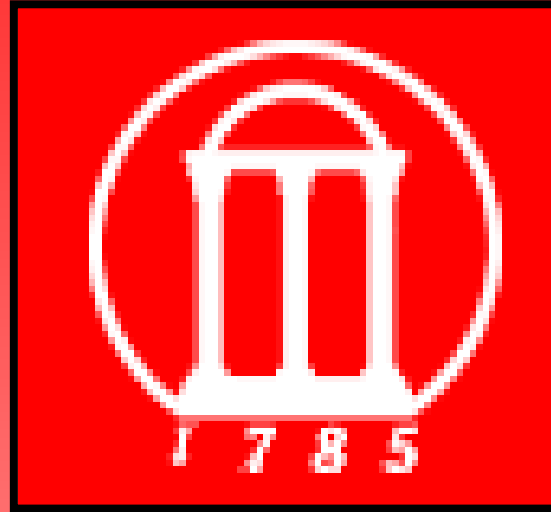


# Lil' Red Ridin' Thru 'Da Hood: A Pilot Study of the Use of Theater in Nutrition Education for

## Low-Income African-American Youth

Caree J. Jackson and Rebecca M. Mullis

Department of Foods and Nutrition, University of Georgia, Athens, GA



### INTRODUCTION

Childhood obesity is a major public health concern in the United States. Poor dietary patterns and lack of physical activity are major contributors to the declining health status of our youth. Because obese children are more likely to become obese adults, many diseases related to poor diets and lack of physical activity follow these children into adulthood. Data reveals African American and Hispanic children are at a higher risk for obesity than their Caucasian counterparts. Thus, early intervention is critically needed in these populations to reduce rising rates of childhood obesity.

One way of successfully communicating nutrition messages in school-based settings is via theater productions. To date, limited research has been conducted in the use of theater to communicate nutrition messages to children, especially, low-income African American children. This study seeks to determine if a culturally appropriate nutrition theater production can educate low-income African-American children about healthy eating and exercising in an entertaining and exciting manner.

### PURPOSE

To pilot test a culturally appropriate theater production, Lil' Red Ridin' Thru 'Da Hood, in order to determine if theater is an effective way of conveying messages about healthy eating and physical activity to low-income African-American children in school-based settings.

We hypothesized that viewing a nutrition theater production designed specifically for low-income African American children and completing related school-to-home educational materials will:

- 1) increase student knowledge about the importance of making healthy food choices and increasing physical activity (PA).
- 2) influence student intentions and behaviors related to making healthier food choices and increasing PA.

### SETTING

Four low-income predominantly African-American urban public schools in the southeastern region of the United States.



Lil' Red and Big Boy walking thru 'da hood.



Gran'ma Jackson knows best.



Lil' Red, Big Boy and Gran'ma Jackson "step" into action!

### METHOD OF INTERVENTION

STUDY SAMPLE: (N=298)

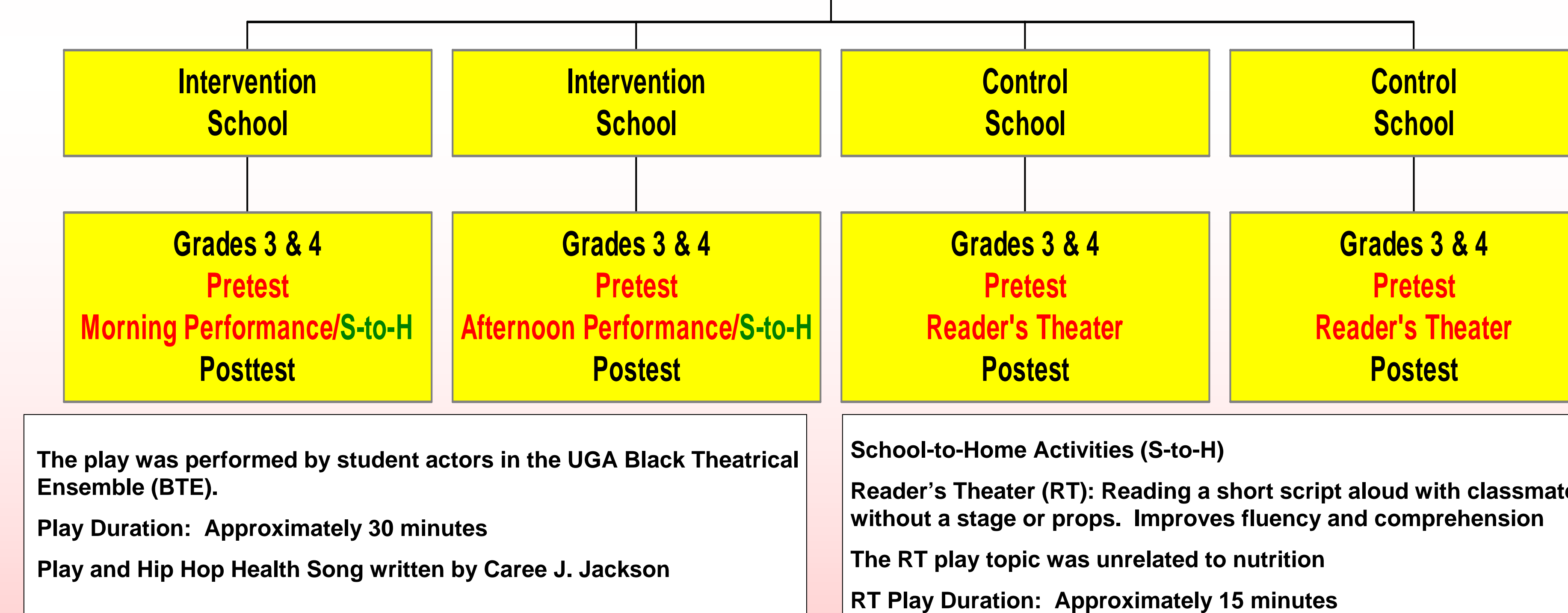
3rd and 4th grade students attending four elementary schools in a large, urban public school system

95% African American

90% Free & Reduced Lunch

PILOT STUDY DESIGN

4 Elementary Schools



### RESULTS

#### FOOD CHOICE ITEMS: (Q5-Q14) HIGH FAT VS. LOW FAT FOODS

Item	INTERVENTION		CONTROL		Posttest p-value
	Mean pre	Mean post	Mean pre	Mean post	
Q5	1.53	1.35	1.73	1.69	.000*
Q6	1.43	1.56	1.41	1.38	.017*
Q7	1.60	1.41	1.71	1.70	.000*
Q8	1.44	1.60	1.31	1.35	.001*
Q9	1.36	1.59	1.20	1.27	.000*
Q10	1.38	1.56	1.21	1.24	.000*
Q11	1.23	1.29	1.43	1.48	.014*
Q12	1.68	1.43	1.79	1.65	.004*
Q13	1.49	1.35	1.50	1.58	.004*
Q14	1.66	1.68	1.43	1.40	.000*

#### PHYSICAL ACTIVITY CHOICE ITEMS: (Q44-Q53) ACTIVE VS. SEDENTARY ACTIVITIES

Item	INTERVENTION		CONTROL		Posttest p-value
	Mean pre	Mean post	Mean pre	Mean post	
Q44	1.31	1.61	1.36	1.40	.007*
Q45	1.69	1.80	1.55	1.61	.009*
Q46	1.36	1.24	1.49	1.48	.002*
Q47	1.46	1.70	1.53	1.49	.006*
Q48	1.54	1.34	1.60	1.48	.077
Q49	1.31	1.18	1.29	1.24	.332
Q50	1.83	1.90	1.71	1.84	.245
Q51	1.63	1.33	1.79	1.59	.001*
Q52	1.20	1.14	1.19	1.19	.395
Q53	1.64	1.36	1.66	1.58	.007*

### SUMMARY OF RESULTS

- 100% of students reported that they enjoyed the play.
- 100% of teachers gave play a rating of "Excellent" reported that the play effectively conveyed health and nutrition messages for this population.

#### SIGNIFICANT FINDINGS

- Major Impact on Food Choices
- Impact on Physical Activity Choices
- Reported increase of 1/2 serving of fruits & vegetables
- Reported changes related to student knowledge, behaviors, and intentions were not statistically significant.

### CONCLUSIONS OF SIGNIFICANCE

- Theater is a viable medium to convey nutrition messages to low-income African American children in school based settings. As evidenced by:

- Teacher acceptance
- Student responses

- Theater intervention had greatest impact on food and physical activity choices
- Data indicates students are already knowledgeable about healthy foods and activities.
- Theater alone will not produce behavioral changes.

#### Future Research

- Engage students and families in longer term interventions
- Improve evaluation instruments

### REFERENCES

- Crawford PB, Story M, Wang MC, Ritchie LD, Sabry ZI. (Aug 2001) Ethnic Issues in the Epidemiology of Childhood Obesity. *Pediatr Clin North Am*, 48 (4) 855-78.
- Fitzgibbon ML, Stolley MR, Dyer AR, VanHorn L, KauferChristoffel K. (Feb 2002) A Community-Based Obesity Prevention Program for minority children: rationale and study design for Hip Hop to Health Jr. *Prev Med*, 34(2), 289-97.
- Kumanyika SK. (1993 Oct 1) Special Issues Regarding Obesity in Minority Populations. *Ann Intern Med*; 119 (7 Pt 2), 650-4.
- Perry CL, Zauner M, Oakes JM, Taylor, G, Bishop DB. (Aug 2002) Evaluation of a Theater Production About Eating Behavior of Children. *Journal of School Health*, 72 (6), 256-61.
- Styne, DM. (2001 Aug) Childhood and Adolescent Obesity: Prevalence and Significance. *Pediatr Clin North Am*, 48 (4), 823-54.