

Year Two Evaluation  
**Arkansas**

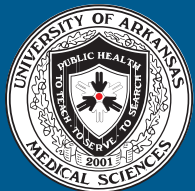


Act 1220 of 2003  
to Combat Childhood Obesity

University of Arkansas for Medical Sciences

Fay W. Boozman  
College of Public Health

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### EXECUTIVE SUMMARY

In April of 2003, Arkansas Legislative Act 1220 was signed into law by the Governor of Arkansas, Mike Huckabee. This is the second annual report evaluating efforts to implement the Act. More details about the Act itself and the history of its development can be found in *Establishing a Baseline to Evaluate Act 1220 of 2003, an Act of the Arkansas General Assembly to Combat Childhood Obesity* (2004). The 2004 report is available online at [www.uams.edu/coph/reports](http://www.uams.edu/coph/reports).

This report summarizes results of the second year of evaluation activities. It presents a brief history of the Act and the progress of its implementation is presented, as well as the current findings gleaned from interviews and surveys. Overall, we note that **change is beginning to occur among schools and families.**

Key findings include:

- *Opinions about Act 1220 overall and its individual components continue to be generally positive.*
- **Parents and adolescents continued to be generally accepting of and comfortable with BMI measurements and reporting in the schools.**
- **No negative outcomes were found which seemed to be related to BMI measurement.**

Other findings include:

- Changes to the BMI measurement process reduced the length of time between measurement and distribution of letters to parents.
- After much discussion and consideration, the recommendations of the Child Health Advisory Committee were adopted as rules and regulations for implementation in the 2005-06 and subsequent school years.
- *Local school environments are beginning to change, frequently as a result of the input received from Local Nutrition and Physical Activity Advisory Committees.* Examples of reported changes include: prohibiting the use of foods as a reward for student behavior or achievement; making changes to cafeteria offerings, such as adding more fruits and vegetables to menus, removing deep fryers, adding fruit, and removing cookies; and increasing the availability of low-fat and low-sugar beverages and snacks in vending machines, snack bars, and school stores. It is important to note that the changes observed in this second year of implementation are voluntary on the part of schools.

- Parents' awareness of health problems associated with overweight in childhood increased. Other aspects of parental knowledge, attitudes, and beliefs remained unchanged.

- While physicians report that parents have brought BMI reports to them for discussion, health care systems in communities have not been inundated by requests from parents for weight consultation and intervention.

- Parents did not report an increased utilization of non-medically supervised weight-loss programs.

- After the first year of BMI reporting, parents of children who are overweight or at risk for overweight significantly improved their ability to accurately identify their child's weight-risk status.

- Parents reported no significant changes in family physical activity.

- There was a substantial increase in the proportion of families reporting that they eat meals together each evening, as well as an increase in the percentage of families reporting daily modification of recipes to make foods healthier.

- Parents and adolescents continue to believe that the contents of vending machines in schools should be changed to include at least some healthier options.

- Adolescents did not report any changes in either eating or physical activity patterns. However, they did report changes in their patterns of purchasing from vending machines. Specifically, the proportion of adolescents who said they never purchased from beverage machines at school rose significantly, and the proportion who said they purchased daily declined significantly.

- Teasing because of weight did not increase after implementation of BMI measurements.

- BMI measurement did not result in an increased frequency of unhealthy skipping of meals and/or snacks.

- There was no increase in adolescents' use of diet pills and/or herbal supplements after BMI screening.

We are grateful to all of the individuals who have provided the information that is summarized here. Parents of school-aged youth, as well as adolescents, completed telephone interviews. School principals, superintendents, and physicians completed mailed questionnaires.

Principals, superintendents, school nurses, community health promotion specialists, members of Nutrition and Physical Activity Advisory Committees, and others completed key informant interviews. These individuals were and are in a position to know what is going on in their schools, school districts, and communities.

They graciously shared their time and information with us, and we now share it with you in the context of this report. Taken together, the information given by these informant groups provides an emerging picture of the evolution of Act 1220 and its impact on schools and families in Arkansas.

*The 2004-2005 school year included efforts to improve the process of measuring students' height and weight, promote state regulations based on the Child Health Advisory Committee's recommendations, and develop local policy through the Local Nutrition and Physical Activity Advisory Committees.*





### HISTORY: What is Act 1220, and how did it come to be?

In April of 2003, Arkansas Legislative Act 1220 was signed into law by the Governor of Arkansas, Mike Huckabee. This is the second annual report evaluating efforts to implement the Act. More details about the Act itself and the history of its development can be found in *Establishing a Baseline to Evaluate Act 1220 of 2003, an Act of the Arkansas General Assembly to Combat Childhood Obesity* (2004).

In summary, this legislation called for a coordinated, multi-level effort to combat childhood obesity. Components of the law included: creation of a state Child Health Advisory Committee to develop physical activity and nutrition standards for public schools; annual body mass index (BMI) screenings for every public school student with results sent to parents in a confidential report; formation of a Nutrition and Physical Activity Advisory Committee in every school district to implement the new standards and develop applicable local policies; reporting of expenditures and revenue from district vending contracts to the public; and prohibition of in-school access to vending and beverage machines in all Arkansas elementary schools.

The idea to create a state law that addressed childhood obesity in Arkansas originated in 2002 with several key legislators, officials at the Arkansas Department of Health (now known as the Arkansas Department of Health and Human Services, Division of Health) and the Arkansas Department of Education.

The purpose of requiring the BMI measurement was to inform parents of health risks related to the weight of their children and to increase awareness regarding the problem of childhood overweight. The BMI measurements facilitated the establishment of a baseline incidence of overweight in Arkansas children and therefore provides a means to measure what impact policy changes have on rates of obesity and overweight.

The BMI initiative, as it came to be known, was viewed as an important part of the law, because it was a concrete, actionable component that could be implemented fairly quickly. However, this component became the most controversial, because the press and parents largely misunderstood what would be required to assess BMI and because the law originally called for children's BMIs to be reported on their report card. Legislators changed the wording of the law in a special educational session in the fall of 2003 to specify that schools send parents a confidential student health report.

The letter sent to parents explained the child's BMI in detail. If the child was assessed to be "At Risk of Overweight" or "Overweight," the letter suggested tips for healthy eating, and ways to increase physical activity. It also recommended that the family contact their pediatrician or family doctor to confirm the school screening measurement and discuss options for dealing with weight concerns. Similarly tailored recommendations were offered to parents of "underweight" and "normal" weight children.



### **IMPLEMENTATION: How has Act 1220 been implemented in the second year?**

The Arkansas Department of Health worked with the Arkansas Center for Health Improvement (ACHI) to establish a standardized protocol for BMI measurements, including training for nurses and other school personnel.

ACHI coordinated the process of measuring BMI and sending reports to parents. The process went smoothly in most schools, with only a few choosing not to participate. All parents and guardians of participating children received their first BMI letter by September 1, 2004.

The Child Health Advisory Committee was formed in August 2003 and forwarded its first recommendations to the Arkansas Department of Education in August 2004, concluding what would be the first year of the implementation of Act 1220.



The second year of implementation (the 2004-2005 school year) included efforts to improve the process of measuring students' height and weight, promote state regulations based on the Child Health Advisory Committee's recommendations, and develop local policy through the Local Nutrition and Physical Activity Advisory Committees. The year was also marked by attempts to amend Act 1220 and develop other state laws governing physical activity and nutrition for children.

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### **BMI Measurements In The Second Year**

In the second year of the BMI initiative, school personnel completed height and weight measurements for students. The University of Arkansas at Fayetteville, working under contract to ACHI, entered all of the data and generated a BMI estimate for each student. ACHI prepared the school health report letters and the mailing labels to parents.

In the first year of BMI reporting, ACHI prepared and mailed all child health reports to parents. In 2005, ACHI sent each school district a computer disc (CD) containing letters and labels for the district's student health reports. The information contained on each CD was also provided to district superintendents on a secured website. School districts were responsible for downloading or printing the letters and mailing labels, and delivering the letters to parents.

School nurses, with assistance from Community Health Nurses, were primarily responsible for measuring students' height and weight in the second year. Most nurses reported that the measurements went more smoothly than in the previous year. In some schools, parental refusal was a challenge, although many schools reported a decline in the number of refusals during the second year.

The changes to the process of distributing reports got the schools more directly involved and reduced the length of time between BMI measurement and distribution of letters to parents. Some school officials who completed and submitted their measurements early reported grammatical errors in the reports. ACHI made the necessary changes, and new CDs were sent to schools by May 1, 2005.

## Year Two Evaluation of Arkansas Act 1220

### The Child Health Advisory Committee: From Recommendations to Statewide Policy

In the fall of 2004, the state-level Child Health Advisory Committee forwarded its nutrition and physical activity recommendations to the Arkansas Department of Education, as required by the Act.

The State Board of Education is the governing body of the Arkansas Department of Education and must approve or reject any proposed school policies through a review process that includes periods of public comment. The process of changing the recommendations into official state regulations consumed the 2004-2005 school year.

Regulations and instructions from the Arkansas Department of Education are communicated to districts through official memoranda after they are considered by the State Board of Education and have undergone a period of public comment.

**The recommendations** Act 1220 required that, in developing recommendations regarding nutrition and physical activity standards, the Child Health Advisory Committee consider requirements for physical activity and physical education in schools, as well as various issues surrounding student nutrition.

These included food and beverages sold in vending machines, school stores, and cafeterias, as well as the professional development of school nutrition staff. The recommendations included specific requirements for each school year from 2004 to 2007, general recommendations and future recommendations.

General recommendations included: offering fresh fruits and vegetables daily in the cafeteria; offering low-fat or baked

chips (no more than 7.5 grams of fat per ounce); eliminating the use of food as rewards for academics, sports or classroom activities; and, substituting oven-baking methods for frying whenever possible in cafeteria food preparation.

The committee chose to recommend a progressive policy change by phasing in some changes over a period of several years. For the 2004-2005 school year, recommendations addressed limiting foods of minimal nutritional value in schools (such as candy, soda, gum) and limiting portion sizes of vended items in new contracts.

For 2005-2006, the committee recommended that PE classes in grades K-6 should have a student-to-adult ratio no greater than 30:1; nutrition education would be integrated into all curricula; and access to competitive foods should be restricted during the school day. The recommendations for the 2006-2007 school year outlined new standards for professional development for child nutrition professionals and for the amount of PE in K-6, middle/junior, and high schools.

Recommendations for the future included allowing ample time for students to eat lunch, limiting soda advertisements in schools, scheduling physical activity and education before lunch, and using only non-food or healthy food items in school fundraisers.

Finally, the recommendations stated that districts should be able to enact the standards early and develop more comprehensive and restrictive district policies should they choose to do so.

#### Controversy over distribution of foods/beverages outside of lunch

Controversy surrounding the recommendations developed immediately after they were delivered to the Arkansas Department of Education. School personnel raised concerns about the time burden and financial impact of the proposed regulations on schools. Other debates about the advisability of state versus local level regulation occurred throughout the state.

While the recommendations of the Child Health Advisory Committee were being reviewed, an Internal Administration memo from the Arkansas Department of Education (dated August 8, 2004) was distributed to all school districts with the intent of reinforcing the portion of Act 1220 that prohibited elementary students from accessing vending machines in schools.





In the memo the term “vending” was defined as “any means used to sell or give away additional foods and beverages to elementary students anywhere on campus on a regular daily basis, including but not limited to...classroom, school store, concession stand.”

Many superintendents and teachers interpreted the memo as prohibiting the distribution of any additional foods and beverages to students including those served at school events and class parties.

Most decided not to enforce the apparent ban until the Arkansas Department of Education provided more specific guidance.

Ken James, Commissioner of Arkansas Department of Education, subsequently clarified the memo and stated that bans on candy used as rewards and school parties had not been mandated by the department.

A second memorandum (dated October 28, 2004) stated “current state law or regulation that prohibits or restricts the service of food items for elementary school parties, events, or special functions” does not exist and that vending of food items in public schools “does not apply to parties, events, or special functions.”

Furthermore, the memo clarified that the recommendations from the Child Health Advisory Committee were “PROPOSED recommendations for food and nutrition standards” and the “State Board of Education has taken no action at this time.” Schools were able to continue hosting class parties, and teachers were able to distribute candy to students.

**Politics** After the confusion over school parties and candy, the State Board of Education took little action on the recommendations in the following months. Between November of 2004 and January of 2005, the Board made no comment on the status of the recommendations.

Meanwhile, the Nutrition and Physical Activity Advisory Committees that were supposed to help districts implement new policies in schools for the 2004-2005 school year had no regulations to implement, and many were uninspired to develop new policies without input from the Arkansas Department of Education.

**The Governor Weighs In** On January 5, 2005, the Arkansas Department of Education began the first public comment period for the Child Health Advisory Committee recommendations. Approximately one week later, Arkansas Governor Mike Huckabee held a press conference to discuss his opinion of the recommendations.

Governor Huckabee signed Act 1220 into law in April of 2003 and, since that time, had been a particularly vocal proponent of changing to a healthier lifestyle.

Yet, despite his support of Act 1220 and other health-related programs, Governor Huckabee initially expressed hesitation at limiting student access to carbonated beverages in schools, in part because of a lack of research specifically documenting improvements in childhood obesity levels after banning soft drink machines in schools.

At the January 2005 press conference, Governor Huckabee asked the State Board of Education to adopt many of the recommendations and support a policy limiting the size of soft drink containers to 12 ounces. However, Governor Huckabee stated that the final decision regarding limiting soda size and any of the other recommendations should be left up to the local school districts.



## Year Two Evaluation of Arkansas Act 1220

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**Legislative attempts to modify the law** As the public comment period continued, the Arkansas General Assembly began its regular session in January 2005. Three Senate bills were introduced either to amend Act 1220 or to govern nutrition and physical activity in public schools. These bills demonstrate the legislature's continuing interest in Act 1220 and the health of Arkansas children.

Two of the bills were unsuccessful. The first called for the BMI measurement component of Act 1220 to be completely removed. Schools would no longer be required to take the BMI measurements of students and generate student health reports to parents.

The bill was read twice and referred to the Senate Committee on Education, but its sponsor withdrew the bill before it made it out of committee.

The second bill sought to reduce the time requirement for physical activity in public schools from at least 60 minutes per week for K-12 students to 50 minutes per week for grades 7-12 and 40 minutes per week for grades K-6. This bill was never voted out of the Education Committee.

Senate Bill 965, an amendment to an existing Arkansas law that addresses school district adherence to the National School Lunch Program (NSLP), was successful.

The bill called for each local school district to give information on the NSLP standards, menus, and other foods sold in the school cafeteria to the district's Nutrition and Physical Activity Advisory Committee.

In turn, the committee would provide technical assistance and recommendations concerning menus and other cafeteria foods to the schools in the district. SB 965 was signed into law on April 18, 2005, and became Act 2285.

In short, it gave more authority and responsibility to local Nutrition and Physical Activity Advisory Committees by allowing them to advise district and schools on the NSLP standards. This law effectively expands the scope and opportunities for the committees to affect school policy and practices.





*The Governor urged the State Board of Education to make the rules regarding nutrition and vending machine access mandatory for all districts.*

**Turning point for recommendations** Between March and June of 2005, the Arkansas Department of Education held five public hearings on the Child Health Advisory Committee recommendations. When the public comment period ended, the State Board of Education took comments into consideration and modified the recommendations. Each change required another public comment period, further delaying the final regulations.

According to newspaper accounts, school officials and parents who attended the hearings were openly critical of the recommendations. The majority of the objections were directed at the physical education requirements. Opponents argued that the proposed regulations would be expensive to implement, because schools would have to hire more staff and find additional classroom space. Others were concerned that including more time for physical activity would mean less time for academics.

Governor Huckabee continued to recommend local control, writing: "I also have concerns that some sections of the recommendations could be construed as unfunded mandates, so I think that there is merit in allowing leaders to decide which recommendations will work in their communities." Huckabee also advocated that the recommendations be put forward as recommendations rather than regulations – "mays" rather than "shalls."

At its June 13 meeting, the State Board of Education tentatively approved a revised version of the proposed regulations. Modifications included increasing the number of school events where foods of minimal nutritional value could be served, from six to nine events per year;

encouraging, rather than requiring, junior high and high schools to limit student access to vending machines until 30 minutes after the last school lunch period; and eliminating the requirement of 225 minutes of physical activity per week for high school students. The Board reported that the revised rules would be open for public comment at one final hearing before it voted on them in August.

Between the June 13 board meeting and the public hearing held June 28, the Little Rock School District's Nutrition and Physical Activity Advisory Committee presented to its school board six pages of recommendations more specific and comprehensive than the revised rules being considered by the State Board of Education.

Among other things, the committee recommended that physical education should be pursued as strongly as any other educational goal in schools and that it should never be used as punishment. It further recommended that physical education be integrated in the classroom setting and that the percentage of healthy options gradually increase until they reach 100 percent of school vending machine offerings. At the June 23 Little Rock School District's School Board meeting, the recommendations were adopted.

Less than a week later, the State Board of Education held the final public comment hearing on the revised state rules. Members of the Little Rock School District's Nutrition and Physical Activity Advisory Committee attended the meeting to protest the "watered-down" recommendations.

Snack vendors also attended the meeting to report that restricting access to vending machines until thirty minutes after the last lunch period would be “like killing the vending machine sales altogether.” The State Board of Education planned to make a final ruling on the recommendations at their August 8, 2005, meeting.

At a press conference on July 25, Governor Mike Huckabee reported that his position regarding the proposed rules governing nutrition and physical activity in Arkansas schools had changed. In a reversal of his position, the Governor urged the State Board of Education to make the rules regarding nutrition and vending machine access mandatory for all districts.

The Governor did not recommend making the physical activity recommendations mandatory, saying that school districts should be allowed to make that decision.

Governor Huckabee credited local healthcare professionals and his nominee for Chief Health Officer, Dr. Joe Thompson, with helping him review his stance on the recommendations.



**Final regulations** At the August 8, 2005, meeting of the State Board of Education, the nutrition and physical activity rules and regulations finally were passed and submitted to the Joint Administrative Rules and Regulations Subcommittee of the Arkansas Legislative Council for review.

In their final form the regulations incorporated many of the changes promoted at public hearings. Schools would restrict access to foods of minimal nutritional value in elementary schools, with the exception of those used at nine school events each year.

Snacks could be provided to students during the school day “as part of the planned instructional program” and as integrated portions of the instructional program. The recommendations called for these snacks to meet United States Department of Agriculture Child and Adult Care Snack Patterns.

In middle, junior high, and high schools, foods of minimal nutritional value could only be sold or given to students 30 minutes after the last lunch period ended. The rules also allowed school groups to sell food or beverage items for fundraisers as long as these items are sold off the school campus.

In regards to physical activity and physical education, the final rules and regulations required, at all levels, a minimum of 150 minutes of physical activity per week. In elementary schools, this time was to include 60 minutes of scheduled physical education.



High school activities such as scheduled physical education classes, walking programs, intramurals, activity periods, the integration of physical activity into the academic curriculum, lifestyle wellness education, and organized physical activity courses were to occur. The requirement of 1 semester of physical education for graduation was maintained.

The Legislative Council Subcommittee originally rejected the rules forwarded from the State Board of Education. Legislators felt that the rules did not “go far enough,” citing concerns that the rules did not regulate or govern foods sold in cafeterias.

Arkansas Department of Education officials replied that cafeteria foods were under the control of the federal school lunch program. The department agreed to hold public hearings on the issue of teacher responsibility for physical exercise in classrooms.

At the end of a second committee meeting on September 6, the rejected rules were reconsidered, passed, and forwarded to the Bureau of Legislative Research to go into effect in Arkansas public schools on September 19, 2005. The recommendations are contained in the appendix of this report.



*Schools currently under contract  
with vending companies  
do not have to comply with the standards  
until their contracts end.*

**The vending loophole** The final regulations regarding nutrition in Arkansas schools required that carbonated and non-carbonated sweetened beverages sold to students will not exceed 12 ounces. However, schools that were currently under contract with vending companies or those who renewed their contracts with companies before August 8, 2005, do not have to comply with the standards until their contracts end or are under renegotiation.

In a memo from the Commissioner’s office, the Arkansas Department of Education informed school districts that state and federal laws prohibit a state from passing a law “which impairs the obligation of existing legal contracts.”

Therefore schools that had beverage contracts in place before the rules went into effect are not required to make healthy changes to the vending items if those changes violate their contracts with vending companies.

The new chair of the State Board of Education, Jenna Westmoreland, was quoted in the Arkansas Democrat Gazette newspaper (September 20, 2005) as saying that when considering the recommendations, the Board believed vending contracts were renewed each year.

She stated, “I was not aware that there were multiple-year contracts on vending machines. That was a piece of information that we didn’t have.”





## Year Two Evaluation of Arkansas Act 1220

### Nutrition And Physical Activity Advisory Committees: Establishing Local Policy

Act 1220 required every school district to develop a Nutrition and Physical Activity Advisory Committee to implement the new standards for nutrition and physical activity and to develop applicable local policies. The Division of Health also employed Community Health Promotion Specialists to assist with the implementation of Act 1220.

At the time of the 2005 surveys, 93 percent of superintendents indicated that their district had formed a committee. The majority (89%) formed a new committee, but some made use of an existing committee (7%) or combined efforts with the newly required Wellness Committee for the Federal food service program (5%).

Nutrition and Physical Activity Advisory Committees were meeting regularly (24% monthly, 26% quarterly, 24% semi-annually) and 22 percent had already made some recommendations to the district school board.

Key informant interviews with committee members and Community Health Promotion Specialists in 2005 provided some insight into how schools are integrating the components of Act 1220.

The comments fell into two broad categories: those regarding the creation and work of the local committees and those regarding community involvement in addressing childhood obesity.

Interviews and superintendent surveys indicated that the majority of school districts had formed their committees in 2005, although many had met only a few times. Committees typically included only the required members, and it was reported that superintendents chose the committee members.



*The committees  
had begun to organize  
their community response  
to childhood obesity.*

At the time of the 2005 interviews, all committee members and most Community Health Promotion Specialists reported that the committees were awaiting recommendations, direction, or instructions from the Arkansas Department of Education.

The committees had, however, begun to organize their community response to childhood obesity. Many committees reported using the Centers for Disease Control and Prevention's School Health Index to begin planning nutrition and physical activity recommendations for their schools.

Some were in the process of writing up goals for local schools; some had dealt with immediate and pressing issues; and some were addressing other topics that they thought were most important for their schools, such as tobacco use and dental hygiene.

Although a few of the community members, Community Health Promotion Specialists and school nurses reported that no local policy had been developed yet to address childhood obesity, others stated that their schools and community partners were working together on initiatives.

For instance, one committee determined that schools should hold an annual "PE field day" and should begin using non-food based rewards. Another committee held an in-service for staff on health and safety. Yet another also obtained a grant for an educational family fun night and installed walking trails for teachers to model healthy behavior for children.

*Twenty-two percent of Nutrition and  
Physical Activity Advisory Committees  
had already made  
some recommendations  
to the district school board.*

## Next Steps in Policy Development

Now that specific rules regarding nutrition and physical activity have been distributed to Arkansas schools, the Arkansas Department of Education will be faced with how to enforce the implementation of the regulations and what the consequences will be for districts that do not conform to the law.

The potential for conflict is highlighted by an education official who reported that a superintendent contacted the department to say that his district would not be implementing any of the changes and that the department could not persuade him to do so.

A number of specific issues also seem likely to emerge, such as how to:

- Make the reporting of revenues and expenditures associated with vending contracts more consistent;
- Help teachers become more comfortable with nutrition education in the classroom;
- Help schools and school districts find creative ways to meet physical activity and physical education standards, including incorporating physical activity into classroom instruction; and
- Help Nutrition and Physical Activity Advisory Committees work effectively to create locally relevant change.

### **IMPACT: What impact is Act 1220 having?**

#### **What Do People Think About Act 1220 and its Activities?**

There appears to have been a change in the perception of Act 1220 over the past year. This was exemplified by several superintendents and principals who said in interviews that they were initially “surprised” or “shocked” at the requirement to report children’s BMI, but after seeing the data they had decided that “it is pretty convincing.”

A number of principals stated that schools must play a leading role, and expressed the belief that components of Act 1220 were a positive thing for schools and that the BMI measurement is important for increased education and awareness of obesity.

However, all Nutrition and Physical Activity Advisory Committee members and most principals who were interviewed made strong statements indicating the belief that parents are responsible for their child’s weight and need more education on nutrition, physical activity, and healthy weight for children.

One principal noted that “...sometimes, the school can make parents aware. You can’t force people to do the right thing, but at least you can make them aware [with BMI letters].”

Many school personnel, particularly school nurses, continue to feel overwhelmed by having to add Act 1220’s mandates to all of their other tasks. Money and time for the required BMI measurements and physical activity/education changes were the biggest concerns of superintendents and principals.

Many superintendents and principals continued to think of Act 1220 as an unfunded mandate for school districts, and, though they thought that it had good goals, were struggling to balance educational goals with health promotion goals. Clearly, schools continue to feel constrained by the length of the school day and all the competing expectations and goals to be met.

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## Year Two Evaluation of Arkansas Act 1220

### Act 1220 and Childhood Obesity in the Media

From November 2004 through October 2005, a total of 715 news stories, editorials and letters to the editor referencing Act 1220 or childhood obesity appeared in newspapers in 72 of 75 Arkansas counties. In the six months prior to that period (May through October 2004), there were just over 400 such references. These levels of media discussion suggest a continued level of interest in the issue of childhood obesity throughout the state.

Overall, the majority (80%) of the 2005 media reports were neutral in tone. Thirteen percent were positive, in favor of attempts to change nutrition and physical activity in schools or approving of the BMI measurement in schools.

The remainder (7%) of the news reports and editorials were negative about the strategies or intent of Act 1220.



The most frequently discussed issues were BMI assessment (64%) and vending machines (43%). The proportion of articles related to vending machines increased substantially from the first monitoring period (28%) to the current year (43%). The topics mentioned with the least frequency included physical activity among children and adolescents and the risks associated with children being overweight.

### Physicians Express Opinions

To gauge community response to public school nutrition and physical activity policy changes related to Act 1220, we surveyed community-based physicians (family practitioners and pediatricians) in 2005. The majority of the respondents (58%) were familiar with Act 1220 and the relevant contents and guidelines.

Act 1220 has provided physicians new opportunities to counsel patients on weight, nutrition, and physical activity issues. Seventy-eight percent of responding physicians stated that this was a physician's most important role to play in promoting healthy weight among Arkansas youth, and 74 percent ranked the opportunity to provide families with guidance on healthy eating and physical activity as one of the most important aspects of Act 1220.

Most physicians (69%) agreed that the primary intent of the legislation was to raise awareness about childhood obesity.

Their perception of the potential outcomes of Act 1220 was generally positive (45%); however, 42 percent said they do not yet know what they think. Seventy-three percent felt that taking BMI measurements in the public schools was important.

Only 13 percent of doctors were concerned that students might develop eating disorders as a result of the heightened focus on weight.

Some doctors expressed concern about inadequate financial resources for responding to the health needs of overweight children, such as a need for insurance reimbursements for dietary counseling and weight loss programs.

Overall, physicians were confident (87%) of their ability to recommend diet and activity for children and adolescents; viewed obesity among children as a contributor to health problems (99%), and said that overweight or obese adolescents were likely to become overweight or obese adults (100%).

*Most physicians (57%) surveyed stated that they had at least one parent bring in a child's BMI letter for discussion, and some (3%) had more than 40 letters brought in for a consultation.*

### BMI Measurement

**Opinions of parents** Interviews of parents in 2005 indicated that 71 percent remembered receiving a BMI report from the school. Of those, 95 percent indicated that they had read at least some of the report, and approximately 67 percent said that the report had been helpful in some way.

The majority of parents (71% in 2005; 69% in 2004) continued to be confident of the confidentiality of the reports and comfortable with the idea of receiving a BMI report from the school (65% in 2005; 70% in 2004).

**Opinions of adolescents** In interviews in 2005, a similar percentage of adolescents (61%) indicated comfort with the idea of their parents getting a BMI report from school as in the previous year (63%). This indicates that the majority of students had a comfortable experience with the measurement and reporting process.

Adolescents continued to be comfortable with the confidentiality of the process (91% in 2005; 90% in 2004). Only 12% of students indicated that they were embarrassed at all by having the measurements taken.

**Opinions of school personnel** As noted, school nurses reported that the height and weight measurements of students generally proceeded more smoothly in the 2004-2005 school year.

They did report, however, some continued frustration with logistics and a perceived lack of communication and planning among the Division of Health, Arkansas Center for Health Improvement, and the Department of Education.

In responding to the 2005 surveys, 74 percent of principals and 71 percent of superintendents reported no real problems with BMI measurements. Of those who did report problems, the most common were logistics, time away from academic instruction, and negative feedback from parents.

School personnel continue to question the value and necessity of BMI measurements and reports to parents. Some question the validity and accuracy of the body mass index itself. Others interviewed believed that weight issues are best dealt with by physicians and that the school was an inappropriate setting for such measurements.

A common theme in interviews was a description of a number of parents who complained about the BMI measurements. School personnel reported that parental responses to the BMI measurements were mixed, but generally more positive in the second year of implementation.

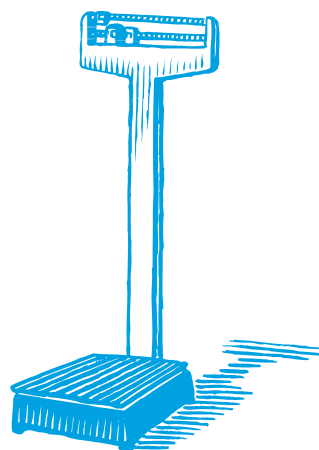
Interestingly, approximately one third (34%) of the superintendents who responded to the 2005 survey indicated that they had had no parent who contacted them about the BMI measurements, and 75 percent had been contacted by fewer than 10 parents. Similarly, the majority of principals (52%) had not heard from any parents about the BMI measurements, and 76 percent had less than five contacts from parents.

All of the school nurses and many superintendents and principals relayed some parental and child concerns about privacy and confidentiality, and some concern about body image issues related to the BMI. There were fewer of these concerns in the 2005 interviews than had been noted in baseline interviews, but some expressions of anxiety remained about these issues.

Despite the general acceptance of BMI measurement by parents and students, BMI measurement and reporting continue to be the primary issues of concern about the Act among school personnel. This seems to reflect a notable difference in attitudes among school personnel as compared with parents and children.

School personnel reported that the nutrition and physical activity aspects of the legislation were received with more enthusiasm from parents, students, and school personnel. Several of those interviewed were of the opinion that addressing nutrition and physical education of children would be a better tactic than BMI letters to reduce childhood obesity.

*In 2005,  
parents generally  
remained comfortable  
with the confidentiality  
of the BMI report.*



### Vending Machines in Middle and High Schools

**Opinions of parents** Parental views about the presence of vending machines in secondary schools and the preferred contents of those machines have not changed substantially in the past year.

In the 2005 telephone survey, a majority of parents (58%) expressed the belief that middle and high schools should not have vending machines. In 2004, 58 percent of parents expressed such beliefs.

A strong majority of parents (95%) believed that vending contents should be modified to offer at least some healthier options or only healthy snacks and beverages (compared with 94% in the previous year).

**Opinions of adolescents** Similarly, adolescents expressed a strong consensus on vending machines and their contents, which did not change.

The majority (82% in 2005, compared to 80% in 2004) continued to believe that vending machines should at least offer healthy options in addition to less healthy options so that students can decide for themselves.

Overall, the majority (63%) preferred that a variety of healthy and less healthy snacks and drinks be offered on campuses (compared with 60% in 2004). In 2005, another 18 percent wanted to see only healthy options in the machines (compared with 20% in 2004).



*Overall, the majority of adolescents (63%) preferred that a variety of healthy and less healthy snacks and drinks be offered on campuses.*

**Opinions of school personnel** In 2005 interviews with principals, superintendents, school nurses, and Nutrition and Physical Activity Advisory Committee members, most reported their personal support for changes to healthier food and vending policies in the schools, yet expressed doubt that such changes would be supported by others.

Many school nurses and principals viewed changing to healthier options as a positive move, a good thing to do for their school and their students.

Several Nutrition and Physical Activity Advisory Committee members, superintendents, and principals expressed continuing concern about loss of vending

revenue. However, one superintendent and a principal volunteered their experiences to suggest that vending income is not affected by a switch to healthier options, and other superintendents and other school personnel expressed the belief that students would purchase healthy options. All school nurses and some superintendents and principals expressed frustration about the focus on changing food inside the school when “outside” the school is the problem with ‘bad’ foods.”

Many, including principals, believed that a better focus would be to make cafeteria lunches healthier. However, they reported that cafeteria staff were very resistant to changes, and many, particularly the school nurses, observed that people generally resist change of any sort.

*Many school personnel see a need to focus on meals served in school cafeterias.*



## How Are School Environments and Policies Changing?

Because of the initiatives fostered by Act 1220, we expect that, over time, schools will change their environments and policies. Subsequently, we expect to see changes in the knowledge, attitudes and beliefs of parents and students regarding weight and health, as well as changes in eating and physical activity patterns in families and individuals.

After only one year of implementation, however, it is likely too soon to see substantial changes in these areas. To the extent that some schools, families, and students are making early changes, we want to report those changes, as seen through the lens of our evaluation.

### Nutrition Policies and Practices Are Modified

The survey of principals and superintendents completed in the spring of 2005 has indicated that schools and districts are beginning to make policy changes that support healthy school environments.

As summarized in Table 1, in the spring of 2005, 41 percent of schools reported policy changes.

Those schools most frequently reported changes to cafeteria offerings (21%), restrictions on the sale of specific foods (17%), and changes to vending machine contents (16%).

Key informant interviews with public school superintendents, principals, school nurses, and members of local nutrition and physical activity committees in 2005 provided some additional insight into changes made to vending and cafeteria foods and beverages in the 2004-2005 school year.

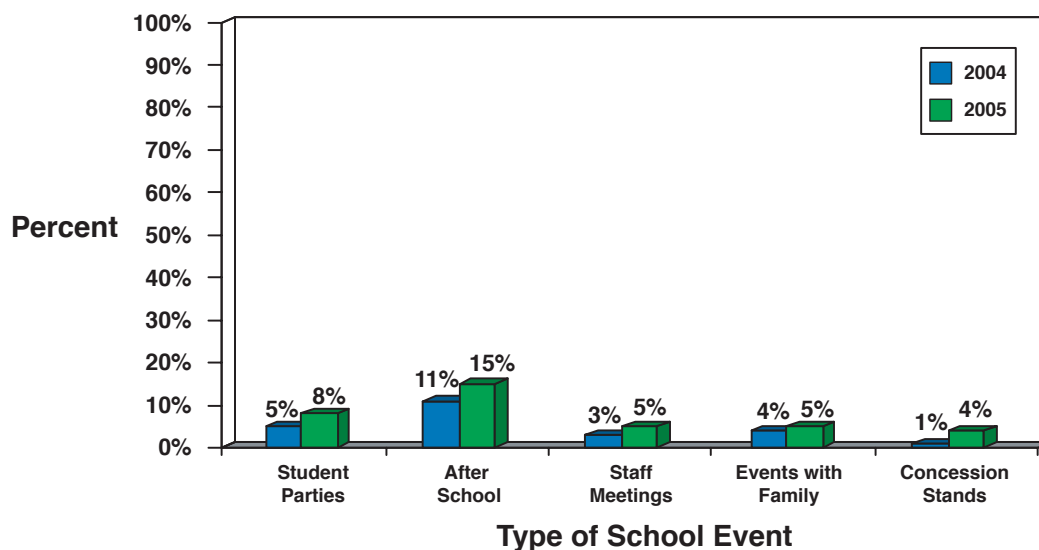
Personnel in middle and high schools reported having established limitations on vending machines and *a la carte* items, either by location or times of access. In fact, findings from the 2005 survey of principals indicate that there were significantly fewer machines in cafeterias, gyms and other locations than were reported in the 2004 survey.

In addition, over the past year significant increases were noted in the percentage of schools reporting policies that support the availability of healthy choices at events as seen in Figure 1, particularly in the availability of healthy food options at after-school events.

Although some schools reported limiting time of access to vending machines, this change was not significant between the two survey years.

Most notably, the percentage of schools now prohibiting the use of foods as a reward to students has significantly increased from 7 percent in 2004 to 15 percent in 2005.

**Figure 1. Schools that Reported Policies Requiring Healthy Food Options at Events**



*Nutrition and Physical Activity Advisory Committee members also reported having made progress in improving school lunches by, for example, removing the deep fryer, adding fruit, and removing cookies from the lunchroom.*



Most of the principals, superintendents, and local committee members who were interviewed said that schools had either changed available foods and beverages to healthy options or had added healthier options. Empirical data from 2004 and 2005 surveys support these assertions.

In 2005, principals reported that students were served significantly more fruits, vegetables, and low-fat snacks and milk than in 2004 (see Table 1).

Further, when interviewed, principals stated that their schools sold more low-fat and healthy foods in 2005 than in the previous school year.

Nutrition and Physical Activity Advisory Committee members also reported having made progress in improving school lunches by, for example, removing the deep fryer, adding fruit, and removing cookies from the lunchroom.

**Table 1. Percentage of schools reporting healthy foods available in vending and *a la carte***

Vending and <i>a la carte</i> content	2004	2005
Fruit & vegetable snacks in vending machines	6%	9%
Low-fat cookies in vending machines	8%	13%
Low-fat baked chips, pretzels, etc. in vending machines	17%	28%
Skim or 1% milk in vending machines	15%	23%
Bottled water in vending machines	48%	53%
Low-fat white milk at snack bar/cafeteria	92%	94%
Low-fat chocolate milk at snack bar/cafeteria	69%	76%
Skim white milk at snack bar/cafeteria	26%	32%
Skim chocolate milk at snack bar/cafeteria	9%	13%

*The percentage of schools now prohibiting the use of foods as a reward to students has increased significantly from 7 percent in 2004 to 15 percent in 2005.*

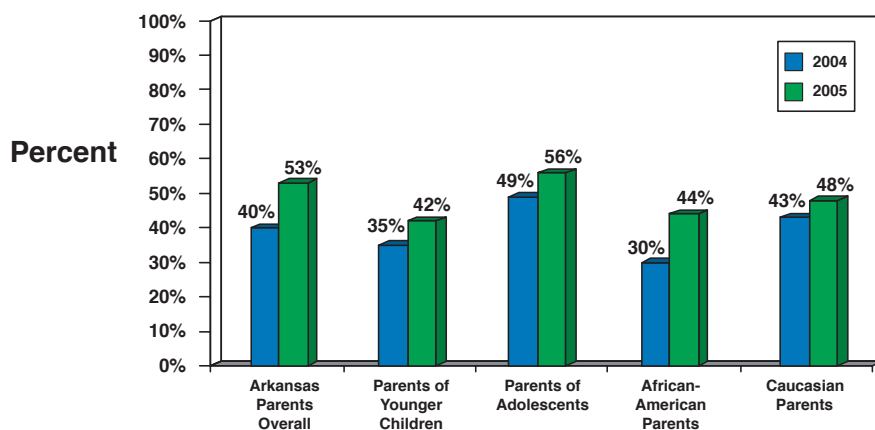
### How Are Families Changing?

#### Parents Increase Awareness of Health Problems Associated With Childhood Weight Status

Parental awareness of health problems that could affect overweight children has changed. In the 2004 survey, parents were most likely to name diabetes (60%) and cardiovascular conditions (high blood pressure, 15%, high cholesterol, 17%, and heart disease, 4%) than any other health problem. In 2005, parents were still most likely to mention diabetes (59%), but a significant percentage named asthma or other respiratory problems (21%) as health problems most likely to affect overweight children.

Other aspects of parental knowledge, attitudes and beliefs remain unchanged. That is, both the 2004 and 2005 surveys indicated a minimum of 75 percent of parents were aware of the potential for health problems and long-term weight issues for overweight children.

**Figure 2. Parents Accurately Identifying their Child as Overweight or at Risk of Overweight**



#### Parents Improve Their Ability to Recognize Childhood Overweight

The baseline survey in 2004 indicated that 60 percent of Arkansas parents whose child was overweight or at risk of overweight were not aware of their child's weight risk status and misclassified their child's weight as healthy or even underweight. Parents of younger children were more likely than parents of adolescents to misclassify the weight status of their overweight or at risk of overweight child. The 2005 survey, which took place after the first year of BMI screening and confidential reports to parents, demonstrated that parents significantly improved the accuracy of their assessment of their child's weight risk status compared with the previous year.

As seen in Figure 2, 53 percent of parents accurately classified their overweight or at risk of overweight child after screening was initiated. This improvement in accuracy of parental identification was apparent across the board. Parents of younger children significantly increased their accurate identification of overweight from 35 percent before

the screening to 42 percent after, and parents of adolescents significantly increased accuracy from 49 percent to 56 percent.

Correct identification of overweight children among African-American parents significantly improved from 30 percent to 44 percent following screening and from 43 percent to 48 percent among Caucasian parents.

Thus, parental awareness of overweight or risk of overweight in their children was significantly and substantially improved after the BMI screening and letter to parents about their child's weight status.

Parents who recognize that their child is overweight may be more likely to institute or support appropriate health promotion efforts to prevent further weight gain and reduce health risks associated with overweight in children.

## Year Two Evaluation of Arkansas Act 1220

### Parents Change Family Eating Patterns But Not Physical Activity

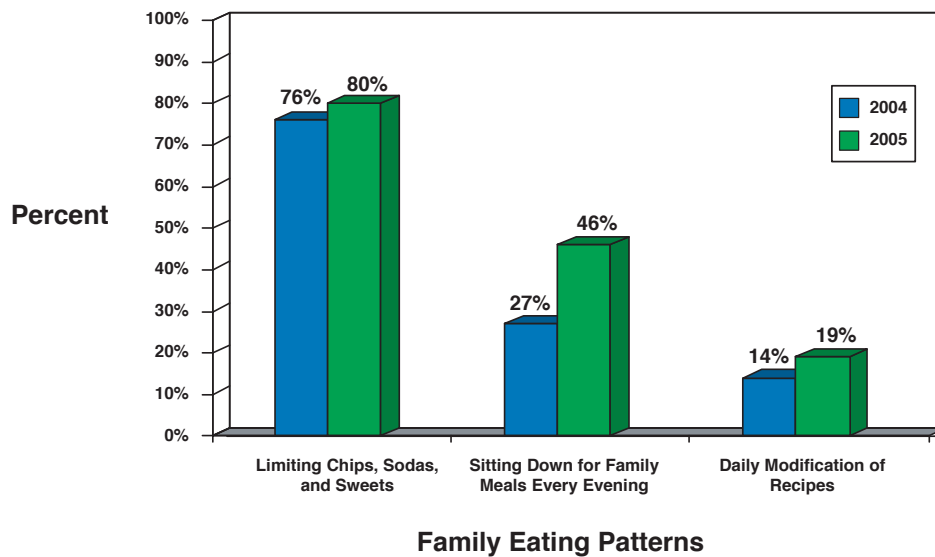
Parents reported no significant changes in family physical activity. However, as summarized in Figure 3, findings from the 2005 survey suggest some changes in eating patterns.

For example:

- There was an increase in the percentage of families trying to limit the amount of chips, soda, or sweets eaten by family members;
- There was a substantial increase in the proportion of families reporting that the family sits down together for a meal every evening; and
- There was an increase in the percentage of families reporting daily modification of recipes to make foods healthier.

*The 2005 survey showed some changes in family eating patterns, but not in family physical activity.*

**Figure 3. Changes in Family Eating Patterns**



### Adolescents Report Changes in Vending Machine Purchase Habits

Adolescents did not report any changes in either eating or physical activity patterns. However, they did report changes in their frequency of purchases from vending machines.

The proportion of adolescents who said they never purchased from beverage machines at school rose from 22 percent at baseline to 29 percent in 2005.

*The proportion of adolescents who reported daily purchasing from beverage machines dropped from 18% in 2004 to 11% in 2005.*

Similarly, the proportion of adolescents who reported daily purchasing from beverage machines dropped from 18 percent to 11 percent.

A similar pattern was seen in reported frequency of purchase from snack machines, but the differences were not as large and, therefore, were not statistically different.

## Have There Been Negative Outcomes of the BMI Measurement?

Although BMI measurement is only one component of Act 1220, it was the major component to be implemented during the first year while the Child Health Advisory Committee was meeting and formulating recommendations and while the Nutrition and Physical Activity Advisory Committees were being formed. It is also the component that has raised concerns about potential negative consequences. Monitoring those potential consequences is a key aspect of our evaluation. Information to date is summarized in Figures 4 and 5.

### Teasing Did Not Increase

Parents and adolescents did not report an increase in teasing because of the student's weight after implementation of BMI measurements compared with before the policy began. In fact, the proportion of parents who reported that their child had been teased due to his/her weight dropped from 14 percent before measurement to 13 percent afterwards.

Similarly, when adolescents were asked to report if they had been teased about their weight, the proportion that reported being teased fell from 12 percent to 9 percent.

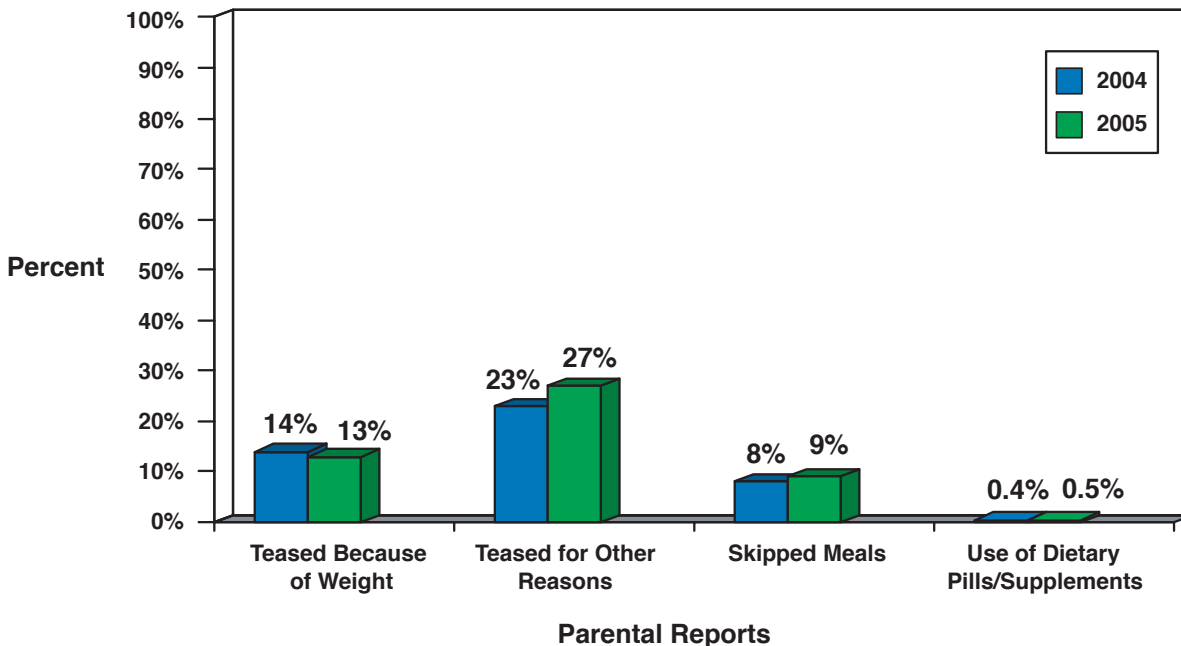
Among the group of children thought to be most vulnerable to teasing – the overweight – there was no increase in teasing because of weight after the BMI measurement.

In general, across both years, weight-based teasing was more common among overweight and at risk of overweight children, girls, whites, those teased for reasons other than weight and those attending large schools.

However, both parents and adolescents reported that being teased because of weight was actually less common than being teased for reasons other than weight.

Specifically across both years, about 1 in 5 parents and about 1 in 4 adolescents reported the occurrence of teasing due to reasons other than weight.

Figure 4. Percentage of Parents Reporting Potential Negative Consequences





## Year Two Evaluation of Arkansas Act 1220

### Unhealthy Skipping of Meals and/or Snacks Did Not Increase

Skipping of meals and snacks among children and adolescents did not increase with BMI measurement. In 2005, relatively few parents (less than 10%) reported having their child skip meals or snacks, although a large proportion of adolescents reported skipping meals (44%) and snacks (55%).

However, the majority (90%) of those who reported skipping meals and/or snacks reported reasons unrelated to weight. The most common reasons adolescents reported for skipping meals and/or snacks were “not having enough time to eat” and “not feeling hungry”.

While skipping meals was more common among girls, the overweight, and those at risk of overweight, skipping snacks was not specific to any one group of adolescents in particular.

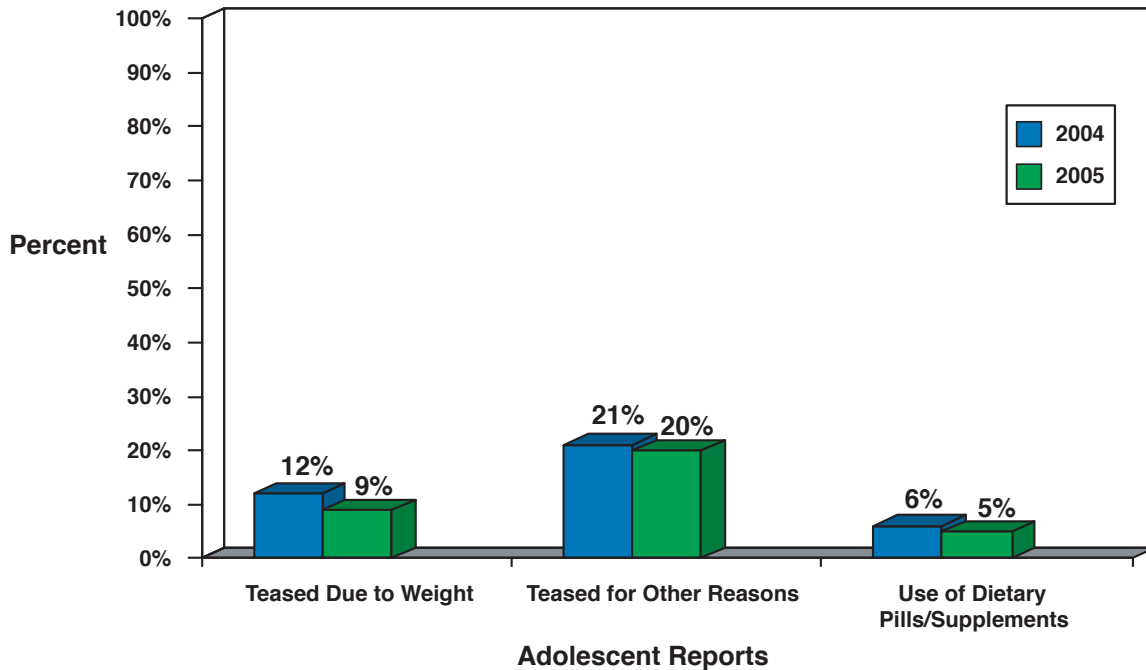
### Use of Diet Pills Did Not Increase

The use of diet pills and/or herbal supplements did not increase following BMI measurement. Less than 1 percent of parents both before and after BMI measurement reported that their child used diet pills and/or herbal supplements.

Similarly, when adolescents were asked to report if they had taken diet pills or herbal supplements in the past six months, 6 percent reported using them in the year before screening and 5 percent reported use one year later.

Those most likely to use diet pills and supplements were adolescents at a healthy weight. In fact, adolescents who were a healthy weight were twice as likely to use diet pills and/or herbal supplements as adolescents who were overweight.

**Figure 5. Percentage of Adolescents Reporting Potential Negative Consequences**



### Have Parents Sought Information from Health Care Professionals?

#### Physicians and BMI Letters

Physicians who responded to our survey commonly said that “patients were more aware and asked more questions” about body mass index and childhood weight issues.



Most physicians (57%) surveyed stated that they had *at least one* parent bring in a child’s BMI letter for discussion, and some (3%) had more than 40 letters brought in for a consultation. A significantly larger proportion of the doctors whose practices are more than 60 percent pediatrics reported children’s BMI letters being brought in for a consultation (73% vs. 50%).

These reports are in contrast to information provided by school nurses, who reported in interviews that few parents had requested help in improving their child’s weight status, so it appears that school nurses are not being consulted and are not aware of actions being taken by parents.

### CONCLUSION: What Are the Next Steps?

During the second year of the implementation of Act 1220, BMI was measured and reported to parents for the second time. In addition, the recommendations of the CHAC and efforts by local Nutrition and Physical Activity Advisory Committees resulted in some preliminary policy changes.

Despite continuing concerns from school personnel about the acceptance of BMI measurement and potential negative consequences, acceptance from parents and their children seems high, and no evidence of adverse consequences of BMI measurement could be found.

In addition, school administrators and other personnel involved in the implementation of Act 1220 appear to be supportive of the Act and its goal of reducing childhood obesity.

Physicians also appear to be supportive of the Act, and at least a modest number of parents do seem to be following advice given in the BMI report by consulting their children’s physicians.

Thus, the acceptance and support of Act 1220 seems generally high at the end of its second year of implementation.

Nonetheless, as additional policy recommendations are implemented and the Nutrition and Physical Activity Advisory Committees become more active, the impact on acceptance and support of the Act and, ultimately, changes in children’s physical activity, nutrition, and weight will need to be closely monitored to determine the overall benefit of Act 1220. A year three report will be forthcoming.



### APPENDIX I

#### Methods

The University of Arkansas for Medical Sciences' *Fay W. Boozman College of Public Health (COPH)* secured funding in February 2004 from the Robert Wood Johnson Foundation to support efforts to evaluate the implementation of Act 1220 of 2003. An initial one-year award was followed by a two-year renewal, effective February 2005. The initial year of evaluation was considered a baseline year and culminated in the publication of a summary report covering the initial year. The current report is the summary emerging from the second year of evaluation.

With Robert Wood Johnson Foundation funding, a team of COPH investigators, led by Drs. Jim Raczynski and Martha Phillips, developed the evaluation plan of the implementation of the Act and the effects it may have on school environments, knowledge concerning weight control, and family nutrition and physical activity behavior patterns experienced by Arkansas students. The weight status of Arkansas students also will be monitored using the annual BMI assessments mandated by Act 1220 led by the Arkansas Center for Health Improvement.

The evaluation is designed to assess the impact of the full range of Act 1220 components. Annual evaluation activities will provide snapshots of policies and procedures and also allow determination of changes over time. The evaluation is based on a conceptual model which proposes that existing environments will be changed by the implementation of state and local policies, which will in turn change the knowledge, attitudes, beliefs, and behaviors of families and students. Those behavior changes should ultimately affect the weight status (as measured by the BMI) of Arkansas students, although we do not expect to see significant changes in weight status in the three years of the evaluation.

The information presented in this report has been gathered over the past year (2005) through a series of activities, including:

- Key informant interviews were completed with a total of 80 individuals who were either involved in or represented groups involved in the second year of the implementation of Act 1220 of 2003. These individuals were identified as a result of a review of public records, as well as referrals from other people who were interviewed and information gathered from the first year of evaluation. Interview participants were randomly selected from five geographical regions across the state of Arkansas: central, north, northwest, south, and southwest. Those selected were representatives of the following groups: the state Child Health Advisory Committee, Community Health Nurses, Community Health Promotion Specialists, district Nutrition and Physical Activity Advisory Committees, and school principals, superintendents, and nurses. Details concerning these interviews included:

Interviews were completed by telephone, audio-taped for accuracy, and transcribed to protect informant confidentiality. Discussions were focused by semi-structured interview guides.

Interviews were conducted with 25 principals and 13 superintendents. Each of these school leaders was randomly selected using a stratified selection procedure that ensured representation from each of the geographic regions of the state, as well as from each school level (primary, middle, and high school). Telephone interviews were completed using the same methods explained above. Interviews of principals and superintendents focused particularly on their experiences with and reactions to key components of the Act (e.g., vending machine changes and BMI measurements) and how implementation progressed in the second year of Act 1220.

### APPENDIX I

#### Methods (Continued)

- Surveys were mailed to all principals (1,106 total) and school district superintendents (259 total) in the state, accompanied by a stamped, self-addressed envelope for use in returning the survey to the evaluation team. Those who failed to respond were sent a second survey and return envelope. Those who failed to respond to the second request received a third survey mailing. Of those who failed to return any one of the three mailed surveys, a group of 50 principals and superintendents were randomly selected and were faxed the survey. A total of 877 principals and 194 superintendents returned surveys. The return rate was 79% for principals and 75% for superintendents. All conclusions regarding changes were based on adjusted multivariate models.
- Physician surveys were mailed to all 1,300 licensed Arkansas pediatricians and family practitioners, accompanied by a stamped and addressed return envelope. Physicians were asked questions concerning their views of Act 1220. A total of 490 surveys were returned for a return rate of 38%. Although the return rate of practicing physicians may have been higher, at least some of the 1,300 licensed physicians are probably not practicing.
- Telephone interviews were conducted with families whose children attended Arkansas public schools at the time of the interviews. A total of 496 schools were selected, using a multi-stage stratified random selection procedure that ensured the inclusion of schools located in all areas of the state, of various enrollment sizes, and serving students at all grade levels.\*\* Households within the attendance zones for those schools were contacted by phone. A parent was interviewed if he/she had a child attending the selected school and agreed to complete the interview. If the student in the household was age 14 or older, and if both the parent and adolescent consented, the adolescent was interviewed as well. In all, a total of 2,508 parents and 481 adolescents were interviewed in this manner. Data from these parents and adolescents were weighted so that the results presented in this report can be considered representative of the state overall. All conclusions regarding changes were based on adjusted multivariate models.
- A validation study of self-reported vending machine data involved site visits to 52 schools. Informal interviews with principals and observations of vending machine locations and contents were conducted to assess the concordance between self-report interview data and observational data, between self-report interview and survey data, and, if possible, between self-report survey data and observational data.

\*\*Bursac Z, Phillips M, Gauss CH, Pulley L, West D, Raczynski J. (2006). **Arkansas Act 1220 Evaluation: Multi-stage Stratified Surveys with PPS Sampling**. *2005 Proceedings of the American Statistical Association, Section on Health Policy Statistics [CD-ROM]*, Alexandria, VA: American Statistical Association; in press.

### APPENDIX II

#### References

##### Arkansas Links

Arkansas Government Act 1220 of 2003 [www.arkleg.state.ar.us/ftp/root/acts/2003/public/act1220.pdf](http://www.arkleg.state.ar.us/ftp/root/acts/2003/public/act1220.pdf)

Arkansas Child Health Advisory Committee  
[www.healthylarkansas.com/advisory\\_committee/advisory.html](http://www.healthylarkansas.com/advisory_committee/advisory.html)

Arkansas Department of Education <http://arkedu.state.ar.us/>

Arkansas State Board of Education [http://arkedu.state.ar.us/state\\_board/board\\_edu.html](http://arkedu.state.ar.us/state_board/board_edu.html)

Healthy Arkansas Initiative <http://www.arkansas.gov/ha/>

Fay W. Boozman College of Public Health, University of Arkansas for Medical Sciences  
[www.uams.edu/coph/](http://www.uams.edu/coph/)

Arkansas Center for Health Improvement [www.achi.net](http://www.achi.net)

Arkansas Physician's Guide to Weight Management in Children and Adolescents  
[http://www.achi.net/BMI\\_Info/Docs/Clinician\\_Guide\\_to\\_Weight\\_Problems.pdf](http://www.achi.net/BMI_Info/Docs/Clinician_Guide_to_Weight_Problems.pdf)

Management of Pediatric Overweight [http://www.afmc.org/HTML/professional/cme\\_ce/CoursesLive](http://www.afmc.org/HTML/professional/cme_ce/CoursesLive)

##### National Links

Robert Wood Johnson Foundation Child Obesity Research  
<http://www.rwjf.org/research/researchlist.jsp?ia=138>

American Obesity Association [www.obesity.org](http://www.obesity.org)

The Weight-Control Information Network, National Institutes of Health (NIH)  
[www.niddk.nih.gov/health/nutrit/win.htm](http://www.niddk.nih.gov/health/nutrit/win.htm)

School Health Index [www.cdc.gov/HealthyYouth/SHI/](http://www.cdc.gov/HealthyYouth/SHI/)

CDC School Health Policies and Program Study [www.cdc.gov/nccdphp/dash/shpps/](http://www.cdc.gov/nccdphp/dash/shpps/)

American Dietary Guidelines [www.nal.usda.gov/fnic/dga](http://www.nal.usda.gov/fnic/dga)

National Association of State Boards of Education, School Health Policies  
[http://www.nasbe.org/HealthySchools/States/State\\_Policy.asp](http://www.nasbe.org/HealthySchools/States/State_Policy.asp)

Center for Science in the Public Interest <http://www.cspinet.org>

National Heart, Blood, and Lung Institute <http://www.nhlbi.nih.gov/index.htm>

American Diabetes Association <http://www.diabetes.org/home.jsp>

American Dietetic Association <http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/index.html>



## APPENDIX III

### Arkansas Department of Education Rules Governing Nutrition and Physical Activity Standards in Arkansas Public Schools Approved on 08/08/2005 by Arkansas State Board of Education\*

#### 1.0 PURPOSE

1.01 The purpose of these rules is to establish the requirements and procedures for governing nutrition and physical activity standards in Arkansas Public Schools.

#### 2.0 REGULATORY AUTHORITY

2.01 These shall be known as the Arkansas Department of Education Rules Governing Nutrition and Physical Activity Standards in Arkansas Public Schools.

2.02 These regulations are enacted pursuant to the authority of the State Board of Education under Ark. Code Ann. 20-7-133, 20-7-134, and 20-7-135.

#### 3.0 DEFINITIONS. \*

#### 4.0 SCHOOL NUTRITION AND PHYSICAL ACTIVITY ADVISORY COMMITTEE

4.01 The committee will assist in the development of local policies that address issues and goals, including, but not limited to the following:

- 4.01.1 Assist with the implementation of nutrition and physical activity standards developed by the committee with the approval of the Arkansas Department of Education and the State Board of Health;
- 4.01.2 Integrate nutrition and physical activity in the overall curriculum;
- 4.01.3 Ensure that professional development for staff includes nutrition and physical activity issues;
- 4.01.4 Ensure that students receive nutrition education and engage in healthy levels of vigorous physical activity;
- 4.01.5 Improve the quality of physical education curricula and increasing training of physical education teachers;
- 4.01.6 Enforce existing physical education requirements; and
- 4.01.7 Pursue vending contracts that both encourage healthy eating by students and reduce school dependence on profits from the sale of foods of minimal nutritional value.

4.02 The School Nutrition and Physical Activity Advisory Committee shall be structured in a way as to ensure age-appropriate recommendations that are correlated to the current grade configuration of the school district utilizing one of the following options:

- 4.02.1 Establish a School Nutrition and Physical Activity Advisory Committee at each school in addition to the district committee;
- 4.02.2 Establish subcommittees of the District Committee, representing the appropriate age and grade configuration for that school district; and
- 4.02.3 Include representatives from each appropriate grade level group (elementary, middle, junior and senior high) on the membership of the district committee.

\*This version of the Final Rules Governing Nutrition and Physical Activity Standards does not contain section 3.0 Definitions. The complete version of the rules can be seen at <http://cnn.k12.ar.us/Topics%20of%20Interest/Program%20Operations/Directors%20Memos/2006%20Memos/FIN-06-012.htm>.

### APPENDIX III

- 4.03 Beginning with the 2005 school year, at a minimum, the School Nutrition and Physical Activity Advisory Committee will:
- 4.03.1 Annually, assess each school campus, using the School Health Index for Physical Activity, Healthy Eating and a Tobacco-Free Lifestyle using the following modules:
    - #1 - School Health Policies and Environment,
    - #2 - Health Education,
    - #3 - Physical Education and other Physical Activity Programs,
    - #4 - Nutrition Services, and
    - #8 - Family and Community Involvement Assessment;
  - 4.03.2 Compare the physical education and health education assessment from the *School Health Index* to the standards defined by the Arkansas Department of Education Physical Education and Health Curriculum Framework;
  - 4.03.3 Compile the results of the *School Health Index* and provide a copy to the school principal to be included in the individual school improvement plan (ACSIP);
  - 4.03.4 Provide the annual completed *School Health Index* assessment results and the physical activity standards comparison to the school principal to be included in the school improvement plan (ACSIP) and to the local school board;
  - 4.03.5 Assist the schools in implementing the Arkansas Child Health Advisory Committee recommendations for all foods and beverages sold or served anywhere on the school campus, including all foods and beverages other than those offered as part of reimbursable meals, including a la carte, vending machines, snack bars, fund raisers, school stores, class parties, and other venues that compete with healthy school meals;
  - 4.03.6 Maintain and update annually a written list of recommended locally available, healthier options for food and beverages available for sale to students;
  - 4.03.7 Encourage the use of non-food alternatives for fund-raisers;
  - 4.03.8 Review and make written recommendations to the local school board regarding the components to be included in food and beverage vending contracts; and
  - 4.03.9 Report as part of the annual report to parents and the community the amount of funds received and expenditures made from competitive food and beverage contracts.
- 4.04 The Local Wellness Policy is required under the current version of the Richard B. Russell National School Lunch Act (42 U.S.C.1751 et seq.) or the Child Nutrition Act of 1966 (42 U.S.C. 1771 et seq.).
- 4.04.1 Not later than the first day of the school year beginning after June 30, 2006, each local educational agency participating in a program authorized by the Richard B. Russell National School Lunch Act (42 U.S.C. 1751 et seq.) or the Child Nutrition Act of 1966 (42 U.S.C. 1771 et seq.) shall establish a local school wellness policy for schools under the local educational agency that
    - 4.04.1.1 Includes goals for nutrition education, physical activity, and other school-based activities that are designed to promote student wellness in a manner that the local educational agency determines is appropriate;
    - 4.04.1.2 Includes nutrition guidelines selected by the local educational agency for all foods available on each school campus under the local educational agency during the school day with the objectives of promoting student health and reducing childhood obesity;
    - 4.04.1.3 Provides an assurance that guidelines for reimbursable school meals shall not be less restrictive than regulations and guidance issues by the Secretary of Agriculture pursuant to subsections (a) and (b) of Section 10 of the Child Nutrition Act (42 U.S.C. 1779) and Sections 9(f)(1) and 17 (a) of the Richard B. Russell National School Lunch Act (42 U.S.C. 1758(f)(1), 1766(a)), as those regulations and guidance apply to public schools;
    - 4.04.1.4 Establishes a plan for measuring implementation of the local wellness policy, including designation of 1 or more persons within the local educational agency or at each school, as appropriate, charged with the operational responsibility for ensuring that the school meets the local wellness policy; and
    - 4.04.1.5 Involves parents, students, representatives of the school food authority, the school board, school administrators, and the public in the development of the school wellness policy.

### APPENDIX III

#### 5.0 GENERAL REQUIREMENTS FOR FOOD AND BEVERAGES IN PUBLIC SCHOOLS

##### 5.01 Access to Foods and Beverages in Public Schools

5.01.1 Elementary students will not have access to vended food and beverages anytime, anywhere on school premises during the declared school day.

5.01.2 Effective July 1, 2005, during the declared school day, an elementary school site may not serve, provide access to, through direct or indirect sales, or use as a reward, any Food of Minimal Nutritional Value (FMNV) or competitive food. This includes FMNV and competitive foods given, sold, or provided by school administrators, or staff (principals, coaches, teachers, club sponsors, etc.) students or student groups, parents or parent groups, or any other person, company or organization associated with the school site. Exceptions to this requirement are listed in 5.02.

5.01.3 In elementary schools, the Child Nutrition Program may only sell food items in the cafeteria, during meal periods that are already offered as a component of a reimbursable meal during the school year, including extra milk, fresh fruits, vegetables, and/or an extra meal meeting the same requirements of the reimbursable meal. School food service departments shall not sell or give extra servings of desserts, french fries, and/or ice cream.

5.01.4 Effective July 1, 2005, during the declared school day, at middle, junior high, and high school sites, schools shall not serve, provide access to, through direct or indirect sales, or use as a reward, any FMNV or competitive food to students anywhere on school premises until 30 minutes after the last lunch period has ended. This includes FMNV and competitive foods given, sold, or provided by school administrators, or staff (principals, coaches, teachers, club sponsors, etc.), students or student groups, parents or parent groups, or any other person, company, or organization associated with the school site.

5.01.5 In middle, junior high, and high schools, the Child Nutrition Program may only sell food items in the cafeteria, during meal periods that are already offered as a component of a reimbursable meal during the school year, including extra milk, fresh fruits, vegetables, unsweetened unflavored water, other food/beverage items that meet standards of maximum portion size and/or an extra meal meeting the same requirements of the reimbursable meal.

##### 5.02 Exceptions to Limiting Access to Foods and Beverages in All Schools

5.02.1 Parents Rights - This policy does not restrict what parents may provide for their own child's lunch or snacks. Parents may provide FMNV or candy items for their own child's consumption, but they may not provide restricted items to other children at school.

5.02.2 School Nurses - This policy does not apply to school nurses using FMNVs or candy during the course of providing health care to individual students.

Special Needs Students - This policy does not apply to special needs students whose Individualized Education Program (IEP) plan indicates the use of an FMNV or candy for behavior modification (or other suitable need).

School Events - Students may be given any food and/or beverage items during the school day for up to nine different events each school year to be determined and approved by school officials. These items may not be given during meal times in the areas where school meals are being served or consumed.

Snacks During the Declared School Day - Snacks may be provided or distributed by the school as part of the planned instructional program, for example, afternoon snack for kindergarten students who eat early lunch. Snacks shall meet the United States Department of Agriculture Child and Adult Care Snack Patterns.

Foods for Instructional Purposes - Foods integrated as a vital part of the instructional program are allowed at any time. Examples include edible manipulatives such as a square of cheese to teach fractions, a nutrition food experience, food production in family and consumer science units, and food science units.

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- 5.03 New or renewed vending contracts for carbonated and sweetened non-carbonated beverages will be restricted to no more than 12 ounces per vended container.  
This requirement does not apply to contracts with an effective date on or before August 8, 2005.

#### 6.0 NUTRITION STANDARDS FOR FOODS AND BEVERAGES

- 6.01 As of July 1, 2005, the Arkansas Child Health Advisory Committee nutrition standards will apply to all foods and beverages served, sold, or made available to students on elementary, middle, junior high, and high school campuses (except the reimbursable school meals, which are governed by United States Department of Agriculture (USDA) federal regulations).
- 6.02 A list of the maximum portion size restrictions and nutrition standards will be provided to school districts. This list, effective July 1, 2005, will apply to all foods and beverages served, sold, or made available to students during the declared school day at any school site with the exception of reimbursable school meals which have nutrition standards governed by the United States Department of Agriculture (USDA) federal law and regulations.
- 6.02.1 Prior to each school year, on or before April 1, the updated list of maximum portion sizes and nutrition standards for foods and beverages will be developed by the Arkansas Child Health Advisory Committee and distributed by the Arkansas Department of Education (ADE) via the Arkansas Department of Education Director's Memo Communication.
- 6.02.2 Compliance will be monitored by the Arkansas Department of Education in addition to the self-monitoring by the Local School Nutrition and Physical Activity Advisory Committee.
- 6.02.3 All FMNV or competitive food beverages sold to students will be restricted to no more than 12 ounces per vended container. The only exception for a larger portion size will be unsweetened unflavored water.
- 6.02.4 A choice of two (2) fruits and/or 100% fruit juices must be offered for sale at the same time and place whenever competitive foods are sold. Fruits should be fresh whenever possible. Frozen and canned fruits should be packed in natural juice, water, or light syrup.
- 6.02.5 At the point of choice, at least 50% of beverages - selections in vending machines, school stores, and other sales venues shall be 100% fruit juice, low-fat or fat-free milk, and unflavored unsweetened water.
- 6.02.6 At middle school and high school levels, local leaders are encouraged to implement vending policies that encourage healthy eating by students.
- 6.02.7 Beginning August 8, 2005, any modification or revisions of vending contracts in existence prior to August 8, 2005 must be in full compliance with all sections of the Rules Governing Nutrition and Physical Activity Standards in Arkansas Public Schools as approved by the State Board of Education.
- 6.02.8 Nothing in these rules shall be construed to prohibit or limit the sale or distribution of any food or beverage item through fund raisers by students, teachers, or other groups when the items are sold off the school campus.

#### 7.0 NUTRITION EDUCATION

- 7.01 The Arkansas Department of Education shall promote grade- appropriate nutrition education as part of a broad based integrated health education program that is aligned with the Arkansas Physical Education and Health Education Framework. The Child Nutrition Unit of the Department of Education shall review nutrition standards prior to implementation. Examples of integration into the curriculum include comprehensive health education courses and Workforce Education courses which are taught within Family and Consumer Sciences, such as Nutrition and Wellness and/or Foods and Nutrition.

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7.02 The Arkansas Department of Education and the Department of Workforce Education will provide technical assistance in helping schools integrate health education curricula that will include the nutrition components.

7.03 Implementation of grade-appropriate nutrition education through a comprehensive education program will be included in the school improvement process.

#### 8.0 HEALTHY SCHOOL ENVIRONMENT

8.01 No food or beverage shall be used as rewards for academic, classroom, or sport performances and/or activities. For exceptions to this requirement, see section 5.02 of this rule.

8.02 All school cafeterias and dining areas should reflect healthy nutrition environments.

8.03 Schools should ensure that all students have access to school meals. Schools should not establish policies, class schedules, bus schedules, or other barriers that directly or indirectly restrict meal access.

8.04 Drinking water via water fountains or other service receptacle should be available without charge to all students on campus according to Arkansas Health Department standards.

#### 9.0 PHYSICAL EDUCATION AND PHYSICAL ACTIVITY STANDARDS

9.01 Public schools must establish strategies to achieve thirty (30) minutes of physical activity each day in grades K-12 and must have begun implementation of those strategies before the end of the 2005-2006 school year.

9.02 Beginning in the school year 2006-2007, physical education classes in grades kindergarten through six (K-6) will have a maximum student to adult ratio of 30:1. At least one of the adults supervising as referenced in this section must be a certified or qualified physical education teacher with the responsibility for instruction. Classified personnel may assist in fulfilling this requirement.

9.03 Beginning in the school year 2005-2006, at a minimum, school districts will work with the local School Nutrition and Physical Activity Advisory Committee to

9.03.1 Encourage participation in extracurricular programs that support physical activity, e.g., walk-to-school programs, biking clubs, after-school walking, etc.;

9.03.2 Encourage the implementation of developmentally-appropriate physical activity in after-school child care programs for participating children;

9.03.3 Promote the reduction of time youth spend engaged in sedentary activities such as watching television and playing video games;

9.03.4 Encourage the development of and participation in family-oriented community-based physical activity programs; and

9.03.5 Incorporate into the school ACSIP the strategies to be employed to achieve the activities required in Section 9.01.



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- 9.04 Beginning in the 2008-2009 school year, for grades K-6, the district will employ at least one certified and/or qualified physical education full-time equivalent (FTE) teacher for every 500 students. This certified and/or qualified physical education teacher will directly supervise physical education instruction.
- 9.05 Beginning in the 2007-2008 school year, the Arkansas Department of Education will devise and implement standards regarding the amount of instructional time to be devoted to various curriculum components, to ensure that
- 9.05.1 Elementary students in grades K-6 will receive at a minimum a total of 150 minutes per week of physical activity. The 150 minutes shall include 60 minutes of scheduled physical education. The additional physical activities may include additional scheduled physical education classes, physical activity during the regular school day through activities such as daily recess periods, walking programs, intramurals, and the integration of physical activity into the academic curriculum.
- 9.05.2 Students in grades 7-8 shall receive a minimum of 150 minutes of physical activity weekly. This requirement may be met through scheduled physical education classes and physical activity during the regular school day through activities such as walking programs.

**COPH Evaluation Research Team**

**James M. Raczynski, PhD  
Martha Phillips, PhD, MPH, MBA**

**Zoran Bursac, PhD, MPH  
Ronald Arlo Kahn, MD  
LeaVonne Pulley, PhD, CHES  
Delia West, PhD**

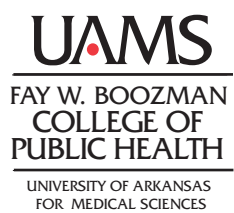
**Melany Birdsong  
Shannon Elliott  
Victoria Evans  
Heath Gauss  
Matilda Louvring  
Nadia Siddiqui  
Jada Walker**

*University of Arkansas  
for Medical Sciences*

**Fay W. Boozman**

**College  
of Public Health**

**4301 W. Markham  
UAMS Slot 820  
Little Rock AR 72205  
(501) 526-6700  
[www.uams.edu/coph](http://www.uams.edu/coph)**



University of Arkansas for Medical Sciences  
4301 W. Markham St., #820  
Little Rock, AR 72205-7199  
(501) 526-6700  
[www.UAMS.edu/COPH](http://www.UAMS.edu/COPH)