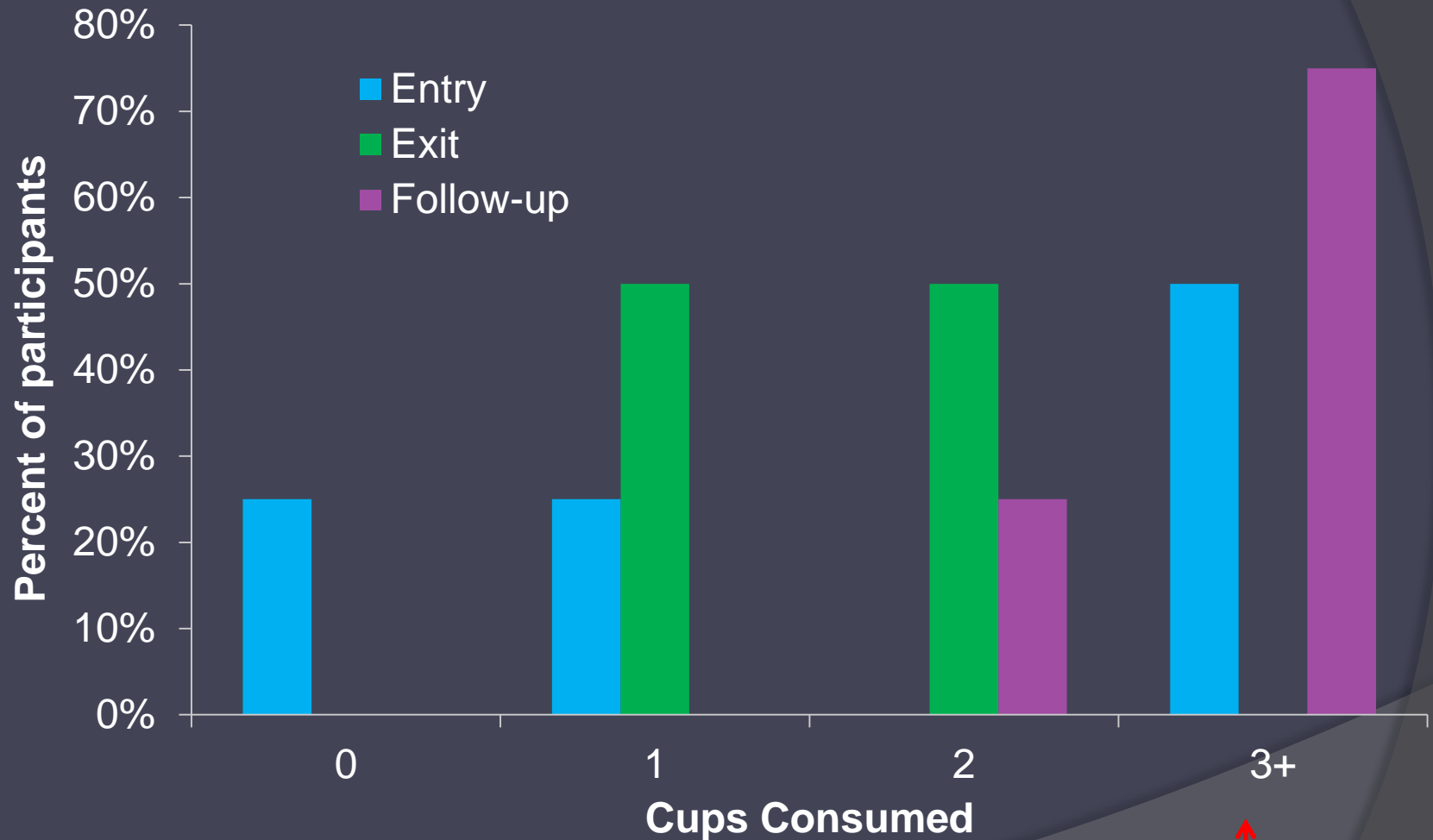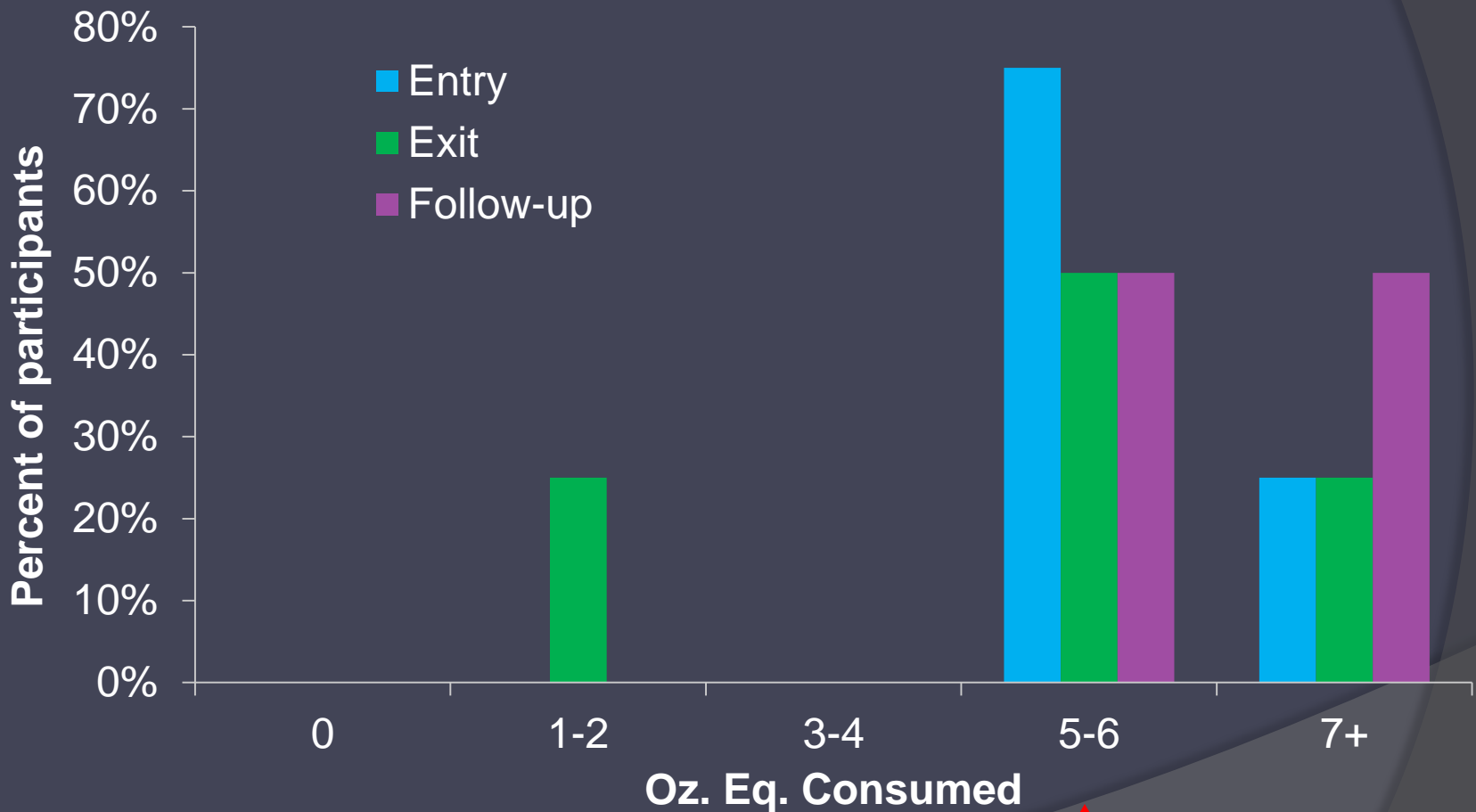
Session 1: Meat & Bean Consumption

Chart showing Percent of participants (y-axis, 0% to 80%) vs Oz. Eq. Consumed (x-axis: 0, 1-2, 3-4, 5-6, 7+) for Entry, Exit, and Follow-up.

% positive change = 50

n = 4

Session 2: 24-hour Recall Outcomes

Variable	Mean ± StD		% Positive Change
	Entry	Exit	
Grains (oz)	7.4 ± 2.9	5.8 ± 0.8	66.7
Fruits (cups)	0.1 ± 0.1	0.1 ± 0.1	66.7
Vegetables (cups)	1.0 ± 1.0	0.7 ± 0.7	66.7
Milk (cups)	1.9 ± 1.5	1.0 ± 0.4	33.3
Meats & Beans (oz)	6.2 ± 1.8	6.4 ± 1.1	33.3

Session 1 Behavioral Checklist Outcomes – Food Resource Management Practices

Entry vs. exit survey responses	**Entry vs. follow-up survey responses**
50% more often planned meals in advance	**Same** as entry versus exit survey response
No participant compared prices more often when shopping	**25%** compared prices more often when shopping
75% less often ran out of food before the end of the month	**67%** less often ran out of food before the end of the month
25% more often used a list for grocery shopping	**Same** as entry versus exit survey response

Session 1 Behavioral Checklist Outcomes – Nutrition Practices

Entry vs. exit survey responses	Entry vs. follow-up survey responses
50% more often planned meals in advance	**Same** as entry versus exit survey response
50% more often thought about healthy food choices when deciding what to feed their family	**100%** more often thought about healthy food choices when deciding what to feed their family
25% more often prepared foods without adding salt	**Same** as entry versus exit survey response
25% more often used the "Nutrition Facts" on food labels to make food choices	**50%** more often used the "Nutrition Facts" on food labels to make food choices
No participant reported that their children ate breakfast more often	**Same** as entry versus exit survey response

Session 1 Behavioral Checklist Outcomes – Food Safety Practices

Entry vs. exit survey responses	**Entry vs. follow-up survey responses**
25% more often followed recommended practices of not letting meat and dairy stay at room temperature for more than 2 hours	**Same** as entry versus exit survey response
50% more often followed recommended practices of not thawing foods at room temperature (25% always followed recommended practice)	**100%** more often followed recommended practices of not thawing foods at room temperature (25% always followed recommended practice)

Session 2 Behavioral Checklist Outcomes

- **Food Resource Management Practices**
  - No participant more often planned meals in advance
  - No participant compared prices more often when shopping
  - **33% less often ran out of food before the end of the month**
  - No participant more often used a list for grocery shopping

- **Nutrition Practices**
  - No participant more often planned meals in advance
  - **33% more often thought about healthy food choices when deciding what to feed their family**
  - **67% more often prepared foods without adding salt**
  - **67% more often used the "Nutrition Facts" on food labels to make food choices**
  - No participant reported that their children ate breakfast more often

- **Food Safety Practices**
  - No participant more often followed recommended practices of not letting meat and dairy stay at room temperature for more than 2 hours
  - **67% more often followed recommended practices of not thawing foods at room temperature**

Session 1 vs. Session 2 Outcomes

Mean Intake	Session 1	Session 2	Session 1	Session 2
	Overall Positive Change Entry v. Exit	Overall Positive Change Entry v. Exit	Overall Positive Change Entry v. F/U	**?**
Grains (oz)	Yes	Yes	Yes	
Fruits (cups)	No	No	No	
Vegetables (cups)	No	No	Yes	
Milk (cups)	No	No	Yes	
Meats & Beans (oz)	Met rec	Met rec	Met rec	

Session 1 vs. Session 2 Outcomes

- Entry vs. Exit Behavioral Survey Outcomes:
  - Session 1 showed greater improvement in 3 out of 4 *food resource management practices* than Session 2
  - Session 2 showed greater improvement in 3 out of 5 *nutrition practices* than Session 1
  - Both sessions showed improvement in one of the two *food safety practices*

Kids Program Outcomes

Questionnaire Item	Response	
Has your child told you they enjoy coming to the classes?	**100% answered "Yes"** 0% answered "No"	
Has your child spoke about the classes at home or outside of class?	**100% answered "Yes"** 0% answered "No"	
Has he or she asked for different foods at home? If so, what types of foods?	**67% answered "Yes"** 33% answered "No"	Of those that answered "Yes": 25% responded vegetables 25% responded meat and dairy 50% responded fruit
Have you notice any changes in his or her nutrition knowledge or eating habits? If so, what have you noticed?	**100% answered "Yes"** 0% answered "No"	33% Try different foods 33% Eating the rainbow 17% Eating more fruit 17% Eating more vegetables

Responses to Adult Feedback Form (*n* = 6)

Implications for Public Health

- Healthy People 2020 objectives:
  - Increase fruit, vegetable, and whole grain intake, and to reduce intake of saturated fats, sugar, and sodium in the diet of Americans (Healthy People 2020)
- Development of collective efficacy and capacity needed to reach attainable goals as a community
- Further observance of health behavior outcomes from abbreviated EFNEP programs

Reflection

- Challenges
  - Recruitment
- What went well
  - Participant guide
  - Discussion-based learning
- What went not so well
  - Veggie tasting
- Change
  - Earlier promotion
  - Kids evaluation
- Limitations
- Future
  - Growth of group nutrition programs in Ogden for both adults and kids

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