



The Fruits of Our Labor

Six Months of SNAP-Ed Evaluation in Arizona

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Today's Harvest



1. Farmer's Almanac

National SNAP-Ed Evaluation Framework

2. An Early Harvest

Local Wellness Policy Scores to Date

3. A Bountiful Harvest

Adult DE Impact Evaluation

4. How's It Hangin'?

A Closer Look at the AzNN Youth Survey

5. Our Newest "Hub"

Introducing the AzNN Evaluation Website



Farmer's Almanac

National SNAP-Ed Evaluation Framework

National SNAP-Ed Evaluation Framework

- Released with FY17 Guidance
- Foundation of SNAP-Ed evaluation guidance from USDA
- *Interpretive Guide* forthcoming
 - Describes indicators and recommended tools in detail
- Priority indicators forthcoming



SNAP-ED EVALUATION FRAMEWORK

Nutrition, Physical Activity, and Obesity Prevention Indicators

	READINESS & CAPACITY SHORT TERM (ST)	CHANGES MEDIUM TERM (MT)	EFFECTIVENESS & MAINTENANCE LONG TERM (LT)	
INDIVIDUAL 	GOALS AND INTENTIONS ST1: Healthy Eating ST2: Food Resource Management ST3: Physical Activity and Reduced Sedentary Behavior ST4: Food Safety	BEHAVIORAL CHANGES MT1: Healthy Eating MT2: Food Resource Management MT3: Physical Activity and Reduced Sedentary Behavior MT4: Food Safety	MAINTENANCE OF BEHAVIORAL CHANGES LT1: Healthy Eating LT2: Food Resource Management LT3: Physical Activity and Reduced Sedentary Behavior LT4: Food Safety	POPULATION RESULTS (R) TRENDS AND REDUCTION IN DISPARITIES R1: Overall Diet Quality R2: Fruits & Vegetables R3: Whole Grains R4: Dairy R5: Beverages R6: Food Security R7: Physical Activity and Reduced Sedentary Behavior R8: Breastfeeding R9: Healthy Weight R10: Family Meals R11: Quality of Life
ENVIRONMENTAL SETTINGS  EAT, LIVE, WORK, LEARN, SHOP, AND PLAY	ORGANIZATIONAL MOTIVATORS ST5: Need and Readiness ST6: Champions ST7: Partnerships	ORGANIZATIONAL ADOPTION AND PROMOTION MT5: Nutrition Supports MT6: Physical Activity and Reduced Sedentary Behavior Supports	ORGANIZATIONAL IMPLEMENTATION AND EFFECTIVENESS LT5: Nutrition Supports Implementation LT6: Physical Activity Supports Implementation LT7: Program Recognition LT8: Media Coverage LT9: Leveraged Resources LT10: Planned Sustainability LT11: Unexpected Benefits	
SECTORS OF INFLUENCE 	MULTI-SECTOR CAPACITY ST8: Multi-Sector Partnerships and Planning	MULTI-SECTOR CHANGES MT7: Government Policies MT8: Agriculture MT9: Education Policies MT10: Community Design and Safety MT11: Health Care Clinical-Community Linkages MT12: Social Marketing MT13: Media Practices	MULTI-SECTOR IMPACTS LT12: Food Systems LT13: Government Investments LT14: Agriculture Sales and Incentives LT15: Educational Attainment LT16: Shared Use Streets and Crime Reduction LT17: Health Care Cost Savings LT18: Commercial Marketing of Healthy Foods and Beverages LT19: Community-Wide Recognition Programs	

CHANGES IN SOCIETAL NORMS AND VALUES

SNAP-ED EVALUATION FRAMEWORK

Nutrition, Physical Activity, and Obesity Prevention Indicators



SNAP-ED EVALUATION FRAMEWORK

Nutrition, Physical Activity, and Obesity Prevention Indicators

READINESS & CAPACITY
SHORT TERM (ST)

CHANGES
MEDIUM TERM (MT)

EFFECTIVENESS & MAINTENANCE
LONG TERM (LT)

INDIVIDUAL



ENVIRONMENTAL SETTINGS

EAT, LIVE,
WORK, LEARN,
SHOP, AND
PLAY



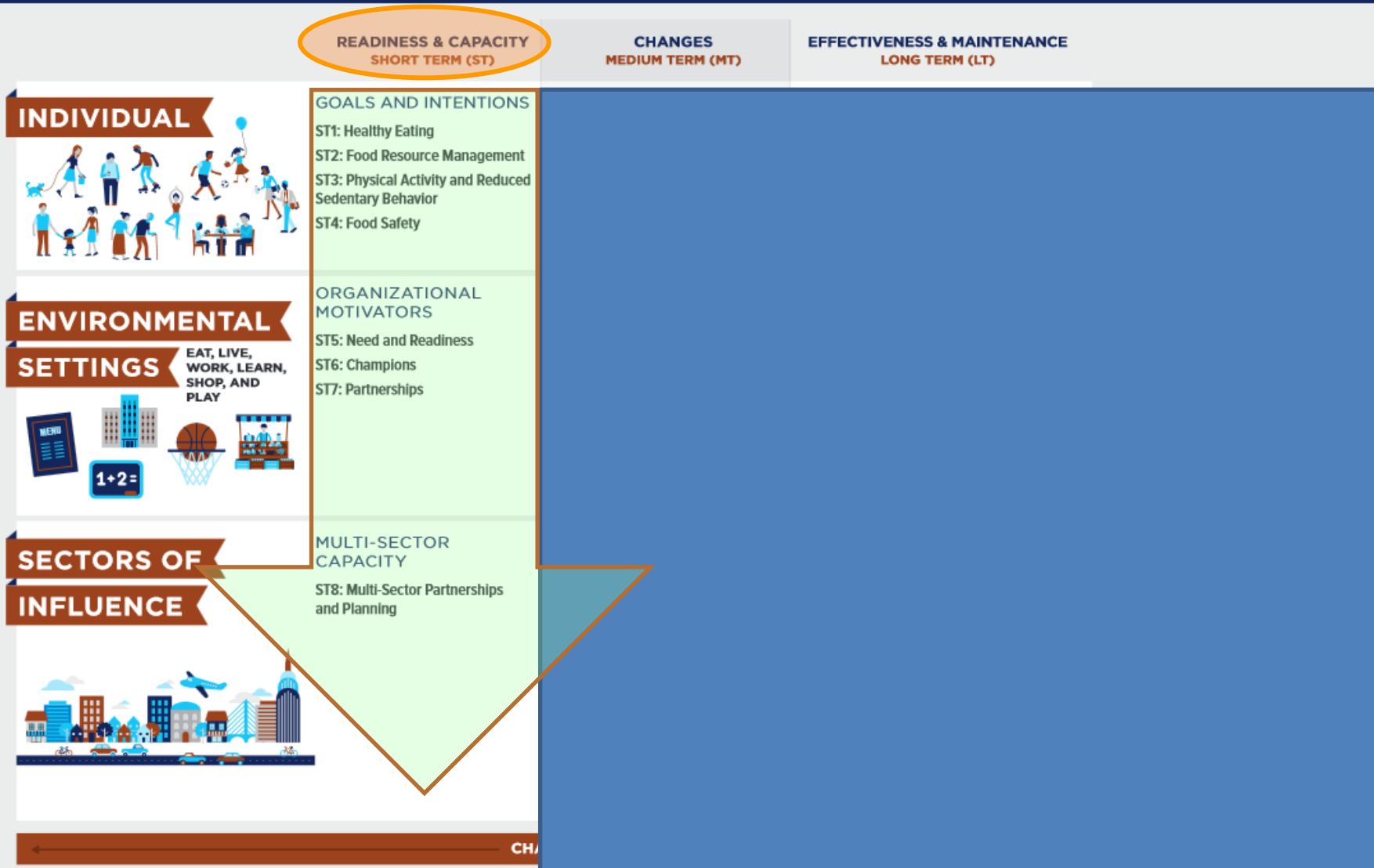
SECTORS OF INFLUENCE



SNAP-Ed achievements over time

SNAP-ED EVALUATION FRAMEWORK

Nutrition, Physical Activity, and Obesity Prevention Indicators



SNAP-ED EVALUATION FRAMEWORK

Nutrition, Physical Activity, and Obesity Prevention Indicators



SNAP-ED EVALUATION FRAMEWORK

Nutrition, Physical Activity, and Obesity Prevention Indicators

READINESS & CAPACITY SHORT TERM (ST)

CHANGES MEDIUM TERM (MT)

EFFECTIVENESS & MAINTENANCE LONG TERM (LT)

INDIVIDUAL

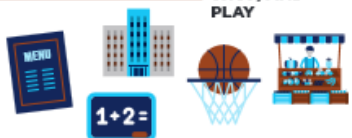


Youth Survey

ST3: Physical Activity and Reduced Sedentary Behavior
ST4: Food Safety

Adult IE

ENVIRONMENTAL SETTINGS



EAT, LIVE,
WORK, LEARN,
SHOP, AND
PLAY

NAPSACC
WellSAT 2.0
SFSP Checklist

SECTORS OF INFLUENCE



MULTI-SECTOR
CAPACITY

Wilder

MULTI-SECTOR
CHANGES

MT7: Government Policies
MT8: Agriculture
MT9: Education Policies
MT10: Community Design and Safety
MT11: Health Care
Clinical-Community Linkages
MT12: Social Marketing
MT13: Media Practices

MAINTENANCE OF
BEHAVIORAL CHANGES

LT1: Healthy Eating
LT2: Food Resource Management
LT3: Physical Activity and Reduced Sedentary Behavior
LT4: Food Safety

ORGANIZATIONAL
IMPLEMENTATION AND
EFFECTIVENESS

LT5: Nutrition Supports Implementation
LT6: Physical Activity Supports Implementation
LT7: Program Recognition
LT8: Media Coverage
LT9: Leveraged Resources
LT10: Planned Sustainability
LT11: Unexpected Benefits

MULTI-SECTOR IMPACTS

LT12: Food Systems
LT13: Government Investments
LT14: Agriculture Sales and Incentives
LT15: Educational Attainment
LT16: Shared Use Streets and Crime Reduction
LT17: Health Care Cost Savings
LT18: Commercial Marketing of Healthy Foods and Beverages
LT19: Community-Wide Recognition Programs

POPULATION RESULTS (R)

TRENDS AND
REDUCTION
IN DISPARITIES

R1: Overall Diet Quality
R2: Fruits & Vegetables
R3: Whole Grains
R4: Dairy
R5: Beverages
R6: Food Security
R7: Physical Activity and Reduced Sedentary Behavior
R8: Breastfeeding
R9: Healthy Weight
R10: Family Meals
R11: Quality of Life

CHANGES IN SOCIETAL NORMS AND VALUES



An Early Harvest

Local Wellness Policy Scores to Date



Who's Eating the Fruit?

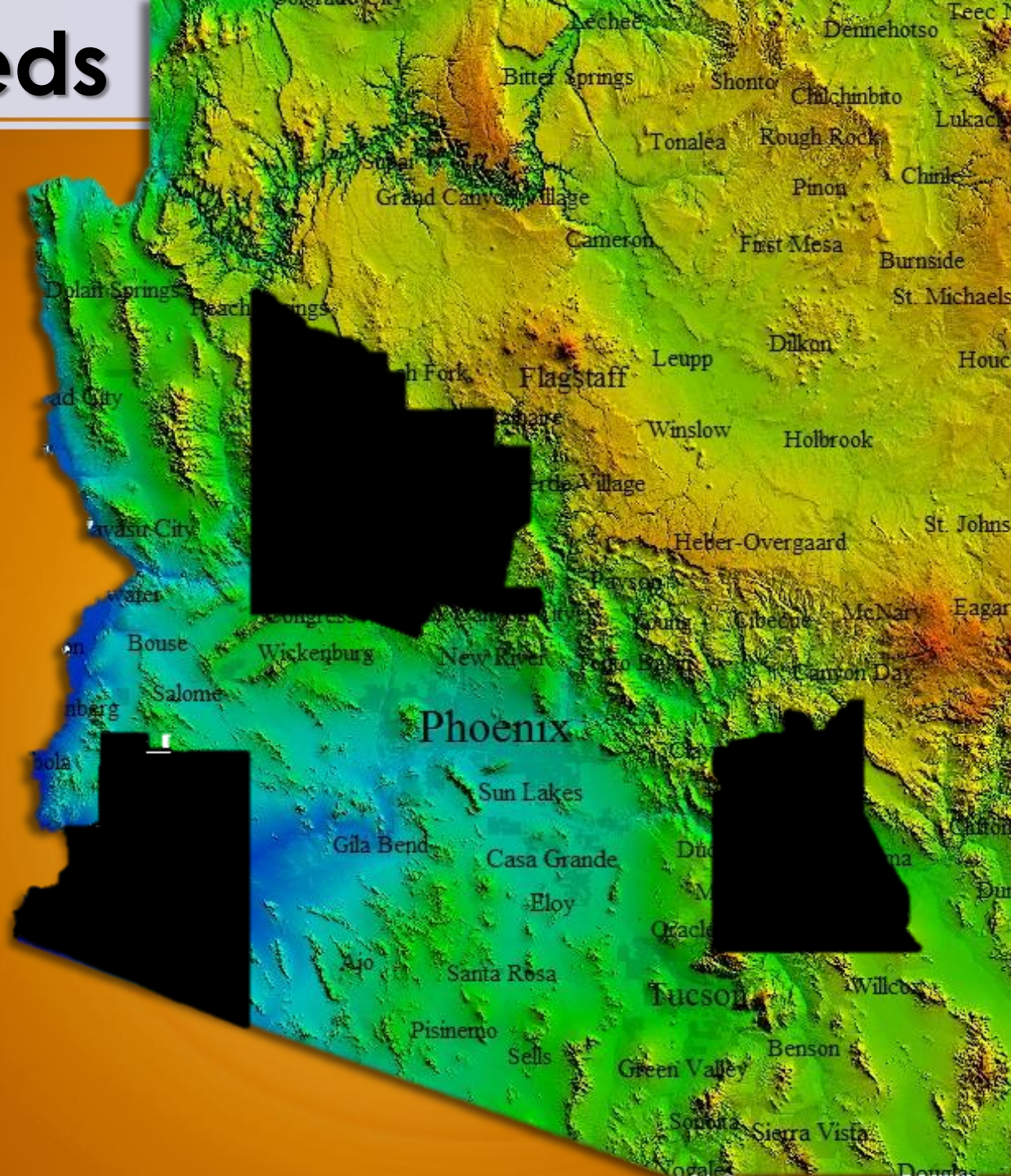
- Embed video here

Planting Seeds

48

LWPS!

20% vs. 5%





Scores and Sections

Comprehensiveness & Scope



Six Sections

**1. Nutrition
Education**

**2. Standards for
USDA School Meals**

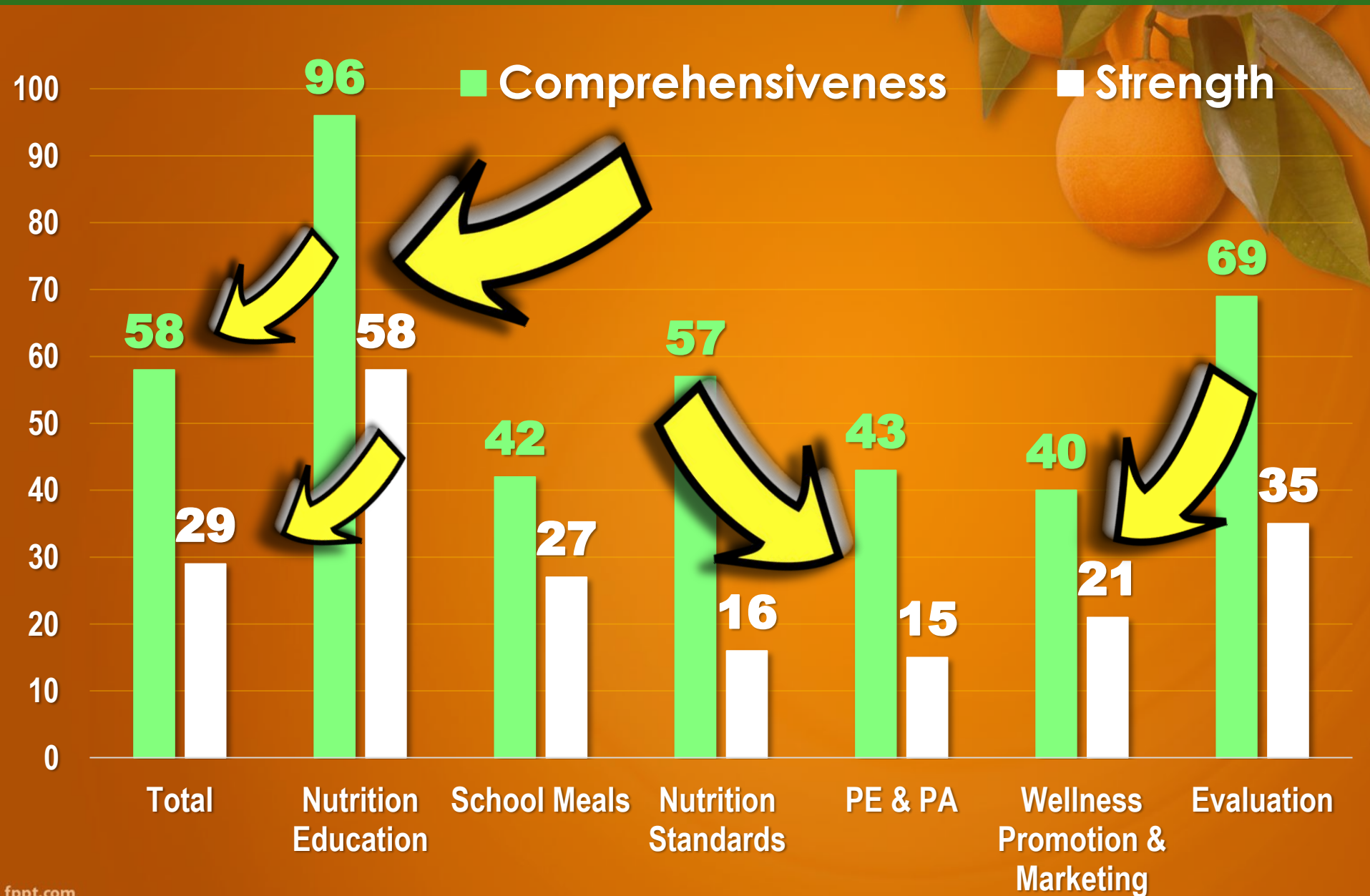
**3. Nutrition
Standards for
Competitive Foods
& Beverages**

**4. Physical
Education &
Physical Activity**

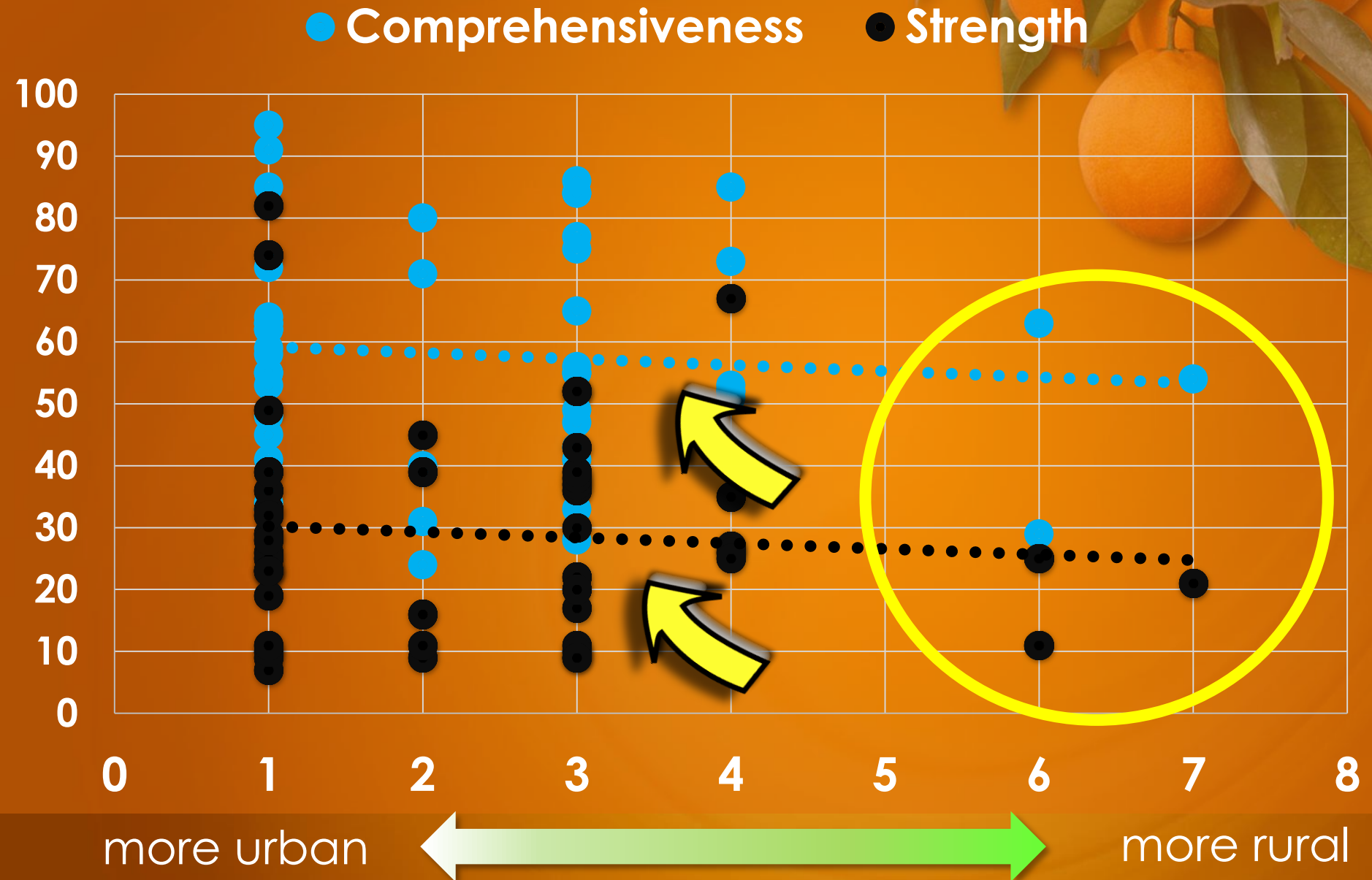
**5. Wellness
Promotion &
Marketing**

**6. Implementation,
Evaluation, &
Communication**

Mean WellSAT 2.0 Scores (N=48)



Total Scores by 2013 Rural-Urban Code (N=48)





How Does Arizona Compare?

School District Wellness Policies: Evaluating Progress and Potential for Improving Children's Health Five Years after the Federal Mandate



**47
states**

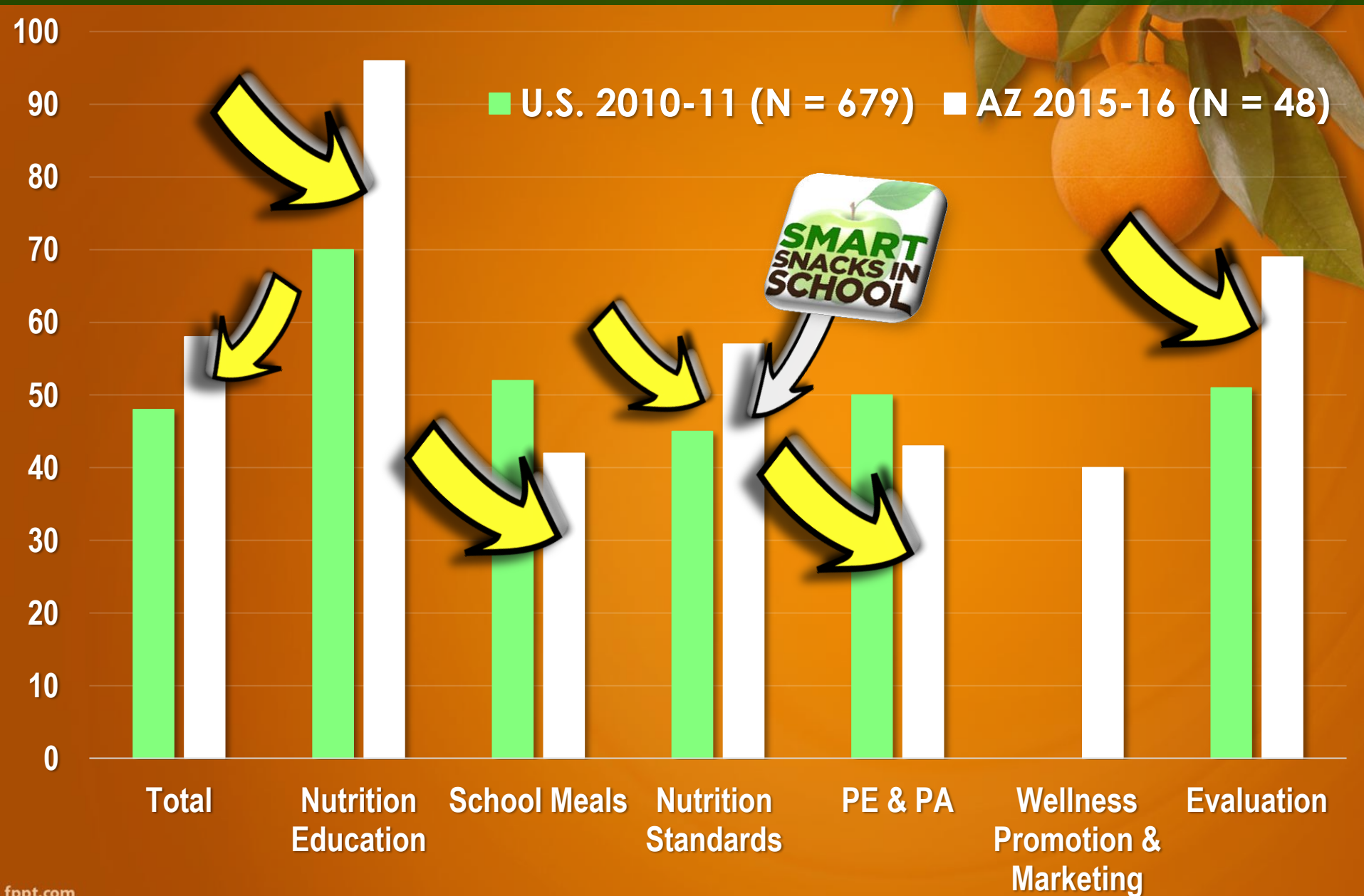


**WellSAT
(not 2.0)**

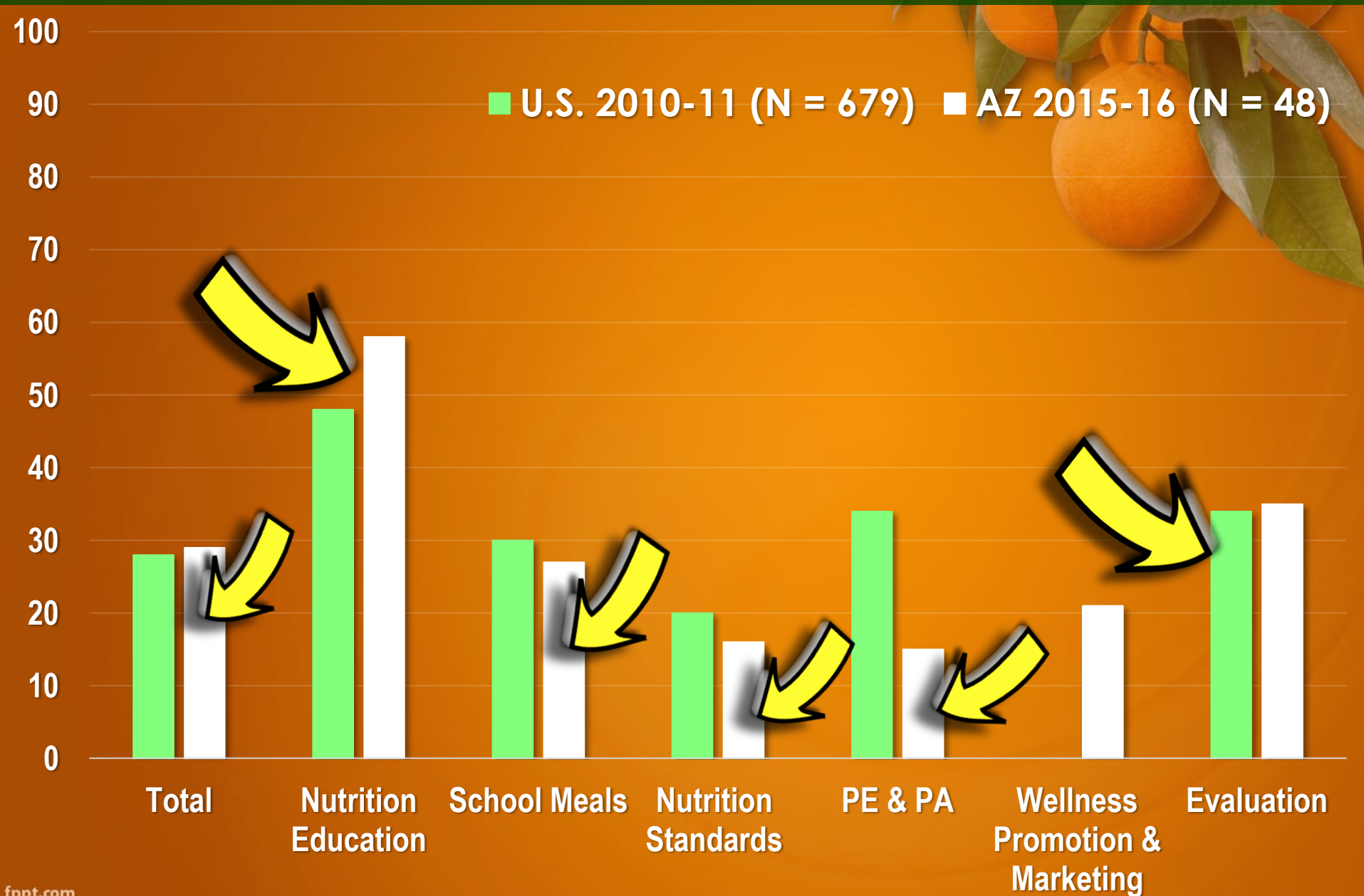


**5 Years
(2006-7 to
2010-11)**

Mean Scores for Comprehensiveness, U.S. vs. AZ



Mean Scores for Strength, U.S. vs. AZ





Does the Fruit Fall Far Enough?

“Districts with stronger, more comprehensive policies were more successful in implementing them at the school level.”¹

“[P]olicies that restrict unhealthy snack foods are associated with lower proportions of overweight or obese students, or lower rates of increase in student BMI.”²

“Strong district policy was associated with an increased odds of not withholding students from recess for poor behavior or not completing schoolwork.”³

“[B]oth district policies and state laws are associated with the elementary-level food and beverage availability.”⁴

“[H]aving strong district-level PE policies increased the likelihood of schools having 150 or more minutes of weekly PE independent of the state having a strong PE law.”⁵

Bearing Fruit in Cochise County!



**Health
Department
HAPI**

**UANN
Cochise**

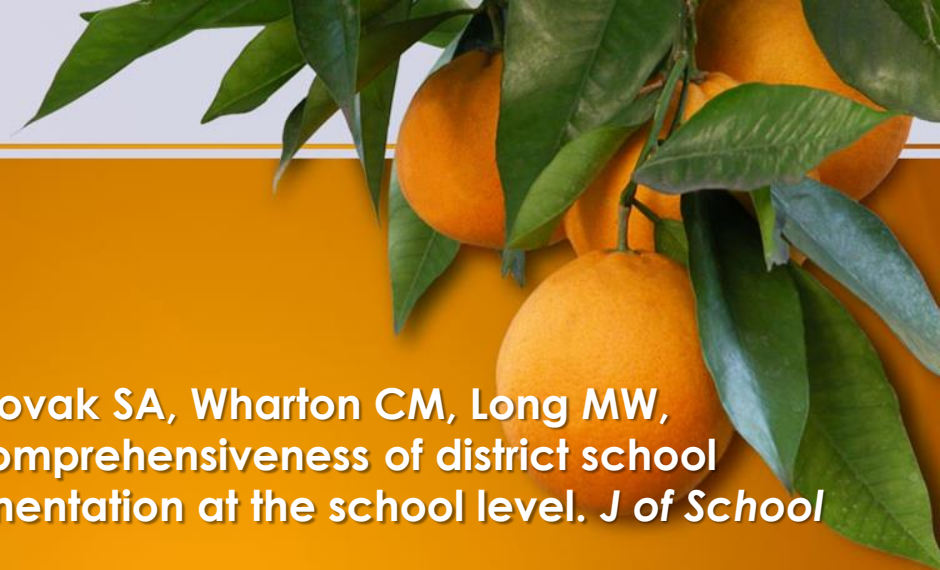
**Cochise
School
District**

**Revised LWP
and
Sustainable
SHAC!**



References

1. Schwartz MB, Henderson KE, Falbe J, Novak SA, Wharton CM, Long MW, O'Connell ML, Fiore SS. Strength and comprehensiveness of district school wellness policies predict policy implementation at the school level. *J of School Health*. 2012; 82: 262-267.
2. Chriqui FJ. Influence of competitive food and beverage policies on children's diets and childhood obesity. *Healthy Eating Research, Bridging the Gap*. July 2012.
3. Turner L, Chriqui JF, Chaloupka FJ. Withholding recess from elementary school students: Policies matter. *J of School Health*. 2013; 83: 533-541.
4. Chriqui JF, Turner L, Taber DR, Chaloupka FJ. Association between district and state policies and US public elementary school competitive food and beverage environments. *JAMA Pediatr*. 2013; 167(8): 714-722.
5. Slater SJ, Nicholson L, Chriqui J, Turner L, Chaloupka F. The impact of state laws and district policies on physical education and recess practices in a nationally-representative sample of U.S. Public elementary schools. *Arch Pediatr Adolesc Med*. 166(4): 311-316.





A Bountiful Harvest

Adult DE Impact Evaluation



Overview

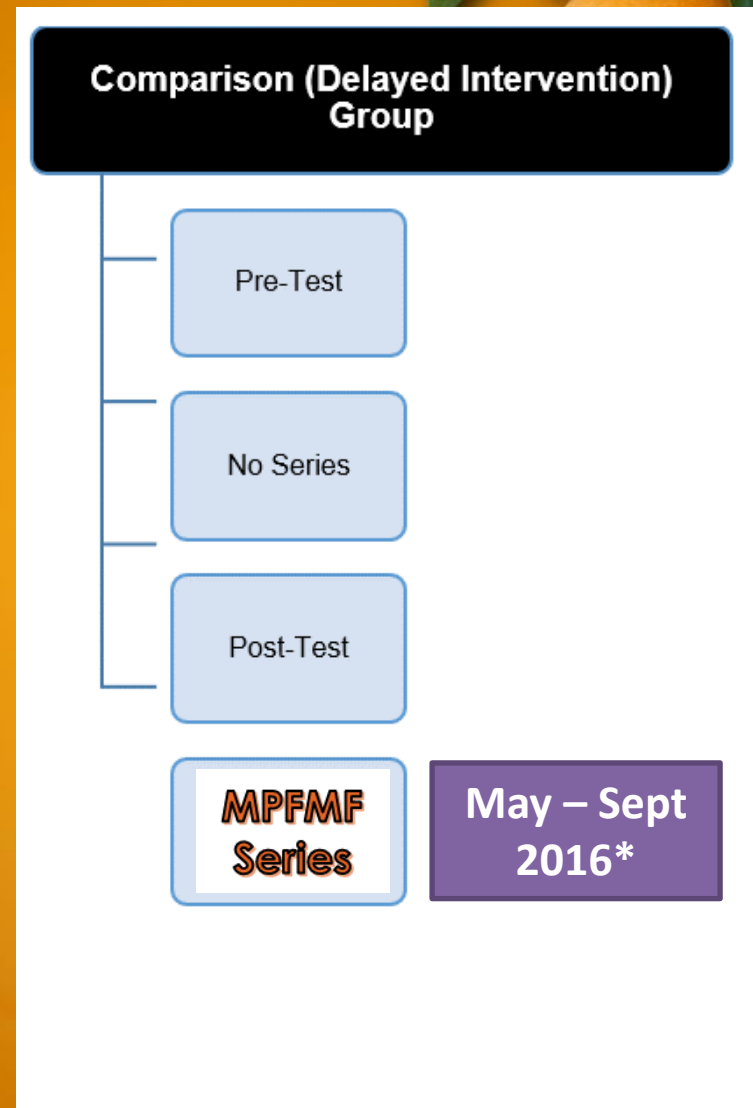
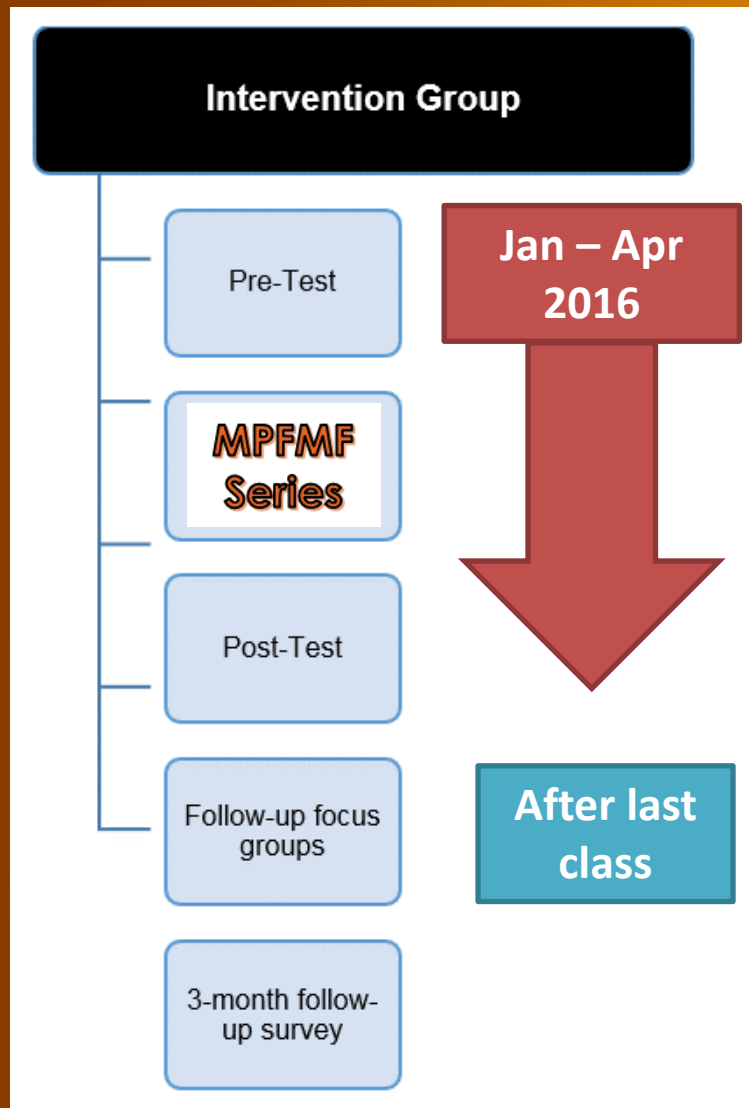
- Adult DE Impact Evaluation Redux
- Where Have We Been?
- Who Are We Reaching?
- Findings for Physical Activity & Food Behavior
- Focus Group Findings

Kudos to You


Too Soon to Tell

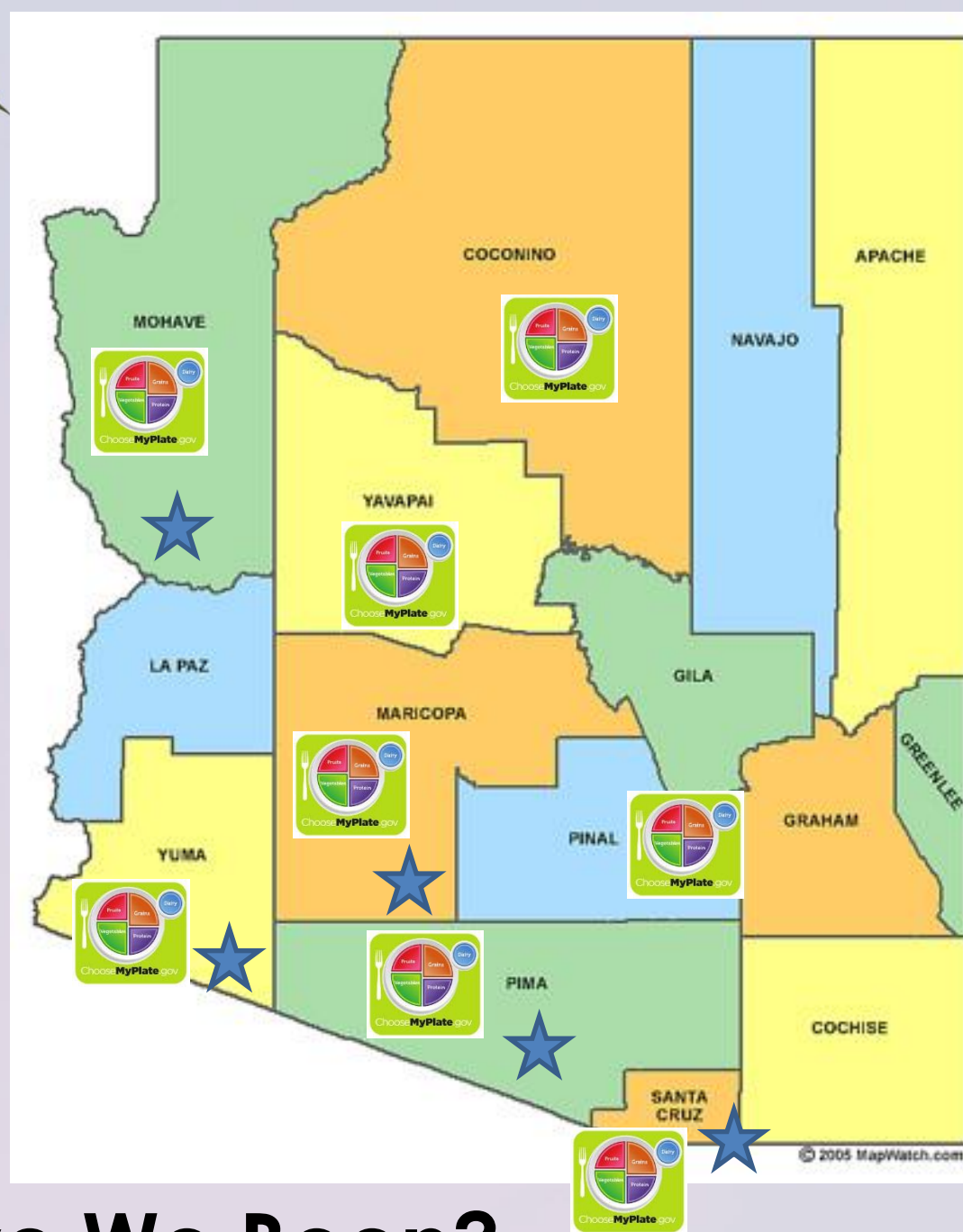
Areas for Improvement

Adult DE Impact Evaluation Redux





County	
	
Coconino	1
Maricopa	8
Mohave	1
Pima	2
Pinal	1
Santa Cruz	2
Yavapai	2
Yuma	1



Where Have We Been?

Participants and Languages Spoken

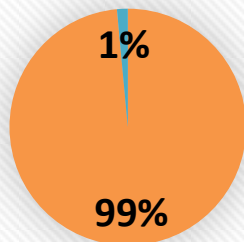
- As of 4/12/16

	Surveys	Anticipated Total (includes projections)
Pre-Post	68	98
Comparison Pre	102	115
Spanish	103	127
English	67	86



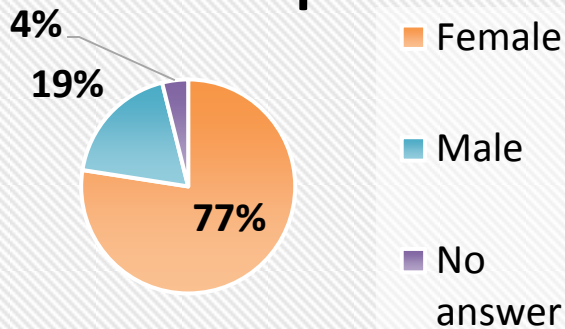
Who Are We Reaching?

MPFMF Group



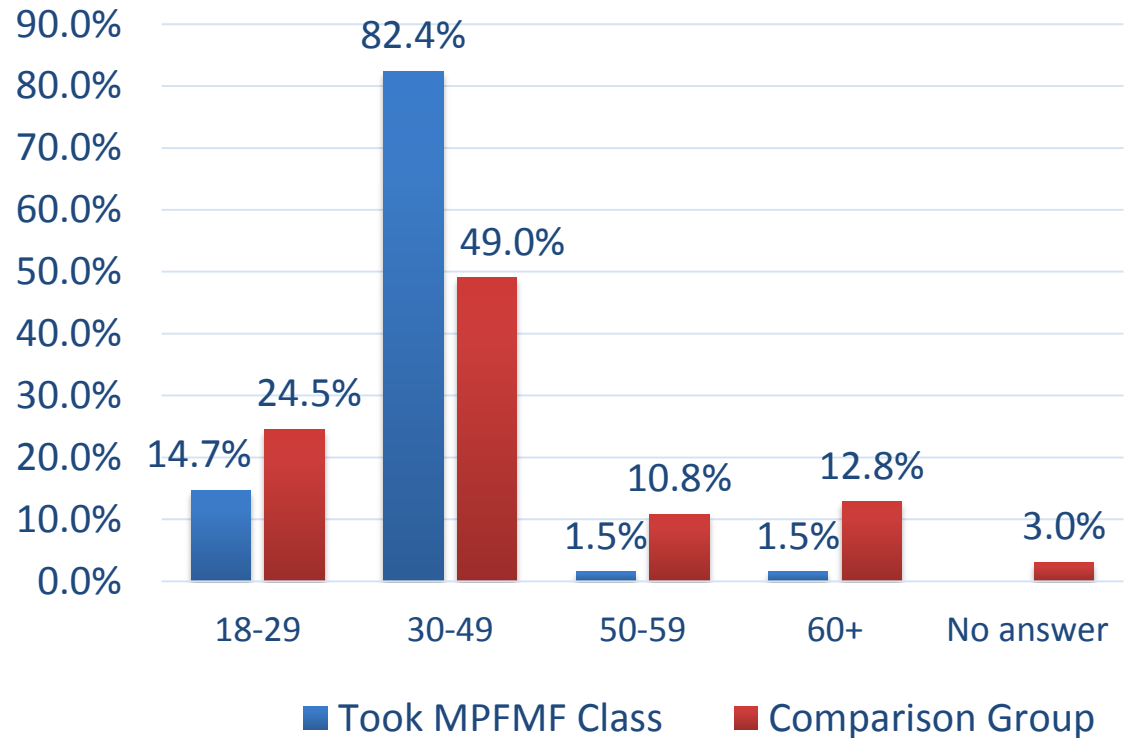
Female Male

Comparison Group



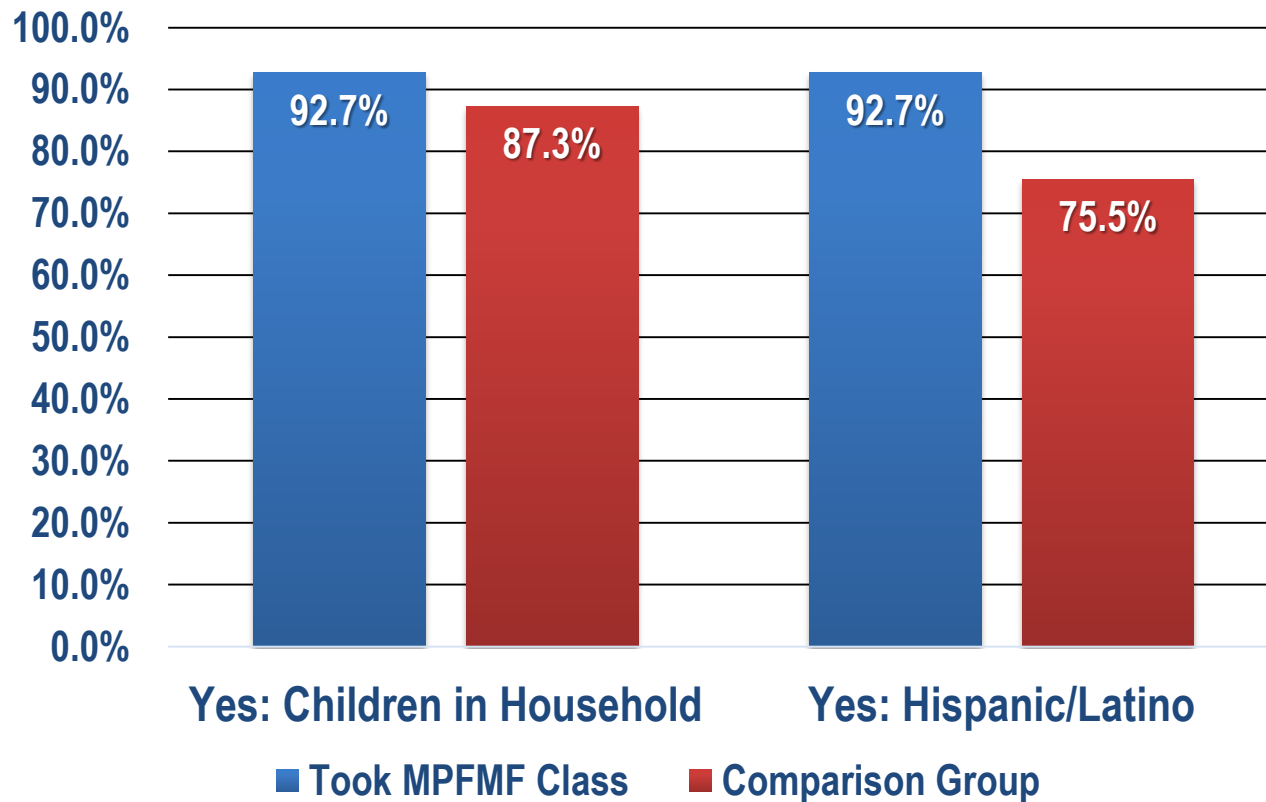
Female
Male
No answer

Age Groups Represented



Who Are We Reaching?

MPFMF and Comparison Groups



Who Are We Reaching?



	Receive SNAP	Do Not Receive SNAP	No Answer
MPFMF Group	27.9%	66.2%	5.9%
Comparison Group	26.5%	67.7%	5.9%

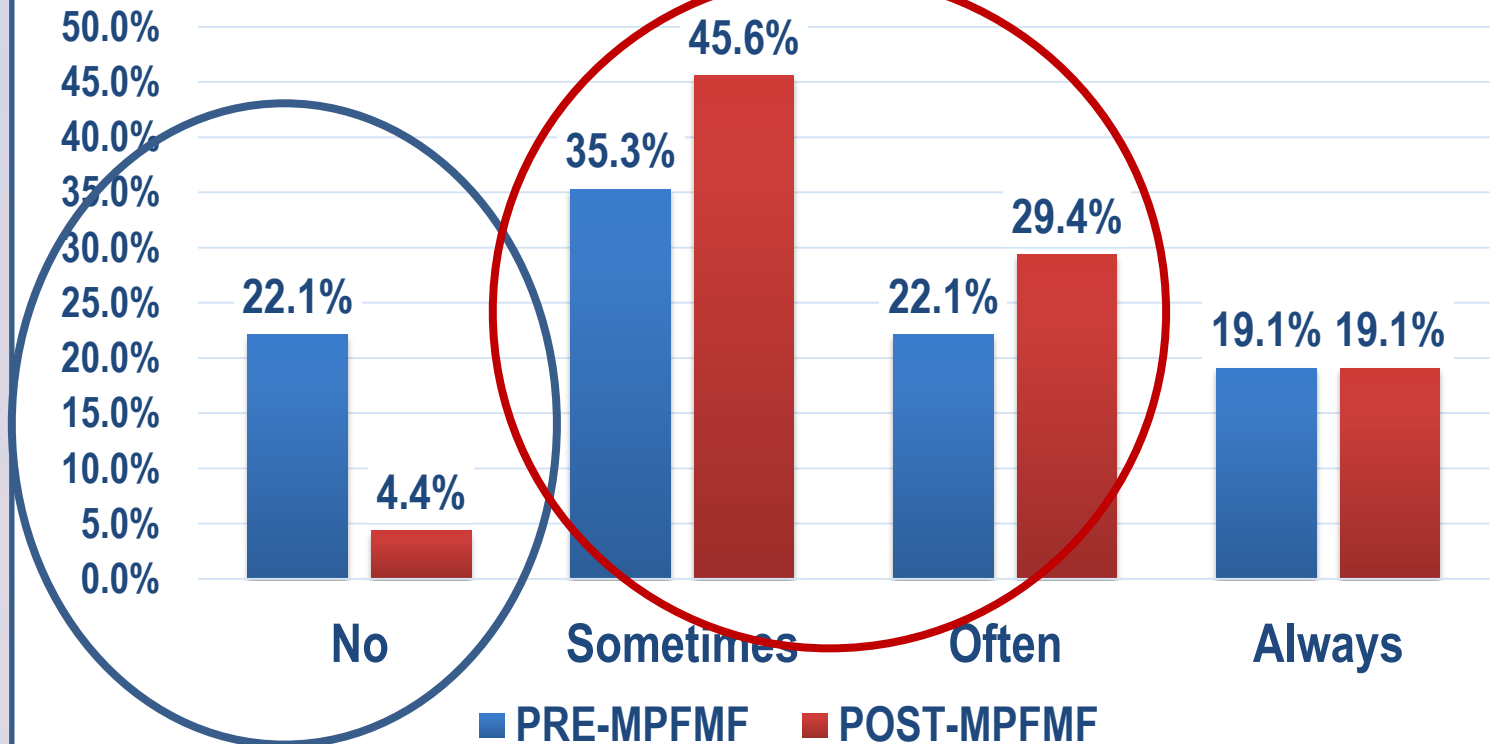


Kudos to You

**Results suggesting positive outcomes
after participating in MPFMF Class Series**

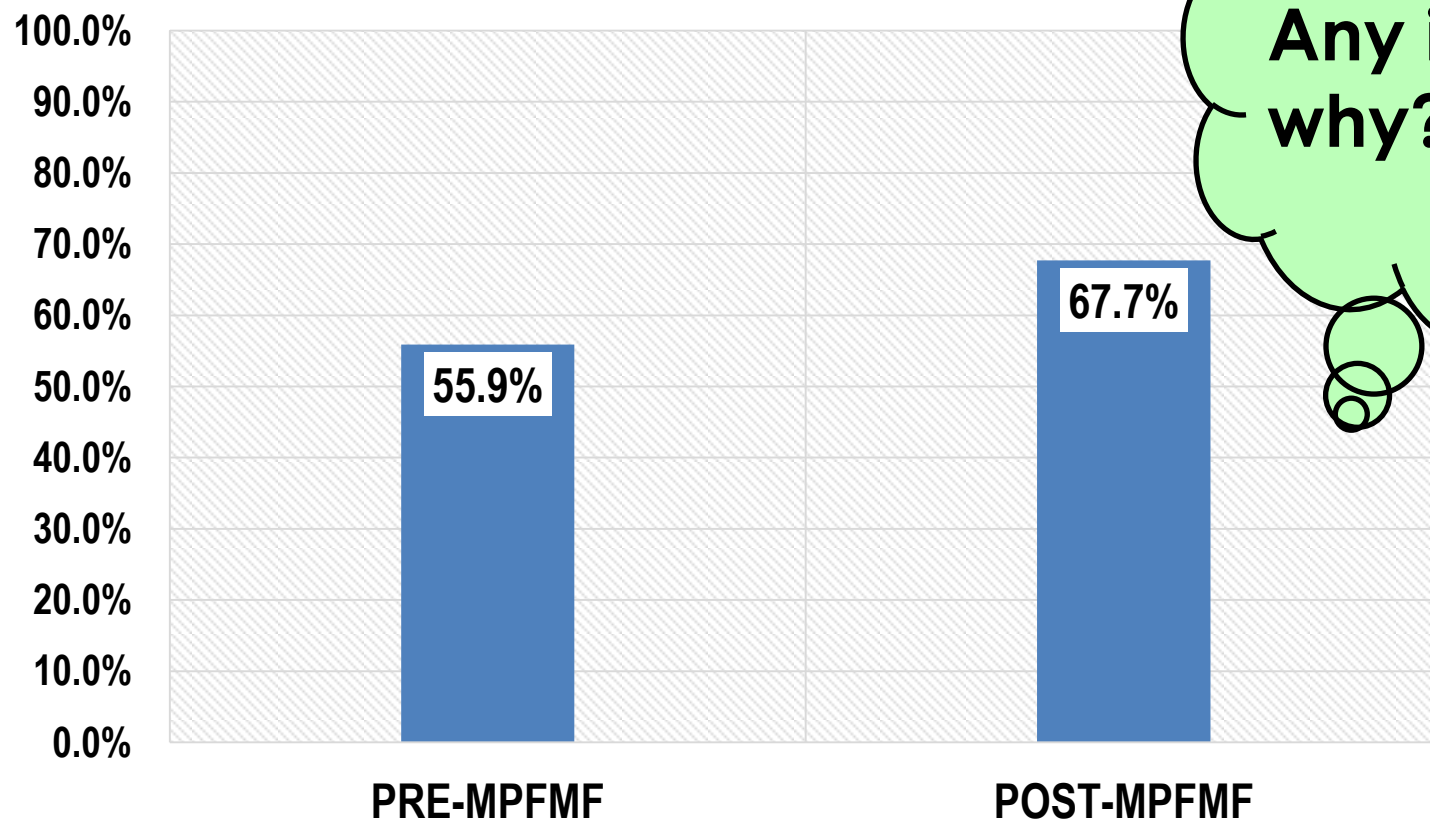
Food Behavior Findings

Use the Food Label When Shopping?



Food Behavior Findings

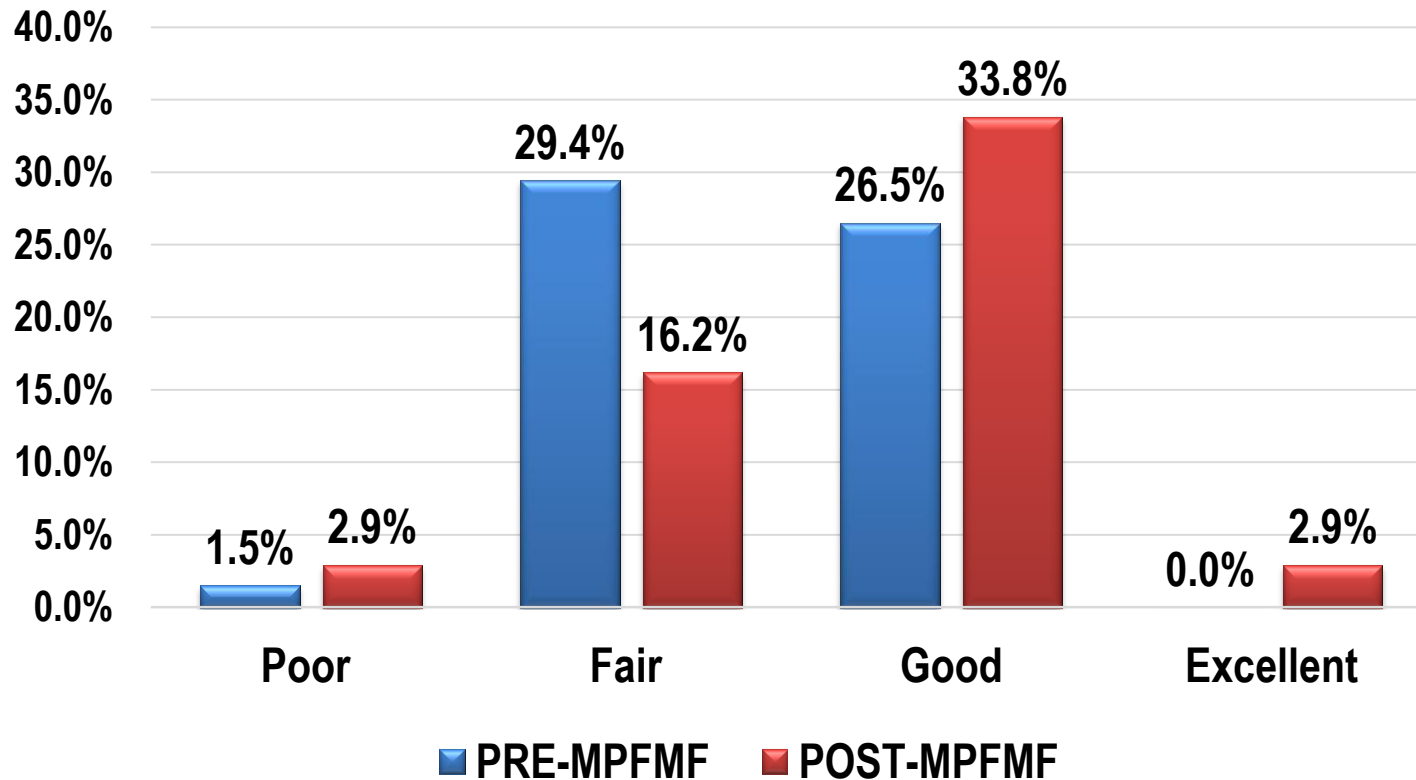
Ate Fish in Past Week: Yes



Educators:
Any idea
why?

Food Behavior Findings

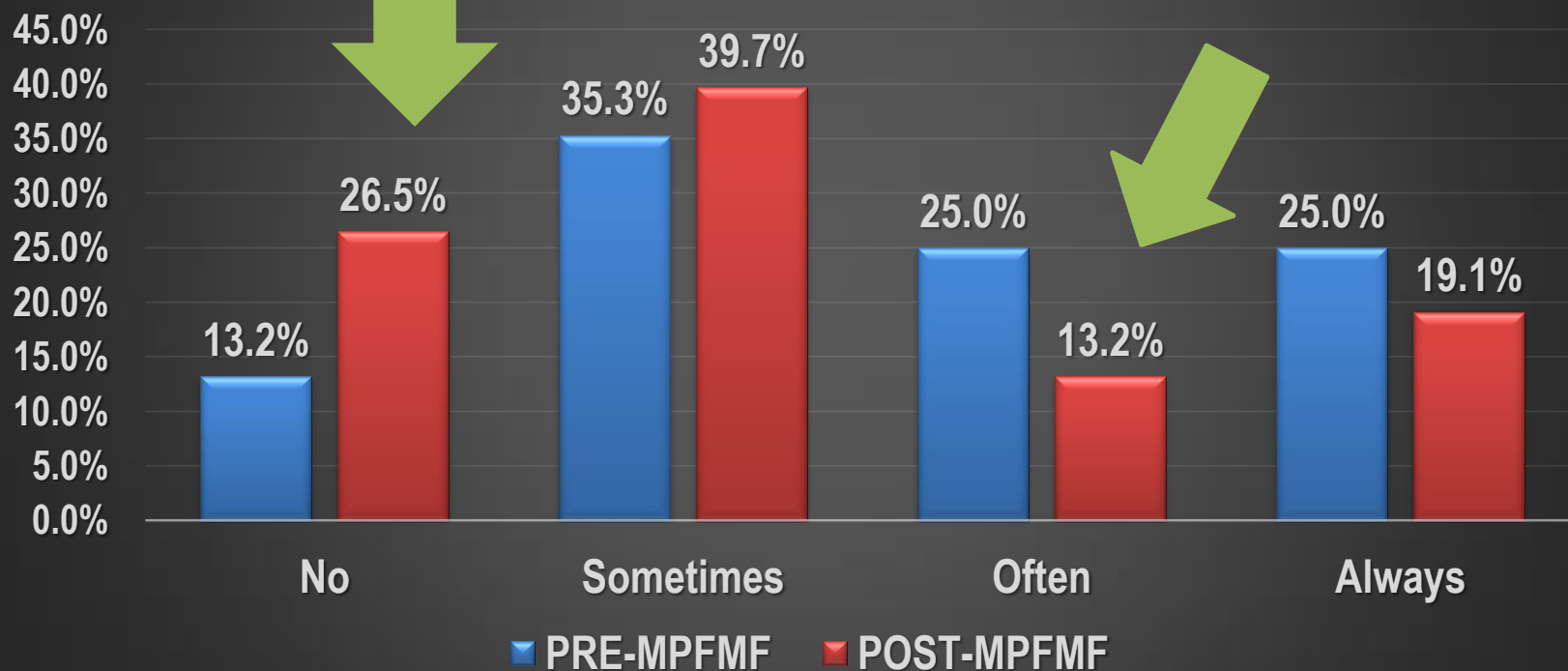
Rate Your Eating Habits



Food Behavior Findings



Do You Run Out of Food Before the End of the Month?





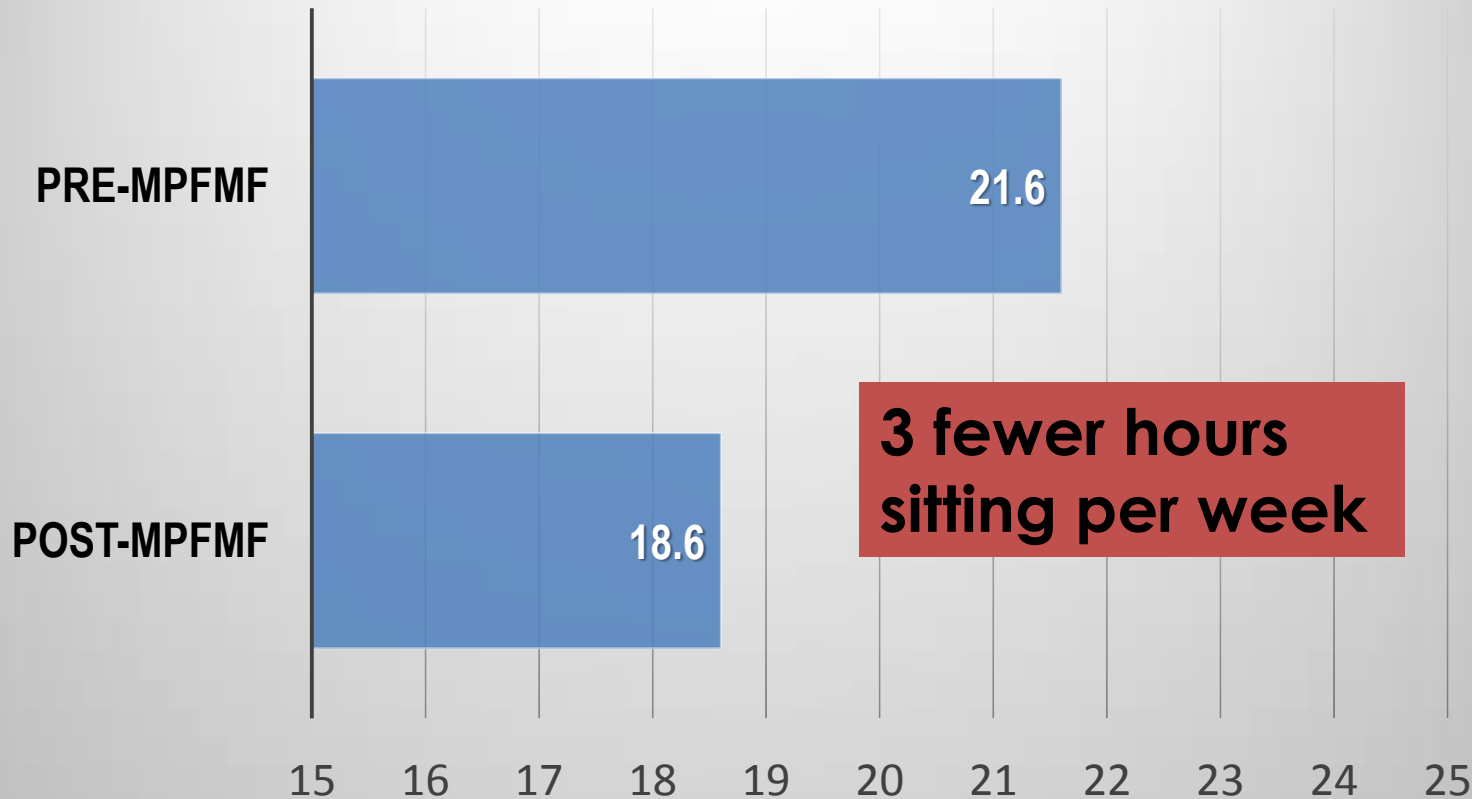
Too Soon to Tell

**Thinking About Changing After MPFMF
Series...But Will They?**

**3-Month
Follow-Up
Survey**

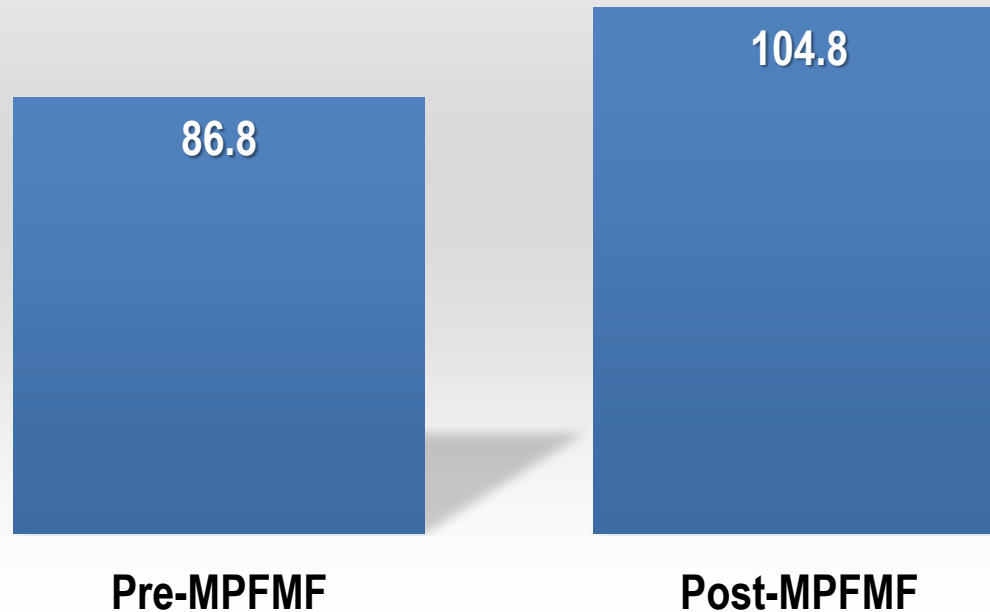
Physical Activity Findings

Average Total Hours a Week Sitting



Physical Activity Findings

**Total Minutes Per Week
Breathe Harder in Spare Time**



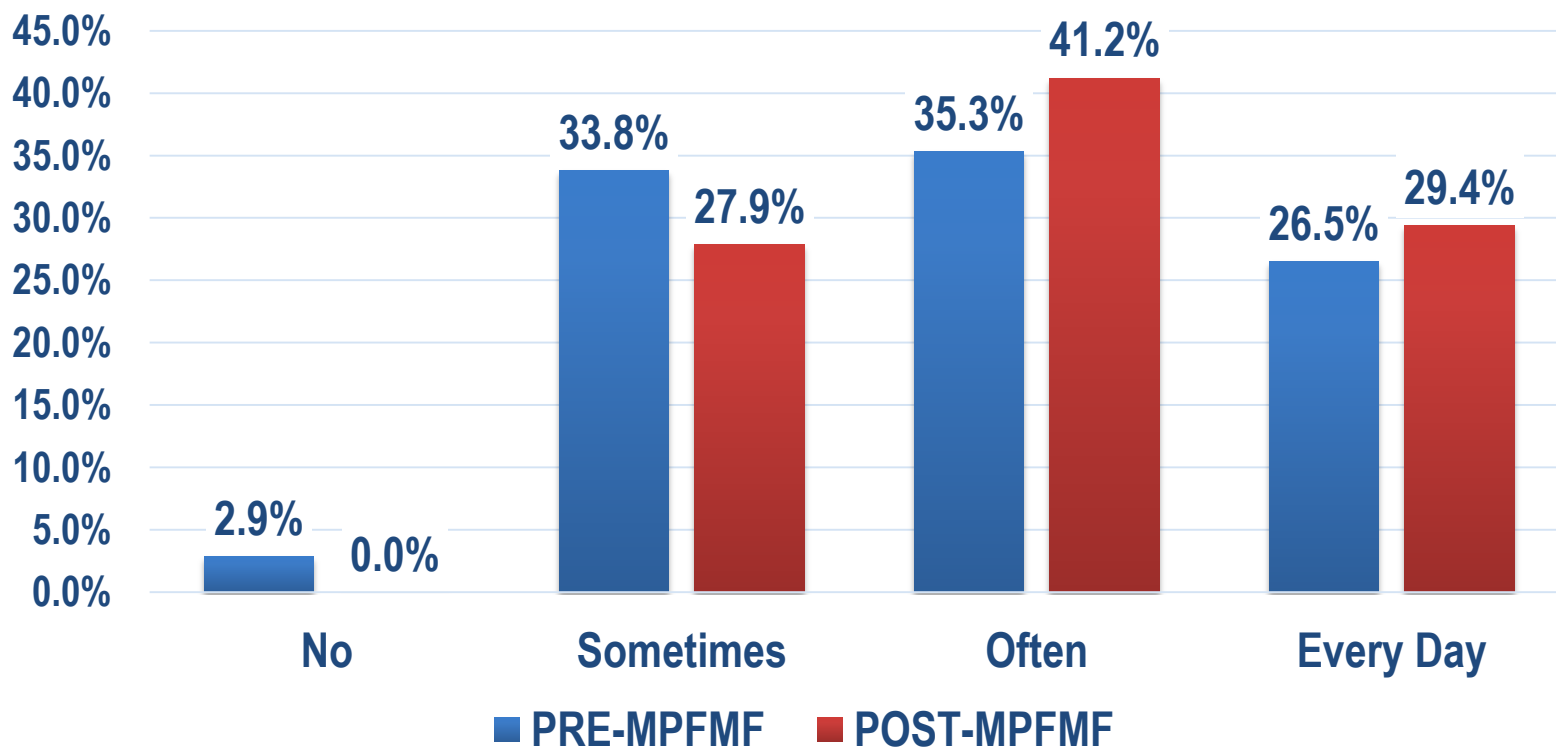
But:

**Some classes
included 2-10
mins activity in
the 4th class**

Food Behavior Findings



Eat 2+ Vegetables at Main Meal





Areas for Improvement

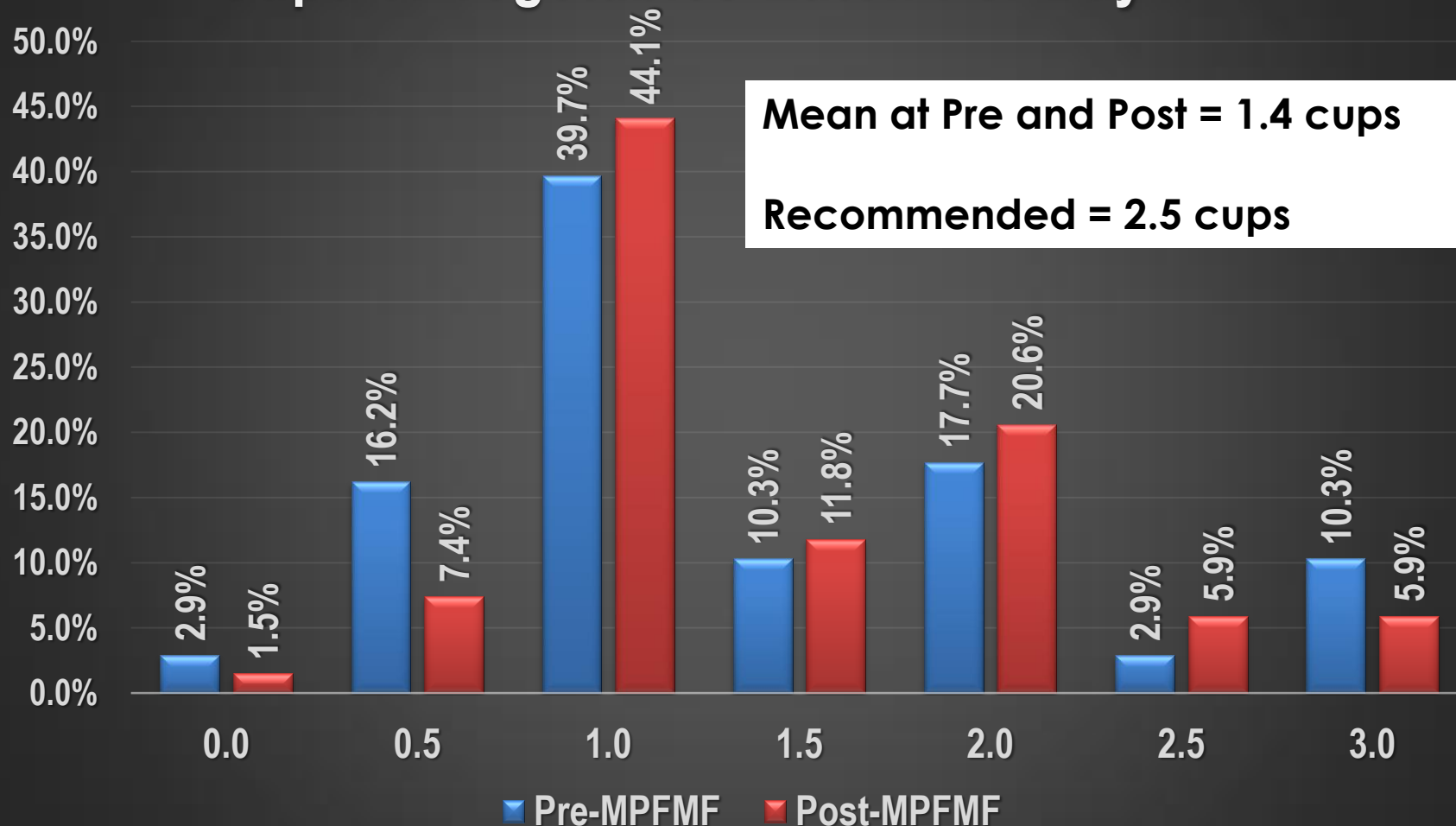
Not Much Change After MPFMF Series

Food Behavior Findings

Cups of Vegetables Eaten Per Day

Mean at Pre and Post = 1.4 cups

Recommended = 2.5 cups





Focus Groups

- **4 groups conducted**
 - **21 total participants**
 - **English and Spanish**
 - **Nogales, Prescott Valley, Mesa, Flagstaff**
- **What did participants find more and less useful from MPFMF for self and families?**

Focus Group Findings

- MyPlate icon helps with meal planning and serving
- Understanding portion sizes
- Physical activity as a family is realistic and enjoyable

“...Getting the right amount of food, that was important because...I didn't know the right amount for a five year old...versus an adult”

“...I have a group the Mexican dance likes me...”



Focus Group Findings



- **It can be difficult to change the family's preferences**

"My kids are really picky eaters so I haven't been able to get them to switch over and try whole grains yet."

- **Changes must be made slowly**

"[My daughter] says that she does not get full. And, later, I see her grabbing something from the refrigerator . . . step by step. You can't do everything all at once, but step by step for today."

Focus Group Findings

Liked It

“For me, what I liked most was the exercise, and...that she gave us new recipes to make different things. Because many times we are like “Oh, what am I going to make...and now, ok [with the recipes] we [can] make something different.”

Wished For More

- Taste-testing
- Handouts & Recipes
- Instruction on reading nutrition labels



Special Thanks To:



Norma Rodriguez
Jennifer Staples
Rebecca Serratos
Carmen Gardea

Sonia Ramirez
Melody Skiver
Rashel Clark
Melissa Palmer
Theresa Kulpinski



How's It Hangin'?

A Closer Look at the AzNN Youth Survey

Youth Nutrition and Physical Activity Survey

The Arizona Nutrition Network wants to learn about what kids your age eat, and how they are physically active (exercise). This survey asks questions about your food choices and physical activity (exercise). Your answers will help make our program the best it can be. We will ask you to take the survey at two different times. Each time, it will take you about 20 minutes.

- No one at school or at home will see your answers.
- Taking part in this survey is up to you. Your choice will not affect your grades in school. Your choice will not affect whether you can do any school or summer program activities.
- If you do not want to answer a question, you can skip it.
- You may stop taking the survey at any time.
- There are no known risks or benefits to doing this survey.



PLEASE DO NOT WRITE IN THIS AREA

[SERIAL]

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A decorative graphic in the top-left corner featuring a cluster of bright orange fruits with green leaves. Below the oranges, a small monkey is visible, holding a piece of fruit in its mouth.

Serving Up MyPlate

- Started before surveys were available?
 - That's **OKAY**
- Started after surveys were available?
 - 229 pre-tests (9 classes)
 - 21 post-tests (1 class)
 - Still receiving surveys through FY16
- *We've heard your voice!* For FY17,
 - Materials will be available early
 - Training will be provided early
 - Expect expanded use with more curricula

Gobbling Up Opportunity

- Youth Survey Validation
- Five 4th grade classrooms (N = 119)

What
protocol
works best?

Do 4th graders
understand the
questions?

How much
variation exists
between pre and
post?



Findings: Protocol



- **Protocol**

- Pencils, not pen
- Review bubbling with entire class
- Skip name bubbling



- **Do 4th graders understand the questions?**

- Reading level appropriate
- Reviewing by each question was important
- “Group question!” helped responses and engagement



FIRST NAME																			
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Findings: Test-Retest

Ideally, no intervention = no change (coefficient 1.0)

Kappa

<0

0.01 – 0.20

0.21 – 0.40

0.41 – 0.60

0.61 – 0.80

0.81 – 0.99

Agreement

Less than chance agreement

Slight agreement

Fair agreement

Moderate agreement

Substantial agreement

Almost perfect agreement

Reliability is tied to individual question

- Yesterday questions
- Comprehension may vary by question

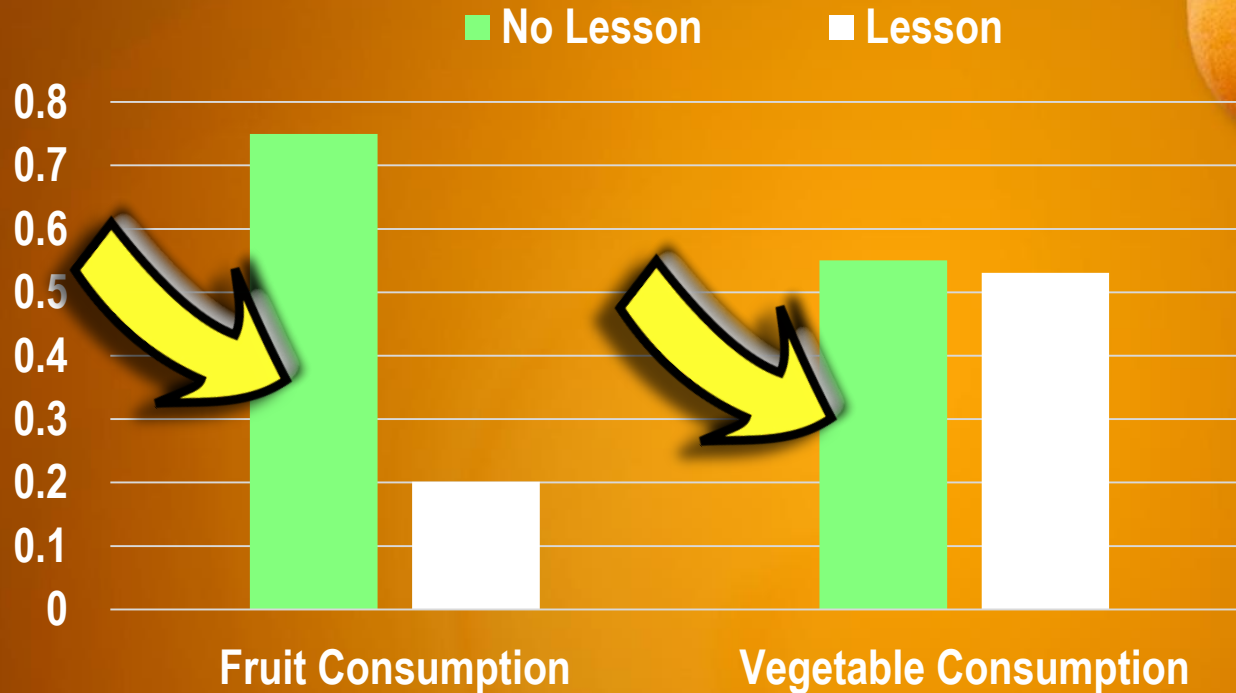


Findings: Test-Retest

- ***Yesterday behavior questions***
 - Interclass correlation coefficients: 0.3955-0.7494
 - Ex.: fruit consumption (0.7494) more consistent than brown bread consumption (0.4331)
- ***Categorical questions*** - moderate to substantial agreement
- ***Ordinal questions*** - fair to moderate agreement



Findings: Test-Retest



✓ **ACCURACY**

improved protocol, better training, valid survey!



Our Newest “Hub”

Introducing The AzNN Evaluation Website



**Who is the website's
target audience?**

YOU!



What will you find there?

- Evaluation resources by **Focus Area**
- **Calendar** of upcoming and past evaluation trainings
- Resources for evaluation-related **trainings, materials, custom frameworks**, and helpful **links**
- Each of our team members under **About Us**
- What's on our minds in our **Blog**



How do you get there?

- <http://nutritioneval.arizona.edu/>
- When you click on some topics, you will be prompted to **Log In** to access the information
 - Your liaison will contact you after the conference with log in instructions

Questions?

