

Eat Healthy, Stay Active!: A Collaborative Partnership between Central Missouri Community Action Head Start and University of Missouri School of Medicine

Central Missouri community Action.

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Background

- Eat Healthy, Stay Active! (EHSA) is a community-based intervention focused on reducing pediatric obesity in the Head Start community (Figure 1)
- · EHSA aims to:
 - Promote healthy eating behaviors and physical activity in Head Start families
 - Measure changes in health literacy using a validated tool, "The Newest Vital Sign" (NVS)
 - Introduce medical students to Head Start, the topic of health literacy and the effects of poverty on patient health

Target Population

- · Head Start children and families in Central Missouri
 - Live at or below 100% of the Federal Poverty Level
 - · Limited access to nutrition, health and physical activity resources
 - 112 Head Start families have participated in EHSA to date
- 385 Head Start children have experienced the EHSA curriculum
- · Head Start Staff
- Educate children in Head Start classrooms using the EHSA curriculum
- 31 staff members have participated to date
- MU SOM 1st and 2nd year medical students
 - Limited exposure to low health literacy populations
 - 49 medical students have participated in the program to date

Project Description

- EHSA is a 5-month curriculum involving classroom activities, community events and parent trainings
- The program is led by CMCA staff, Head Start teachers and 1st and 2nd year medical students
- Medical students completed didactic series on topics including poverty, nutrition, health literacy skills and motivational interviewing. They also:
- Participated in the "I CAN...Help My Child Stay Healthy" training
- Completed a series of open-ended journal questions
- Surveyed their attitudes, knowledge, and skills regarding health literacy before and after the program
- Head Start families were exposed to curriculum that focused on:
- Nutrition, exercise, health literacy, and goal setting
- · Methods of data collection:
 - Medical student growth and competence was assessed using pre and post surveys as well as journaling/self reflection questions
- Head Start parent health literacy was assessed using the NVS (Figure 2)
- Head Start children's nutrition knowledge was assessed using a 4 question nutrition survey





Figure 1: The EHSA facebook page connects members of the EHSA community.

Nutrition Facts Serving Size Servings per container	8	/s cu
Amount per serving Calories 250	Fat Cal	12
		%D\
Total Fat 13g		209
Sat Fat 9g		409
Cholesterol 28mg		129
Sodium 55mg		29
Total Carbohydrate 30g		129
Dietary Fiber 2g		
Sugars 23g		
Protein 4g		89
Protein 4g "Percentage Daily Values (DV) 2,000 calorie det. Your daily vi be higher or lower depending o calorie needs. Ingredients: Cream, Skim 1 Sugar, Water, Egg Yolks, Brown Millifat, Peanut Oil, Sugar, Butt Carraocenan, Vanille Exten	Nues may n your Mik, Liquid i Sugar,	89

READ TO SUBJECT: This information is on the back		Attention	
of a container of a port of ice-	Owen.	700	1
If you eat the entire container, how	many calories will you eat?		
Answer 1,000 is the only come	17 amount		L
If you are allowed to eat 60 grams have much ice cream could you for			
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Answer: 10% is the only come:	Conseer		
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In it case for you to eat this ice one	and		
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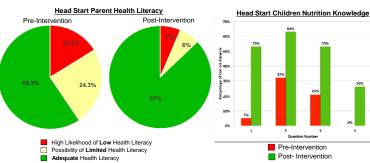
Figure 2: "The Newest Vital Sign" is a validated tool used to assess health literacy.

Results

- Medical students completed pre and post intervention surveys containing 14
 questions in three areas: attitudes, knowledge, and skills/confidence regarding
 health literacy. Surveys were scored using the 5 point Likert scale
- There was a statistically significant difference in pre and post intervention survey responses for the attitudes and skills/confidence components (Table 1)
- Head Start parent health literacy (assessed using the NVS) increased after the intervention. Head Start children nutrition knowledge increased after the intervention (as assessed using a 4 question nutrition survey) (Figures 3 and 4)

	Pre-Intervention Survey (overall mean)	Post-Intervention Survey (overall mean)	p-value
Attitudes (Q1-5)	3.5	4.32	0.001
Knowledge (Q6-10)	4.64	4.81	0.117
Skills/Confidence (Q11-14)	3.32	3.93	0.001

Table 1: Medical student pre and post intervention survey data. 14 questions (in 3 categories) were scored using the 5 point Likert scale. Data was averaged and statistically analyzed using a student's t-test.



<u>Figure 3</u>: Head Start Parent pre and post intervention health literacy, <u>Figure 3</u>: assessed using the NVS.

<u>Figure 4</u>: Head Start children pre and post intervention nutrition knowledge, assessed using a 4 question survey

Conclusions

- EHSA increases medical student attitudes, skills and confidence in working with low health literacy populations
- EHSA increases health literacy in Head Start children and families
- · Evidence supports EHSA as:
- a model for teaching health literacy to low income populations
- a valuable educational tool for medical students
- Other medical schools may implement similar programs to increase preclinical training in the topics of health literacy and barriers to health in low-income populations

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Bibliography

Herman A, Nelson BB, Teutsch C, Chung PJ, ""Eat healthy, stay active!": a coordinated intervention to improve nutrition and physical activity among head start parents, staff, and children." American Journal of Health Promotion 27.1 (2012): e27-e36.

Learn More about Eat Healthy, Stay Active!

EHSA Year 1: https://www.youtube.com/watch?v=QbUBQc1e8V8
EHSA Year 2: https://www.youtuve.com/watch?v=Ct2Zb FTccs
Find us on facebook by searching: *Eat Healthy, Stay Active!*

