

Changes in Behaviors, Knowledge and Beliefs Among Parents and Students

One of Eight Brief Reports

YEAR 5 EVALUATION OF ARKANSAS ACT 1220 OF 2003 TO COMBAT CHILDHOOD OBESITY

INTRODUCTION

Obesity is recognized as one of the most pressing health threats facing families and communities in Arkansas and in the nation overall. Arkansas Act 1220 of 2003, which mandated statewide policy changes aimed at preventing childhood obesity, included school-based policies that support physical activity and promote the sale of healthier foods and beverages, as well as annual body mass index (BMI) screenings with results provided to parents in a confidential report. This brief report presents key findings from Year 5 interviews with parents and students that were conducted to assess changes in their behaviors, knowledge and beliefs related to new policies mandated by Act 1220.

As in previous years, our research team at the Fay W. Boozman College of Public Health at the University of Arkansas for Medical Sciences conducted the evaluation with support from the Robert Wood Johnson Foundation. More details from the Year 5 evaluation and complete evaluation reports for Years 1-4 are available at: www.uams.edu/coph/reports/#Obesity.

KEY FINDINGS: CHANGES IN BEHAVIORS, KNOWLEDGE AND BELIEFS AMONG PARENTS AND STUDENTS

Parental Knowledge and Beliefs Regarding Childhood Obesity

Since the passage of Act 1220, parental awareness of health problems associated with childhood obesity has increased.

- Year 5 findings suggest the activities and programs focused on childhood obesity prevention have increased parental awareness of the problems associated with overweight in childhood, particularly heart disease and diabetes.
- The percentage of parents who asserted the belief that overweight children are more likely to become overweight adults increased from 94 percent in Year 1 to 98 percent in Year 5.



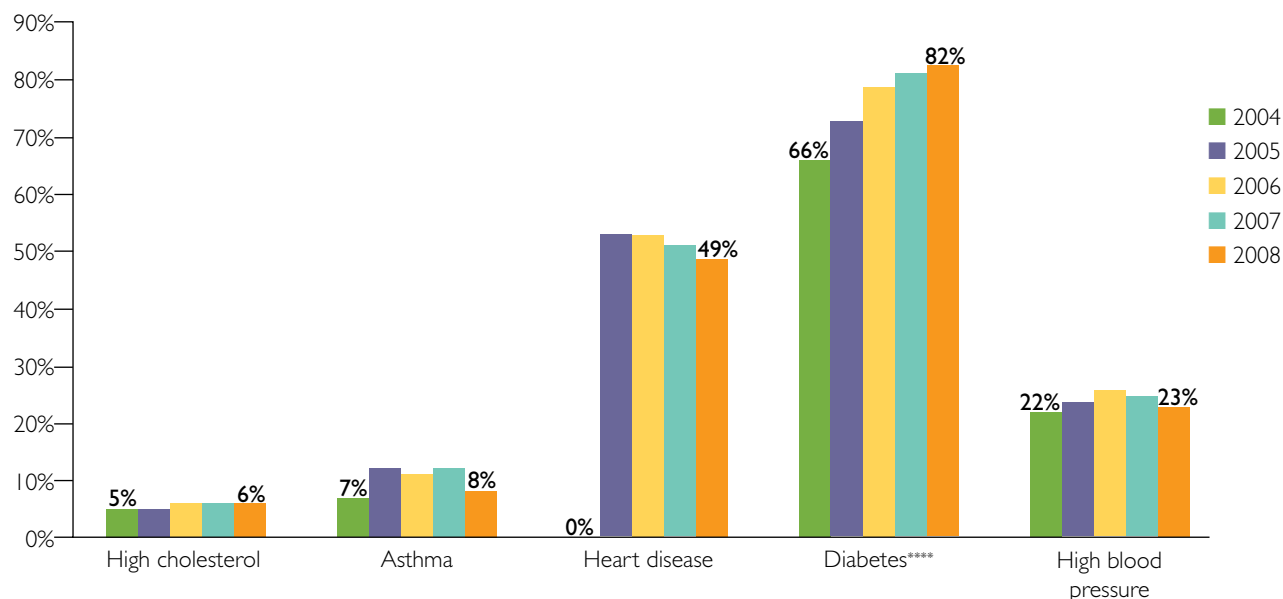
Family Behaviors Related to Nutrition and Physical Activity

There was little evidence to suggest that families are making substantial changes to improve their children's nutritional environment outside of school.

- Parents did not report substantial changes in the frequency of eating out or frequency of modifying recipes to make them healthier.

- Adolescent students have not reported substantial changes in their overall dietary habits, such as consumption of soda or junk foods, since Year 1. However, there was a significant increase in the percentage of parents who reported that their younger child drank no soda the day before the interview, up from 44 percent in Year 1 to 53 percent in Year 5.

PARENTAL AWARENESS OF HEALTH PROBLEMS ASSOCIATED WITH CHILDHOOD OBESITY



*p ≤ .05; **p ≤ .01; ***p ≤ .001; ****p ≤ .0001

FAMILY NUTRITION AND PHYSICAL ACTIVITY PATTERNS

Behaviors	2004	2005	2006	2007	2008
Nutrition					
Trying to limit family consumption of chips, sodas, sweets	76%	79%	79%	83%	81%
Younger child (≤13 years of age) drank no sodas yesterday**	44%	47%	49%	57%	53%
Average number of times per week parent modified recipes to make them healthier	2.3	NA	2.5	2.7	2.3
Average number of times family ate in fast food restaurant last month	5.9	NA	6.4	6	6.5
Physical activity					
Limit the amount of child's screen time, including television, video games, and internet	72%	71%	75%	74%	74%
To give more time for homework	NA	20%	20%	17%	20%
To give more time for physical activity****	NA	33%	37%	40%	47%
As punishment for bad behavior*	NA	2%	2%	1%	<1%
Because of TV program content**	NA	8%	7%	6%	4%
To give more time for sleep	NA	6%	7%	4%	5%
Require child to stay inside after school rather than playing outside*	11%	10%	10%	9%	8%

*p ≤ .05; **p ≤ .01; ***p ≤ .001; ****p ≤ .0001

Parents reported helping their children make physical activity a priority.

- The percentage of parents who reported that they have increased their child's physical activity level increased from 28 percent in Year 1 to 35 percent in Year 5.
- While there has been no significant change in the percentage of parents who limited TV or computer screen time, a higher percentage of parents limited children's screen time specifically to make more time for physical activity.
- The percentage of parents who reported requiring their children to remain inside after school rather than playing outside has decreased significantly from 11 percent in Year 1 to 8 percent in Year 5.

Since the passage of Act 1220, students have reported a significant decline in vending machine purchases.

- In Year 5, only 35 percent of adolescents reported that they had access to food vending machines in schools, down from 64 percent in Year 1. Among those students with access to vending machines, the average number of vending purchases made in the past month declined significantly since Year 1.
- A higher percentage of students reported making no purchases in the past month, and the percentage who reported daily food or beverage purchases has declined.

STUDENT REPORTS OF VENDING MACHINE ACCESS AND PURCHASE PATTERNS

Access or purchase pattern	2004	2005	2006	2007	2008
Vending machine available at school					
Food machine****	64%	58%	39%	31%	35%
Beverage machine****	97%	94%	84%	74%	67%
Student purchases from beverage machine					
Average number of purchases per month*	11.6	NA	5.4	7.2	7.2
Student made no purchase in past month**	22%	29%	37%	34%	41%
Student made daily purchases in past month**	18%	11%	7%	10%	12%
Student purchases from food machines					
Average number of purchases per month	10.3	NA	2.9	5.2	5.5
Student made no purchase in past month**	28%	33%	59%	58%	54%
Student made daily purchases in past month**	8%	5%	4%	11%	2%

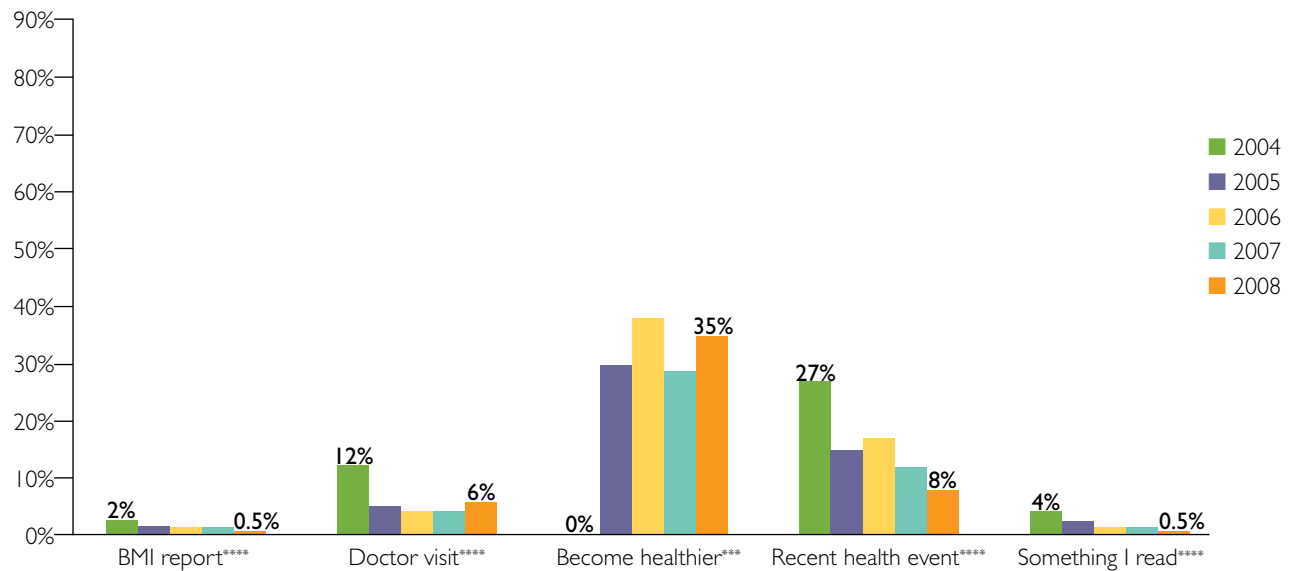
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Over the course of the five-year evaluation, there have been some changes in parents' reasons for trying to make healthy changes to the family diet.

In Year 5, 65 percent of parents reported that they are trying to change the family diet to be healthier. This percentage has remained stable since Year 1.

The desire to become healthier continued to be the primary reason given for making healthy changes to the family diet, and was cited by 35 percent of parents in Year 5. The percentage of parents who indicated that these efforts were due to the child health report remains low, at less than 2 percent.

PARENTS' REASONS FOR CHANGING FAMILY TO A HEALTHIER DIET



*p ≤ .05; **p ≤ .01; ***p ≤ .001; ****p ≤ .0001