

Parent and Adolescent Responses to State Obesity-prevention Initiatives

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 promote the sale of healthier foods and beverages, support physical activity and require annual body mass index (BMI) screenings with results provided to parents in a confidential report.

The key findings presented in this brief report reflect Year 5 data gathered from 323 adolescent students and 2,264 parents with children in Arkansas public schools to assess their responses to the changes within the school environment. Both students and parents were interviewed about behaviors that might be considered appropriate responses (e.g., initiating a diet to manage weight or restricting screen time to encourage more physical activity), as well as behaviors that might be considered

potentially negative outcomes (e.g., unhealthy dieting behaviors, excessive concern with weight or increased weight-based teasing from peers). Findings from the biennial Youth Risk Behavior Survey (YRBS)¹ also are presented. The YRBS, which is administered to a representative sample of high school students in each state, includes specific questions about dieting and physical activity behaviors.

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.

¹ Youth Risk Behavior Survey (YRBS) 2007. Available at www.cdc.gov/mmwr/preview/mmwrhtml/ss5704a1.htm.



KEY FINDINGS: PARENT AND ADOLESCENT RESPONSES TO STATE OBESITY-PREVENTION INITIATIVES

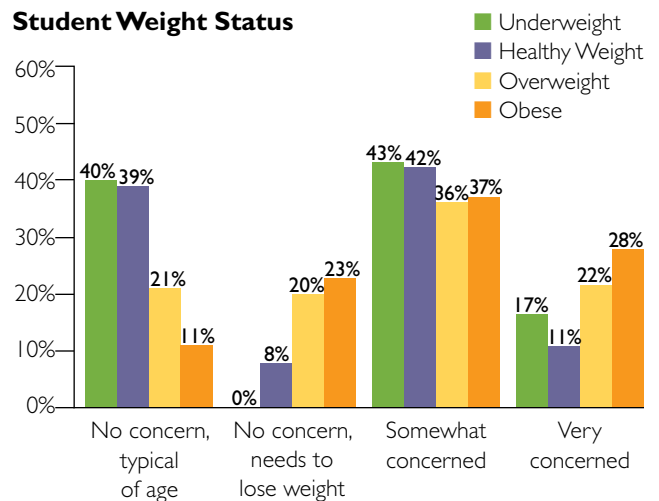
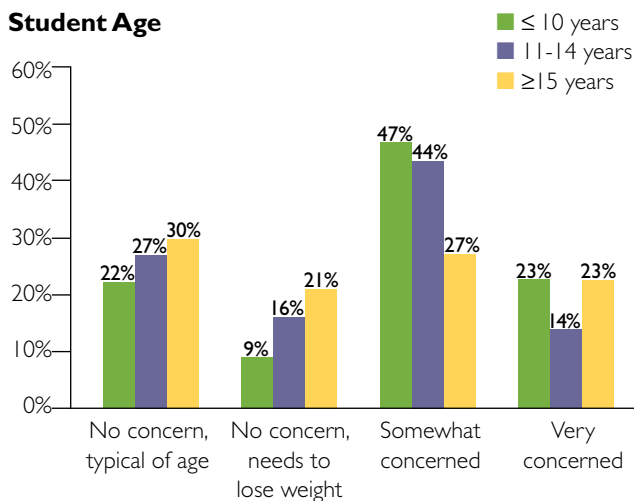
Weight Concern Among Students

Parents were surveyed in detail about weight concerns expressed by their children for the first time in Year 4. Survey results from Year 5 indicate similar patterns of concern.

- Overall, 21 percent of parents interviewed in Year 5 indicated that their child had expressed concern about his/her weight in the past year. This percentage is consistent with the 19 percent who reported such concerns in Year 4.
- Among those students who expressed concern to their parents, 66 percent did so only after the BMI screenings were initiated.

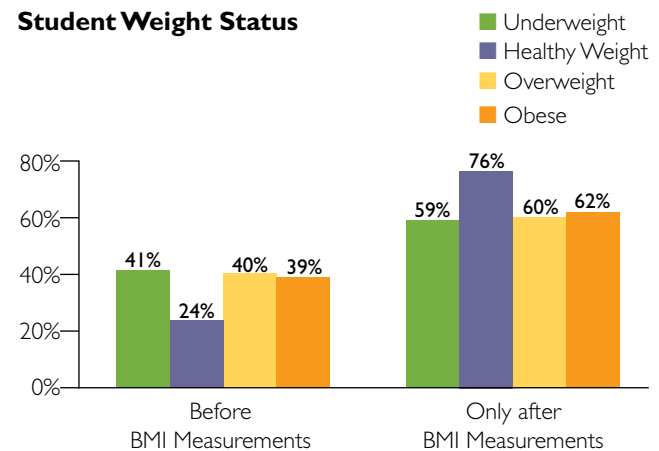
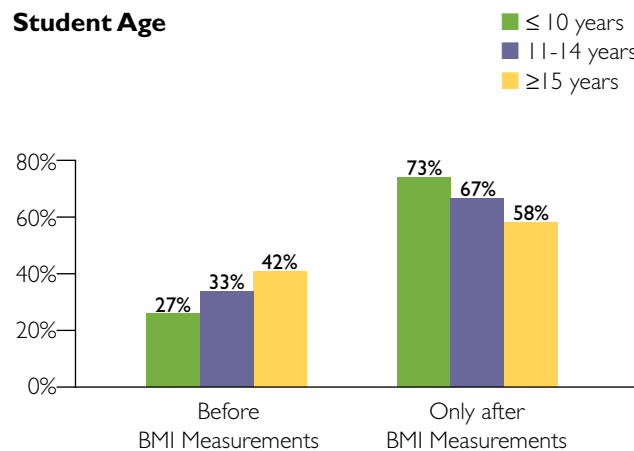
- In Year 5, 41 percent of parents were not worried about these expressed concerns, either because they believed the concerns to be appropriate for the child's age (26 percent) or appropriate for the child's weight status (15 percent). The remainder of parents were either somewhat (40 percent) or very concerned (19 percent).
- In Year 5, younger students were more likely to express weight concerns to their parents only after the BMI measurements began.
- Parents of younger children tended to be more worried about their child's concerns than parents of older children.

PARENTAL CONCERNS AMONG PARENTS WHOSE CHILDREN EXPRESSED WEIGHT CONCERN IN YEAR 5



In Year 5, 21 percent of students expressed concern about their weight to their parents.

WEIGHT CONCERN EXPRESSED BY STUDENTS, AMONG STUDENTS REPORTING CONCERN TO PARENTS IN YEAR 5



Changes in Adolescent Responses

Since Year 1, there has been minimal evidence of positive behavior change, and no evidence of a significant increase in any adverse consequences of Act 1220 mandates.

- In Year 5, 24 percent of adolescent students expressed concern about their weight during interviews. This does not represent an increase over previous years.
- The percentage of students who were not comfortable with the BMI report has decreased significantly, from 29 percent in Year 1 to only 16 percent in Year 5.
- Weight-based teasing and use of diet pills appear to be decreasing, and the percentage of students who reported starting a diet has decreased significantly from 29 percent in Year 1 to 19 percent in Year 5.

Youth Risk Behavior Survey Data on Dieting Behaviors

As part of the evaluation of the impact of Act 1220, findings from the YRBS related to self-reported adolescent dieting practices also are monitored.

- YRBS data from 2007 suggest that dieting, fasting and using diet pills to manage weight have decreased among Arkansas teens since the beginning of the decade. These changes are not statistically significant but indicate a definite trend.
- According to 2007 data, the frequency of unhealthy dieting behaviors among Arkansas youth was not statistically different from the frequency reported by the nation as a whole.
- The frequency of vomiting or laxative use as a weight control strategy declined somewhat to 4 percent in 2007, from a peak of 9 percent in 2005.

STUDENT REPORTS OF POSSIBLE CONSEQUENCES OF ACT 1220

	2004	2005	2006	2007	2008
Concerned about weight	23%	29%	25%	25%	24%
Embarrassed by measurements	NA	12%	7%	11%	10%
Not at all comfortable with BMI report**	29%	22%	15%	25%	16%
Teasing because of weight	12%	9%	6%	12%	7%
Teasing for other reasons	21%	20%	19%	25%	16%
Gone on a diet*	29%	23%	26%	27%	19%
Took diet pills	6%	5%	2%	5%	2%
Increased physical activity	59%	63%	62%	72%	58%

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

ADOLESCENT SELF-REPORTS OF WEIGHT CONTROL BEHAVIORS FROM YOUTH RISK BEHAVIOR SURVEY

Adolescent self-reported behavior	Arkansas				US			
	2001	2003	2005	2007	2001	2003	2005	2007
Dieting	43%	NA	40%	38%	44%	42%	41%	41%
Fasting	15%	NA	16%	12%	13%	13%	12%	12%
Diet pills	12%	NA	12%	8%	9%	9%	6%	6%
Vomiting or laxative use	5%	NA	9%	7%	5%	6%	5%	4%

There were no statistically significant differences between Arkansas and national YRBS data.

Changes in Parental Responses

Since Year 1, there has been an increasing trend among parents to help their children make physical activity a priority, and no evidence showing that parents were more likely to encourage their child to diet.

- In Year 5, 35 percent of parents reported increasing their child's physical activity level, up from 28 percent in Year 1.
- The percentage of parents who reported that they signed their child up for sports or exercise classes increased significantly from 42 percent in Year 1 to 49 percent in Year 5.
- Consistent with data from Years 2 to 4, only 6 percent of parents interviewed in Year 5 reported putting their child on a diet in the past six months.

- In Year 5, less than 1 percent of parents reported that they had enrolled their child in a weight loss program or clinic.
- While there has been no significant change in the percentage of parents who limit 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.

PARENTAL REPORTS OF POSSIBLE RESPONSES TO ACT 1220

Behaviors	2004	2005	2006	2007	2008
Put child on diet**	9%	6%	6%	5%	6%
Took child to weight loss clinic	<1%	1%	<1%	1%	<1%
Gave child diet pills	<1%	<1%	1%	<1%	1%
Increased child's exercise or physical activity**	28%	28%	24%	32%	35%
Signed child up for sports or exercise classes**	42%	40%	45%	48%	49%

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

FAMILY PHYSICAL ACTIVITY PATTERNS

Behaviors	2004	2005	2006	2007	2008
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