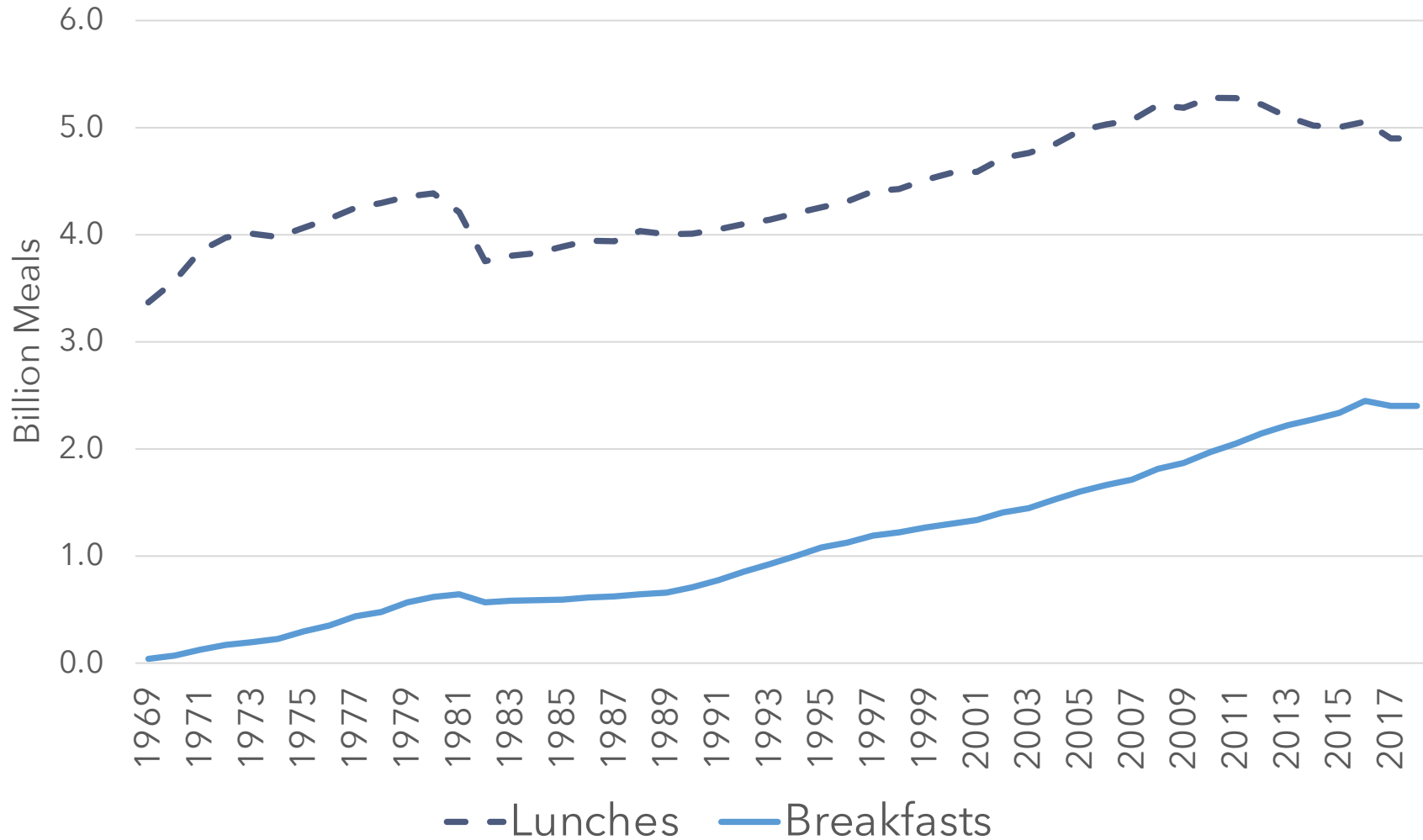


A close-up photograph of a white bowl filled with cereal, likely cornflakes, topped with a layer of white milk. A silver spoon is visible in the lower right corner, partially submerged in the cereal. The background is a soft, out-of-focus light brown color.

Weight, Diet, and Academic Effects of a Breakfast in the Classroom Initiative

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Assistant Professor of Nutritional Sciences
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School Breakfast Program Participation Lags Behind National School Lunch Program Participation



Alternative Breakfast Service Strategies Heavily Promoted





**School Breakfast
Program Participation**



Dietary Outcomes



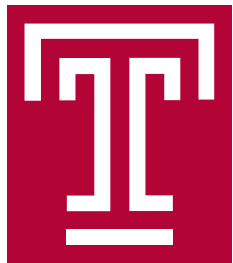
Weight Outcomes



Academic Outcomes



ONE HEALTHY BREAKFAST



The Food Trust



THE SCHOOL DISTRICT OF
PHILADELPHIA

ONE HEALTHY BREAKFAST

Be SMART. Be STRONG. Be ACTIVE. Be YOU.

FAMILY EDITION OCTOBER 2015

ONE HEALTHY BREAKFAST TIPS

How do I know if a food is healthy for breakfast?*

- Read the Nutrition Facts Label.
- Check the label to see how much is in one serving size.
- Look for foods and drinks that are lower in fat, sugar, and calories.
- Foods are extra healthy if they have vitamins, protein, and fiber.
- Fresh fruits and vegetables don't have a nutrition label, but they are simple and healthy choices.

STUDENTS:
Please take this newsletter home and share with your family.



Breakfast is an easy as 1,2,3!

Include at least three food groups from MyPlate to create One Healthy Breakfast. Try these:

- Cereal with fruit and low or non-fat milk.
- Bagel with peanut butter and a banana.
- Egg with salsa in a whole wheat tortilla.
- Yogurt parfait (low or non-fat yogurt, mixed with grain cereal).

Peanut Butter Waffle

Take a whole-grain waffle and instead of topping it with butter (which just adds sugar and fat), spread 2 tablespoons of peanut butter on top. The whole-grain waffle will give you fiber and protein. You could also sprinkle some fruit on top to get your three food groups (or add a glass of low or non-fat milk).

*This information is from the USDA. For more info, visit: www.fns.usda.gov



ONE = eat foods in their recommended amounts
HEALTHY = healthy choices from 3 MyPlate food groups
BREAKFAST = morning food and drink, providing energy



WHAT'S YOUR ONE HEALTHY BREAKFAST?

Be SMART. Be STRONG. Be ACTIVE. Be YOU.



ONE HEALTHY BREAKFAST

eamnutrition.usda.gov



Lesson 5: Breakfast Food Makeover

Now that you have the basic idea of making over Food, you are going to work as a group to make over Common's breakfast foods. We can use the Food Makeover Guide to help us.

Our goal is to practice replacing each food item below with a lower calorie, lower fat, and/or lower sugar choice that is healthier for us.

Instead of regular soda or another sweet beverage, Common should choose:

This is a better beverage choice because:

Instead of whole milk, Common should choose:

This is a better beverage choice because:

Instead of a breakfast pastry, Common should choose:

This food is a better choice because:

Instead of an egg, cheese, and bacon on a croissant, Common should choose:

This food is a better choice because:

Instead of a bag of chips, Common should choose:

This food is a better choice because:

Remember, the healthiest breakfast choices include fresh fruits and vegetables, whole grains (such as brown rice and wheat bread), lean protein, and low-fat dairy.

Lesson 5: Breakfast Food

Use this guide to help you make a breakfast makeover.

Drinks

Soda (solo, 12 ounce can)			
Water (any amount)			
Orange Juice (4 ounce juice box)			
Condensed Milk (2% Fat, 8 ounces)			
Chocolate Milk (1% low-fat, 8 ounces)			
White Milk (2%, 8 ounces)			
White Milk (skim or non-fat, 8 ounces)			

Cereal

Whole-grain, Low-sugar Cereal (one cup)	100	2	1
Sugar-Sweetened Cereal (one cup)	135	6	20
Oatmeal (1/2 cup)	150	3	1

Breakfast Sandwiches

Egg & Cheese On English Muffin	260	10	2
Egg, Cheese & Sausage On English Muffin	420	25	2
Egg, Cheese, Sausage & Bacon On Croissant	580	39	6
Peanut Butter (1 Tablespoon) On Slice of Wheat Bread	194	9	1.5

Other

Chips (1 oz bag, 12 chips)	150	8	1
Hot Dog (1 hot dog, 1/2 chip)	270	0	1
Pretzels (1 oz bag, 17 pretzels)	110	1	1
Breakfast Pastry	410	25	17
Medium Whole Wheat Pancake	92	4	2.6
Non-Fat Plain Yogurt (any)	100	0	7

Lesson #5 Review: What did you learn today?

- 1.
- 2.

Be SMART.
Choose low-fat.

ONE HEALTHY BREAKFAST

Be SMART.
Choose water, 100% juice or low-fat milk.

ONE HEALTHY BREAKFAST

Be SMART.
Choose fruit.

ONE HEALTHY BREAKFAST

Be SMART.
Choose whole grains.

ONE HEALTHY BREAKFAST

18
K-8 Schools



1362
4th-6th Graders



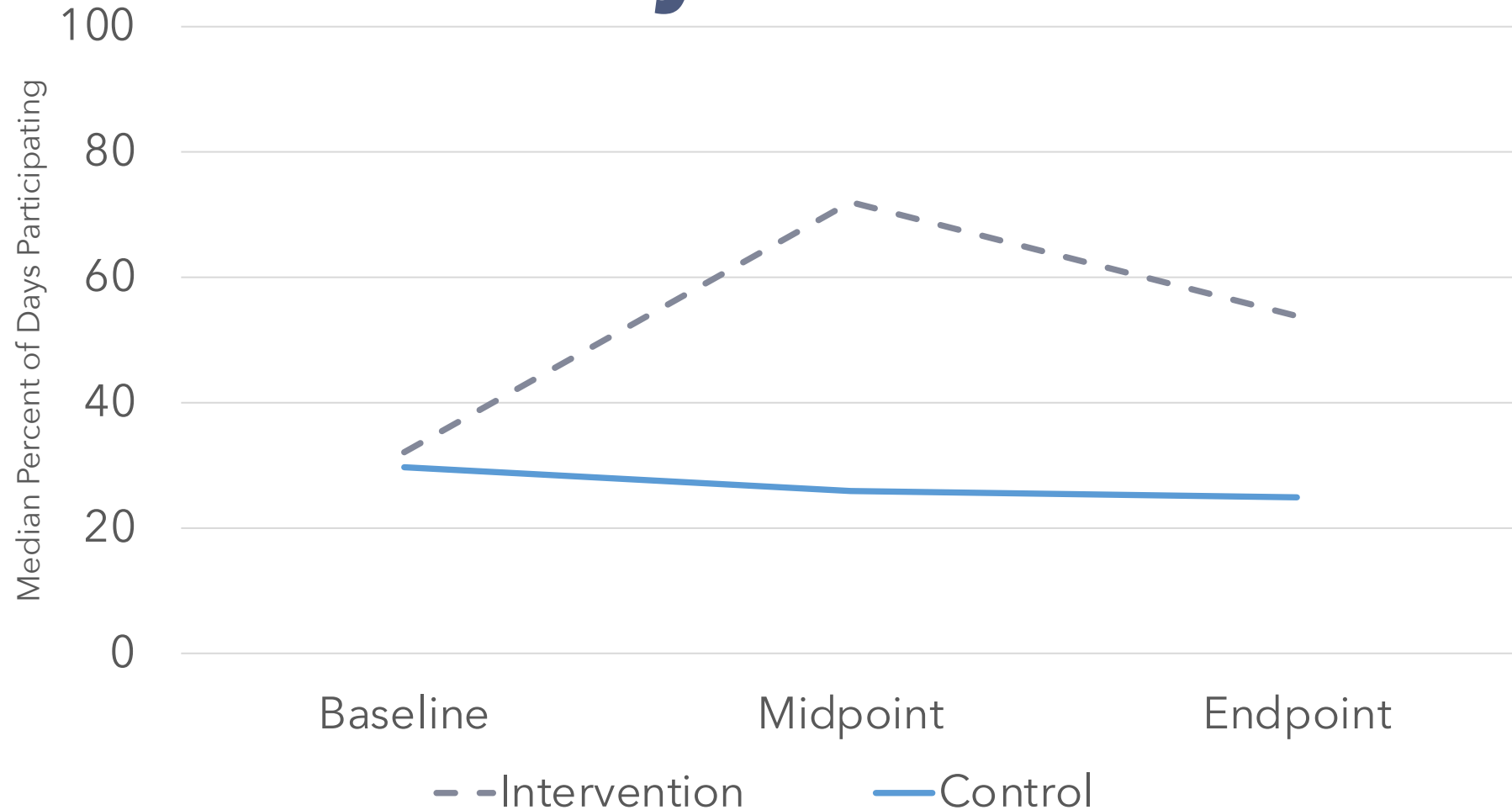
79% Eligible
Free/reduced-
Price Meals



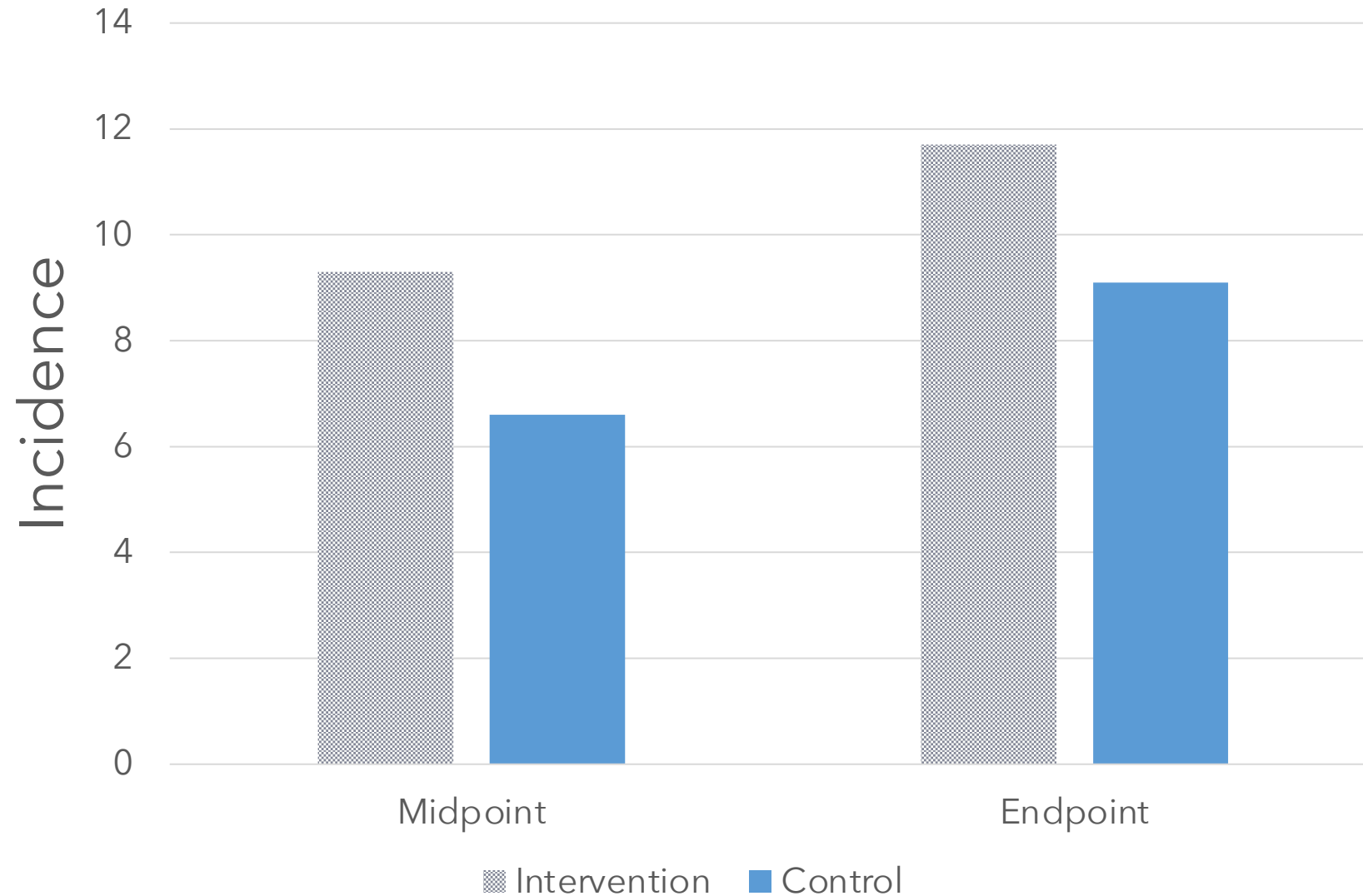
39% with
Overweight or
Obesity



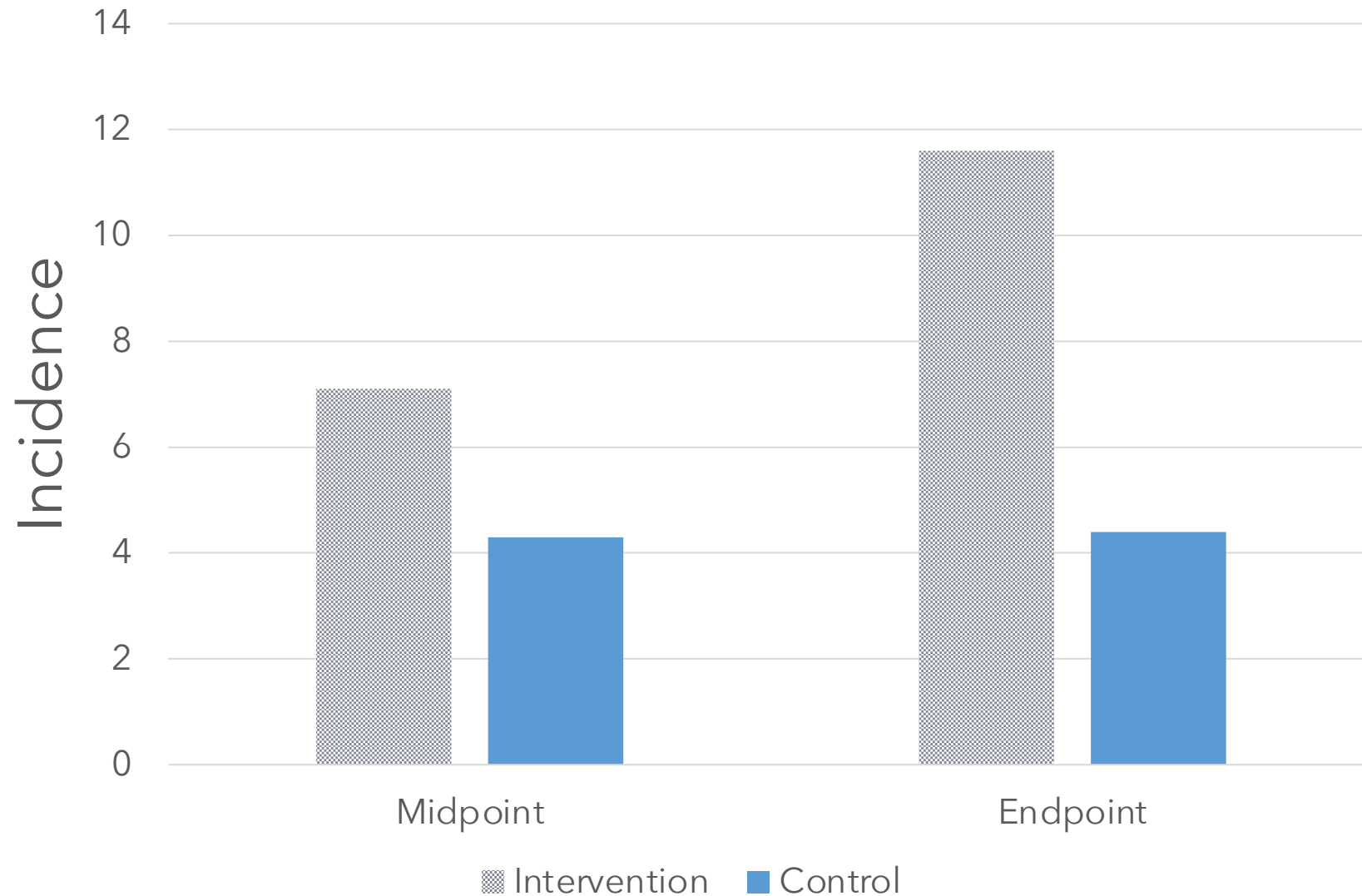
School Breakfast Program Participation Increases with One Healthy Breakfast



No Impacts on Overweight/Obesity



Increases in Obesity Incidence and Prevalence



Impacts on Breakfast Behaviors

✘ Skipped Breakfast

+ Ate at School

— Ate at Corner Store

— Ate at Home

+ Ate at Multiple Locations

Impacts on Dietary Intake

× Milk

+ 100% Juice

— Sugar Sweetened Beverages

× Fruit

× Grain Products

× Meat/Meat Alternatives

— Foods High in Saturated Fat and Added Sugar

+ Met School Breakfast Program Requirements

Impacts on Academic Outcomes

✘ Attendance

✘ Math Standardized Test Scores

✘ Reading Standardized Test Scores

Conclusions

- Breakfast in the Classroom, with complementary nutrition promotion, increased obesity among Philadelphia students.
- No effect was seen on breakfast skipping.
- Students shifted breakfast to school from other locations, but overall more students ate multiple breakfast.
- Some improvements were observed in the quality of foods students ate.
- No impact on academic outcomes.

Challenges and Future Research Opportunities

- High loss to follow-up (42%) due to student transfer
- Low-income, urban area with high density of corner stores
- “Share tables” provided some students extra food
- Intervention did not target types of foods served for breakfast
 - 100% juice allowed as fruit
 - Packaged foods easiest for classroom service
 - Students’ taste preferences

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