

SMART CAFÉ: A student-run nutrition program in New Orleans schools

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Background

- 22% of the New Orleans population is **food insecure**.
- 72% of New Orleans children are eligible for nutrition programs, including **SNAP and WIC**.
- 41.3% of Louisianians aged 2-19 are **overweight or obese**.



- Precursors of **hypertension and atherosclerosis** begin in children as young as age five.
- 1 in 3 children born in the U.S. in 2000 will develop **type 2 diabetes**.
- A healthy diet can mitigate risk factors for cardiovascular disease and diabetes.

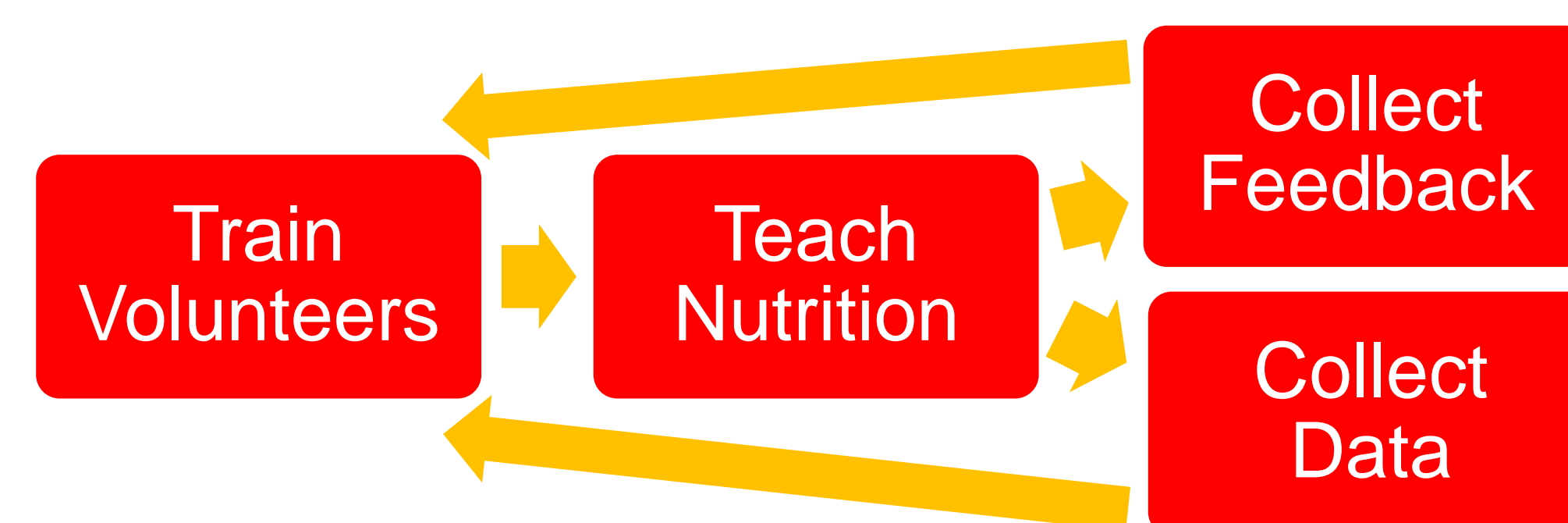
Objectives

- Increase **knowledge** of nutrition among K-2 graders
- Increase percentage of K-2 graders who **try all their food** at lunch
- Improve future clinicians' **ability to communicate** the importance of a healthy lifestyle

Methods

- **Interprofessional student board** recruits and trains LSUHSC student volunteers.
- Volunteers visit local school cafeterias and sit with K-2 graders during lunch to:
 - **Teach basic nutrition** using lesson plans and blocks
 - **Encourage children to try nutritious foods** using stickers, rhymes, games, and persuasive words.

- Volunteers **huddle** after each cafeteria visit to reflect on successful and unsuccessful strategies.



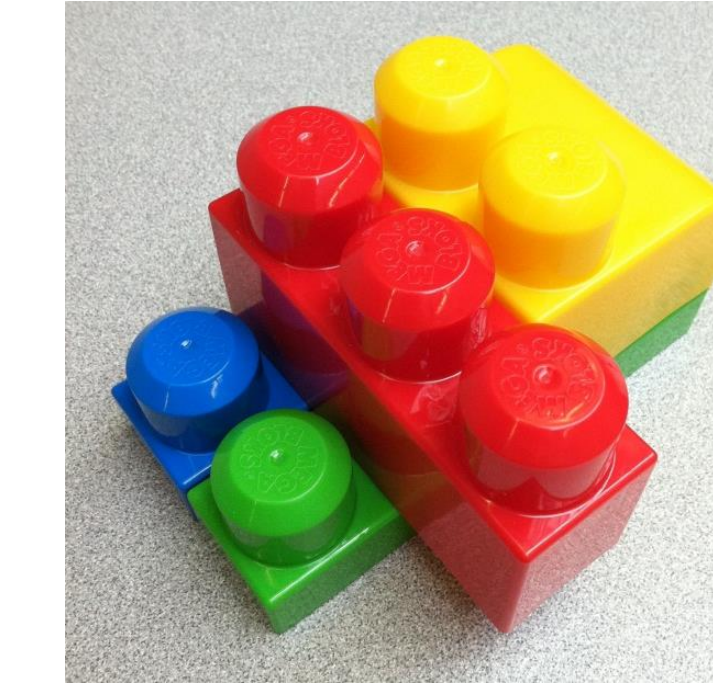
- **Pre-intervention data** on cafeteria choices, nutrition knowledge, and perceived empowerment is compared to **post-intervention data**.

Acknowledgements

- ReNew Schools
- The Albert Schweitzer Fellowship
- Revolution Foods

Program Strengths

- **Reproducible, scalable, and cost-efficient**
- Scripted curriculum
 - Promotes sustainability and quality control of program
- Lunchtime intervention
 - Allows **real-time application** and reinforcement
 - Does not interfere with classroom instruction
- Food supplied by Revolution Foods
- **Interprofessional** educational experience
 - Develops team communication and problem-solving skills



Program Challenges

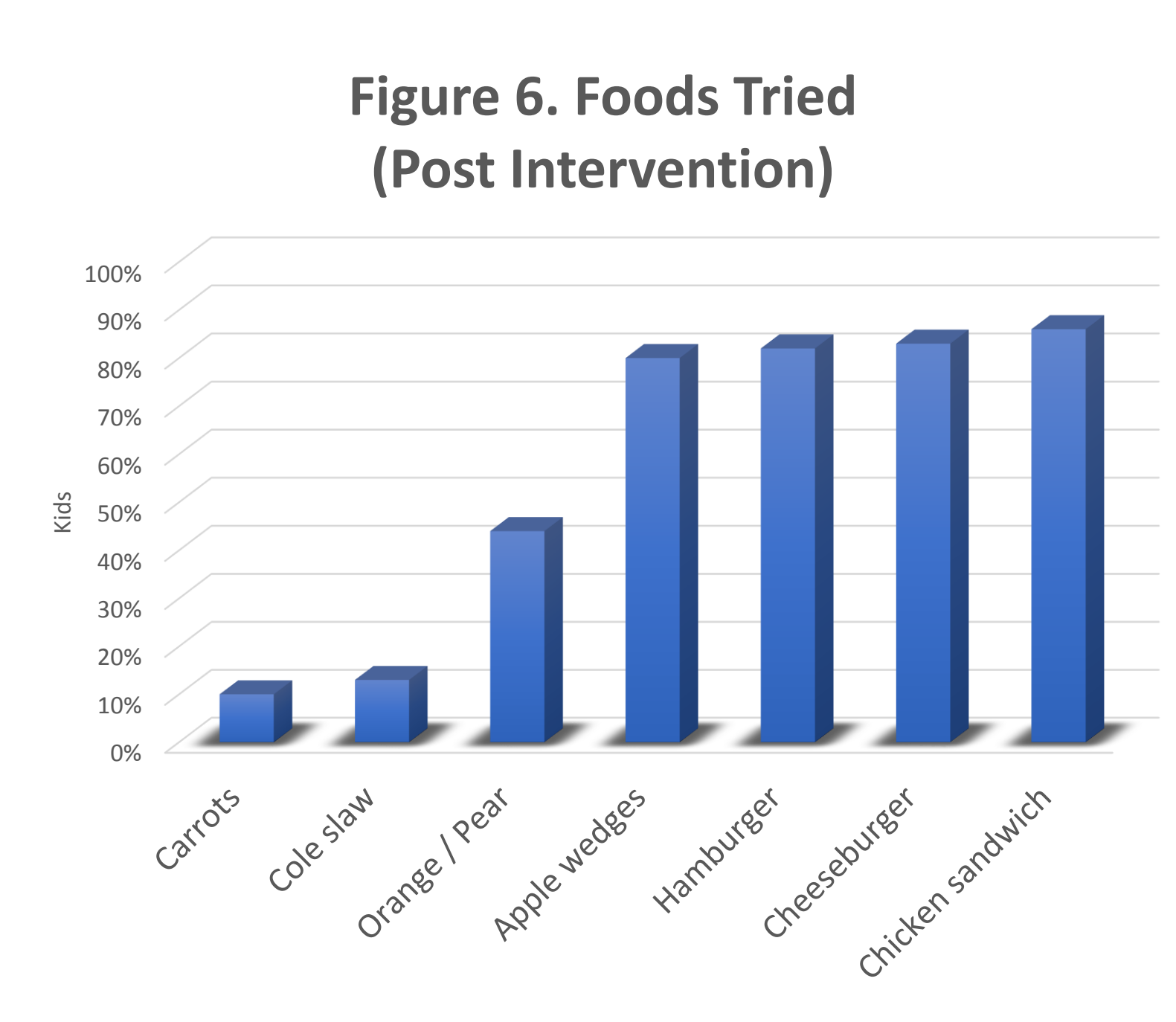
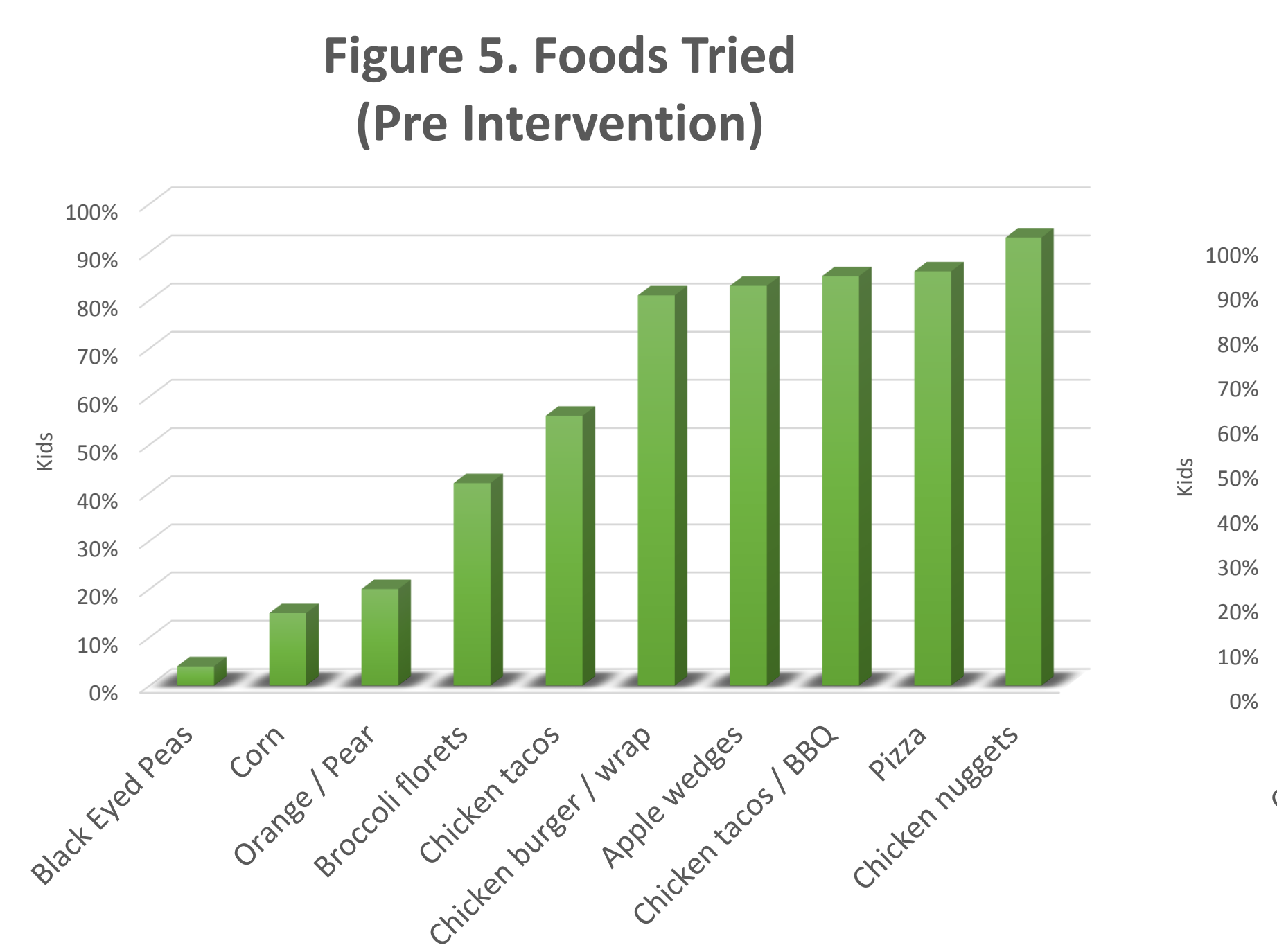
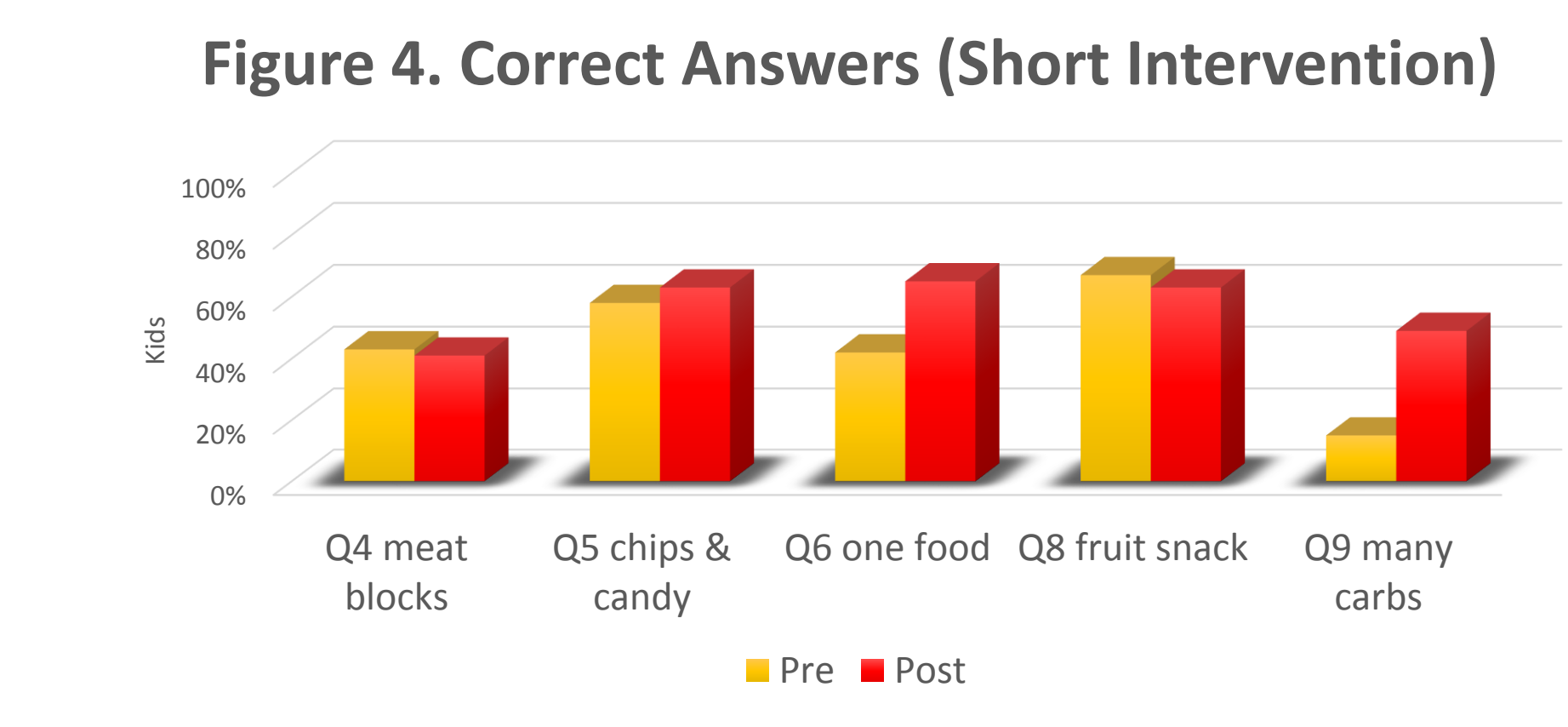
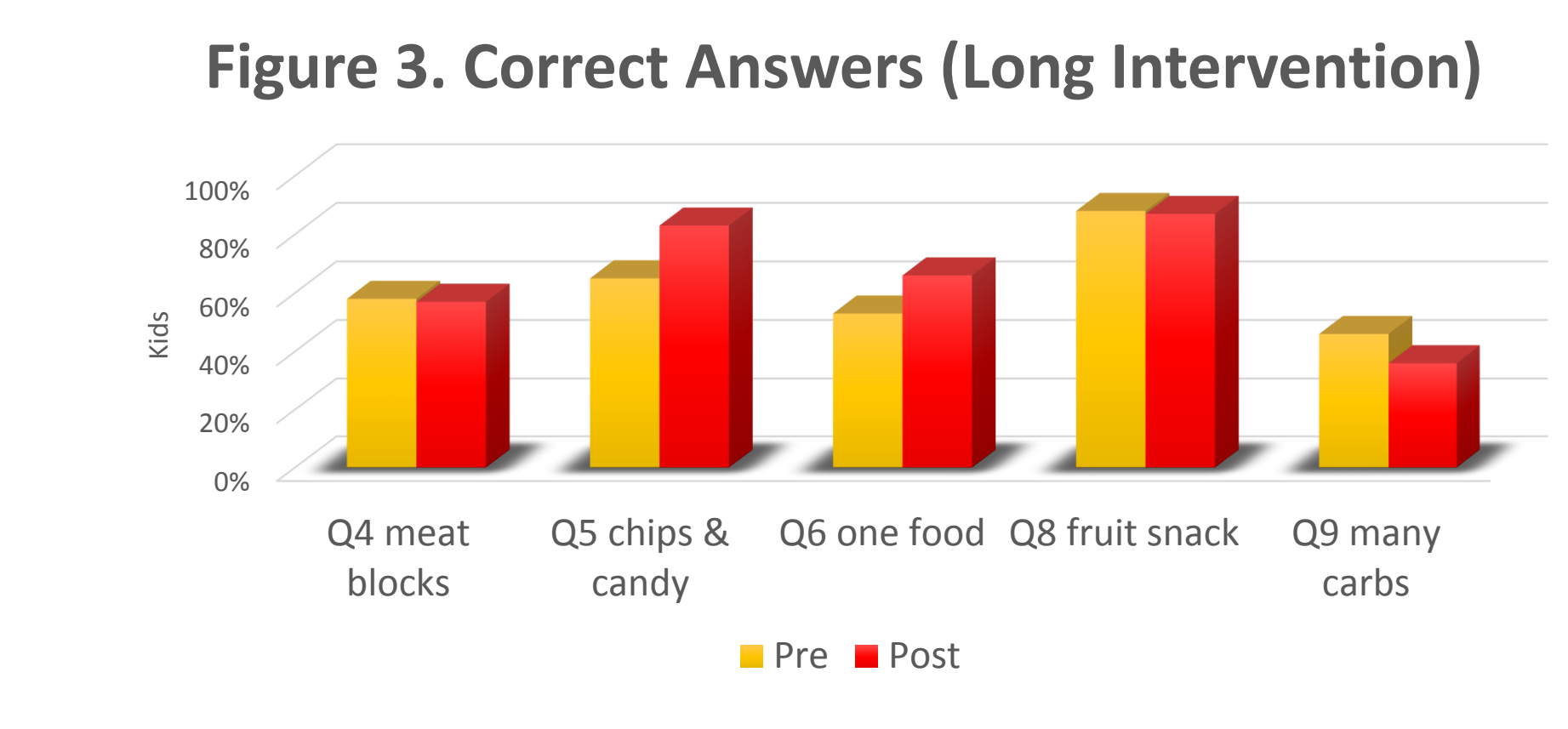
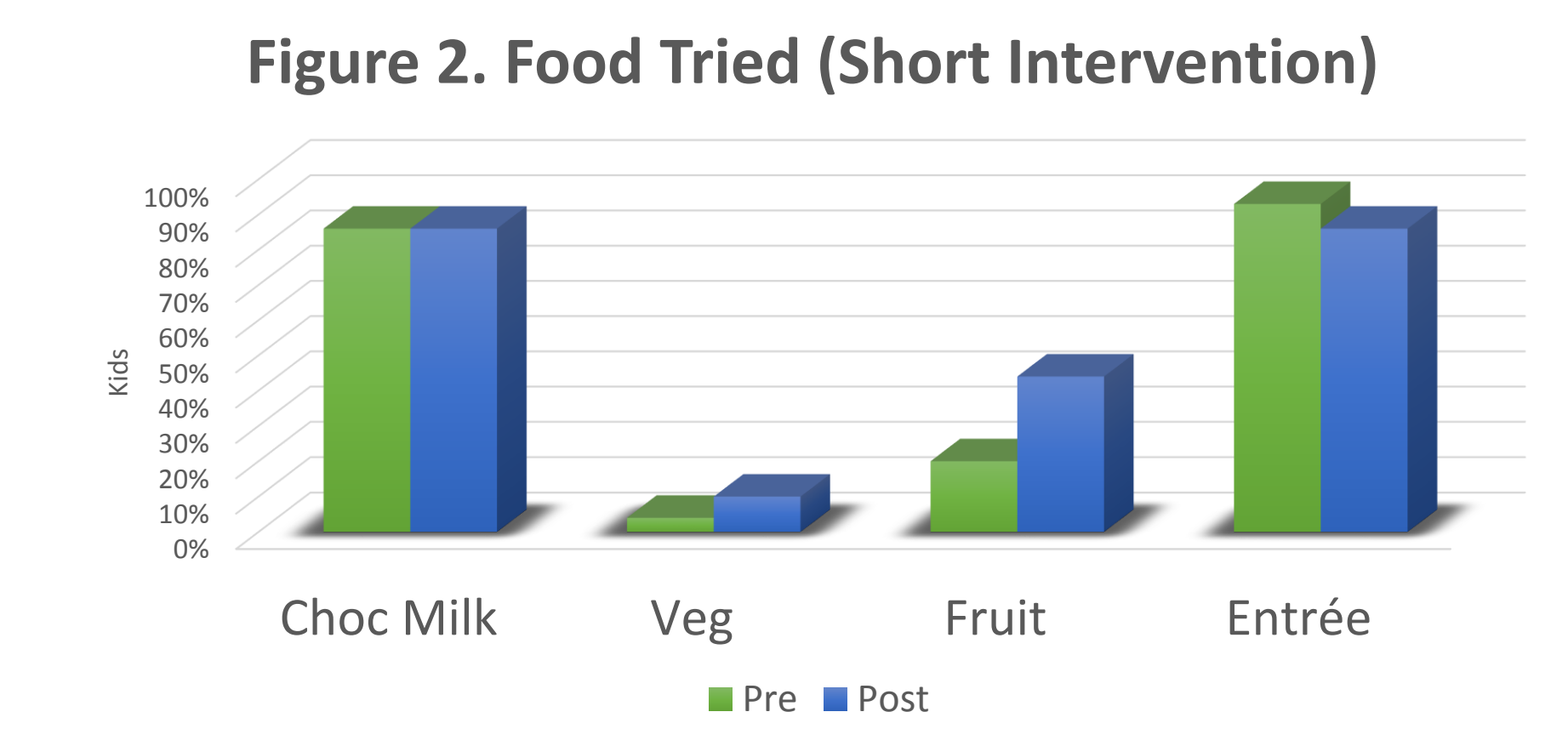
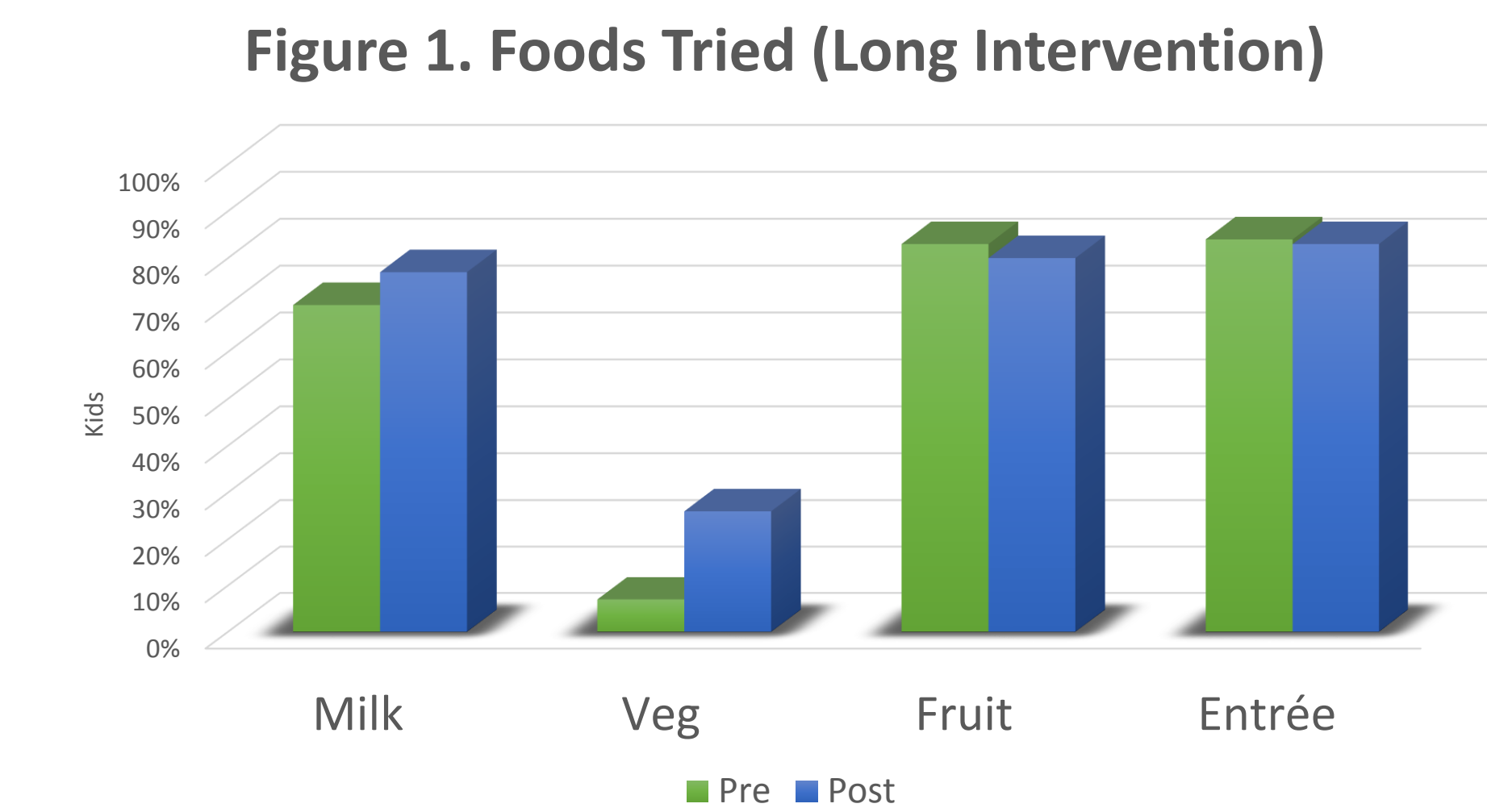
- Some students overweight and malnourished: must teach nutrition concepts and not simply calorie reduction
- Lunch lasts **only 20 minutes**
- Cafeteria is **noisy**: must manage children's behavior
- **Difficult to schedule visits** to accommodate all volunteers
- Volunteers **reluctant to eat cafeteria food** with children
- **Narrow focus**: aim to plan Parents' Nights at schools and nutrition symposia at LSUHSC in the future
- Results show **insignificant changes**
 - Small sample size, especially for short intervention
 - Long intervention generally more effective
 - Behavior may depend primarily on what's served for lunch
 - Must **modify curriculum and assessment tool**

Process Evaluation

- 1 new school added each year: 3 schools total this year
- Over 160 volunteers trained from five LSUHSC schools
- Long (13 lessons) & short (3 lessons) curricula developed
- **900 K-2 students** received intervention
 - 95% eligible for **free and reduced lunch**
 - 97% **African American**
- Volunteer feedback on effective strategies:
 - Encourage with **praise and stickers**
 - **Model** desired behavior
 - **Smell** unfamiliar foods first
 - **Relate** new foods to familiar foods



Outcome Evaluation



- Percentage sampling transformation
- **Two group mean comparison test** for significance

Table 1. Kids Who Tried Foods

	Intervention	Pre/Post P-value
Milk	Long	.0984
	Short	.4552
Veg	Long	.1140
	Short	.1126
Fruit	Long	.6682
	Short	.0841
Entrée	Long	.6332
	Short	.7695

Table 2. Kids Who Answered Correctly

	Intervention	Pre/Post P-value
Q4	Long	.4713
	Short	.5932
Q5	Long	.0078
	Short	.2445
Q6	Long	.0339
	Short	.0680
Q8	Long	.7122
	Short	.5676
Q9	Long	.0102
	Short	.8421

References

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