# An Examination of Local School Wellness Policies in Virginia

### Steven Michael Golliher

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## Master of Science

Human Nutrition, Foods and Exercise

Elena L. Serrano, Ph.D.; committee chair

Kathryn W. Hosig, Ph.D., M.P.H., R.D.

Kerry J. Redican, Ph.D., M.P.H., C.H.E.S.

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## Local Wellness Policies in Virginia

#### Steven M. Golliher

### **Abstract**

In response to the dramatic increase in the prevalence of childhood overweight, a provision of the Child Nutrition and WIC Reauthorization Act of 2004 required school divisions participating in the National School Lunch and Breakfast Programs to adopt local school wellness policies (LWP) by the fall of 2006. The local school wellness policies were to include guidelines for nutrition education, physical education (PE) and physical activity, and foods offered on campus. The purpose of this study was two-fold: 1) compare and contrast proposed goals versus adopted policies in Virginia; and 2) analyze the rigor of LWPs in Virginia. All LWPs in Virginia were reviewed with each item scored as required or recommended and specific or broad. Chi-square analyses were used to compare policies that were proposed and adopted. Eighty-one local wellness policies were matched to goals. In general, school divisions did not adopt as many policies as proposed. LWPs met only the minimum requirements mandated. Only 56 (69.1%) had policy language for more than one category in each of the three areas studied with nutrition education policies more popular than physical education/physical activity and nutrition guidelines. For example, 60 schools adopted policies to promote classroom nutrition education, whereas no LWPs contained policy language to improve PE teacherstudent ratio. Further, specificity proved to be a concern. The results suggest that while schools may be meeting the minimum requirements, the LWPs may not be promoting school health to the degree intended.

- Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and Trends in Overweight Among Children and Adolescents, 1999-2000. JAMA. 2002:288:1728-32.
- 2. US 108<sup>th</sup> Congress, Child Nutrition and WIC Reauthorization Act of 2004. S 2507. Available at: <a href="http://agriculture.senate.gov/Legislation/Compilations/FNS/CNWRA04.pdf">http://agriculture.senate.gov/Legislation/Compilations/FNS/CNWRA04.pdf</a>. Accessed December 19, 2007.

3. Serrano E, Kowaleska A, Hosig K, Fuller C, Fellin L, Wigand V. Status and Goals of Local Wellness Policies in Virginia: A Response to the Child Nutrition and WIC Reauthorization Act of 2004. Journal of Nutrition Education and Behavior. 2007;39(2):95-100.

#### **DEDICATION**

To my beloved wife and daughter, Jen and Chloe, whose love and support throughout this enduring time in our lives provided the strength and enthusiasm to complete my thesis and masters' degree. I sincerely appreciate your encouragement, understanding and patience during our college experience. One day in the distant future, we will look back at this and crash into a parked car.

Sickness is poor-spirited, and cannot serve anyone; it must husband its resources to live.

But health or fullness answers its own ends, and has to spare, runs over, and inundates the neighborhoods and creeks of other men's necessities. ~Ralph Waldo Emerson

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## **Chapter I: Introduction**

Childhood is a critical time to promote healthy lifestyles (1). Children in the United States spend a considerable amount of time in school and consume and expend a considerable proportion of energy at school (1). Schools provide an ideal avenue for reaching children. In Virginia, 1,246,822 youths attend public school (2). In children, about one third of their total energy (calorie) intake comes from foods and beverages consumed at school. As a result, it is essential for schools to promote a healthy environment.

In 2006, the University of Baltimore issued the "Childhood Obesity Report Card" (3). Virginia ranks 24<sup>th</sup> in the United States regarding childhood overweight legislation. The report card was based on analyses of childhood obesity legislation in the U.S. A letter grade (A-F) designation was given to each state based on their efforts in the following areas:

- nutrition standards—controlling the types of foods and beverages offered during school hours
- vending machine usage—prohibiting types of foods and beverages sold in school and prohibiting access to vending machines at certain times
- body mass index measured in school
- recess and physical education—state-mandated additional recess and physical education time
- obesity programs and education—programs established as part of curriculum
- obesity research—legislative support for other institutions or groups to study obesity
- obesity treatment in health insurance—expanding health insurance to cover obesity treatment where applicable
- obesity commissions—legislature-established commissions designed to study obesity

Based on these criteria, Virginia is one of fourteen states that earned a "C" grade based on legislative efforts, highlighting improvements that can be made to address this epidemic, particularly in schools. Twenty-eight other states were designated as either "A" or "B" while nine states earned either "D" or "F"(see Appendix A).

A number of education and health agencies have issued recommendations or guidelines for addressing childhood overweight including the American Dietetic Association, American Academy of Pediatrics, Centers for Disease Control and

Prevention, and National Association for Sport and Physical Education. For example, nutrition and overweight and physical activity and fitness are now central components of Healthy People 2010 (4), a set of health objectives or goals for preventive health for the nation. In fact, several of the specific objectives of Healthy People 2010 encompass school-based efforts. Related indicators include:

- reducing overweight or obesity in children and adolescents
- increasing vigorous physical activity to 20 minutes or more at least 3 days per week
- increasing physical education in schools
- requiring daily physical education and increase physical activity levels at school
- increasing physical activity to 30 minutes per day at least 5 days per week, and
- providing healthy meals and snacks at school.

In response to the dramatic increase in childhood obesity, the cyclical five-year reauthorization-and therefore reexamination- of child nutrition programs included numerous changes. In terms of school-based incentives, the Child Nutrition and WIC Reauthorization Act of 2004 (CNRA)(5)(Appendix B) mandated that each school division participating in the National School Lunch Program (NSLP) or National School Breakfast Program (NSBP) adopt a local school wellness policy. The idea was that legislation would ultimately help reduce childhood overweight and be driven by needs identified at the local level. While the legislation was considered a hallmark for health promotion, to date, few studies have reported on them, including evidence or effectiveness toward improving the health status of school-aged children (6).

The purpose of this study is two-fold: 1) examine the language and focus of local school wellness policies (LWPs) across the state of Virginia; and 2) compare and contrast earlier school divisions' proposed local school wellness policies to their adopted policies. These findings will provide insight to the trends in LWPs and the potential effectiveness of them in promoting a healthier school environment through improvements in nutrition and increasing physical activity. Also, results from this study will help identify additional methods or suggestions for improving the school health environment, or existing legislation at the school, state, and national levels.

## **Chapter II: Review of the Literature**

## **Childhood Overweight Epidemic Rationale**

The prevalence of childhood overweight has risen dramatically in the United States (7). In the last thirty years, rates have increased nearly three-fold in certain age groups. Body mass index (BMI) is often used as a tool to determine the weight status of an individual. BMI is calculated using the formula of weight (in pounds) X 703 divided by height (in inches) squared (8). For youth, BMI is determined based on growth chart percentiles with weight categories of underweight, healthy weight, at-risk for overweight and overweight. Youth with BMI-for-age and gender percentiles less than the fifth percentile are considered underweight, percentiles of  $\geq 5^{th}$  and  $< 85^{th}$  healthy weight,  $\geq 85^{th}$  and  $< 95^{th}$  at-risk for overweight, and  $\geq 95^{th}$  percentile overweight. According to data from the National Health and Nutrition Examination Survey (NHANES), the prevalence of overweight has increased dramatically from 1980 to 2004 (9). In children aged 6-11, prevalence increased from 6.5% to 18.8% and from 5.0% to 17.4 in adolescents aged 12-19. The following table shows the increase in overweight among children and adolescents.

Table 1: Childhood Overweight Prevalence in the U.S.

Age Group	NHANES I 1971-1974	NHANES II 1976-1980	NHANES III 1988-1994	NHANES 2003-2004
2-5 years	5%	5%	7.2%	13.9%
6-11 years	4%	6.5%	11.3%	18.8%
12-19 years	6.1%	5%	10.5%	17.4%

NHANES=National Health and Nutrition Examination Survey (7)

Overweight data is sex-and age-specific BMI  $\geq$  95th percentile based on CDC growth charts.

Healthy People 2010 has established overweight and obesity as leading health indicators and called for a reduction in the proportion of overweight and obesity in children and adolescents (4). Today's overweight children are at an increased risk for chronic diseases, including coronary heart disease, into adulthood than healthy weight children (10). Perhaps more troubling, overweight children are at a significantly greater likelihood of becoming obese adults (11, 12). Further, children who are overweight before the age of eight will likely be severely obese in adulthood. With more than 25

million children already overweight, the consequences of overweight and obesity in the future likely will have a profound effect on health care costs and a decline in the overall productivity as adults (12).

## **Consequences of Overweight and Obesity**

Childhood overweight can lead to serious health consequences for children and adolescents (13). Overweight and obesity has a detrimental effect on health-related diseases and conditions that affect millions of Americans. Heart disease and stroke, type 2 diabetes, certain forms of cancer, and premature death have been associated with poor nutrition and physical inactivity in adults (14). Considering the prevalence of childhood overweight, future incidence of these health-related diseases are expected to rise. Overweight children and adolescents are at risk for health problems as youth and adults. Immediate consequences of childhood overweight have surfaced in response to the increasing number of overweight children. Overweight children and adolescents are more likely to have high blood pressure, high cholesterol, and Type 2 diabetes, risk factors for cardiovascular disease, compared to children and adolescents with healthy weights. As many as sixty percent of overweight children and adolescents have one risk factor for cardiovascular disease (CVD), and while twenty-five percent experience two or more risk factors (14). The preventable (lifestyle-related) risk factors for CVD include hypertension, high cholesterol and abnormal glucose tolerance (15). Also, studies suggest that childhood overweight is associated with asthma, sleep apnea and type 2 diabetes (16-18). Additionally, overweight children and adolescents are considered highrisk for psychosocial problems including systematic social discrimination, low self esteem and can hinder academic and social functioning (19).

## Role of Public Schools to Address Diet and Physical Activity

More than 95% of American children aged 5 to 17 years-old are enrolled in school (1). In Virginia, 1,246,822 youth were enrolled in public schools at the beginning of the 2007-08 school year (2). For most youth, schools provide the most continuous and interactive contact than any other institution. Thus, schools play a major role in promoting healthy, physically active lifestyles through health and physical education and providing nutritious foods. A correlation between lower scores on standardized tests and

overweight in the school years have surfaced in recent years (19), underscoring the importance of nutrition and physical activity opportunities in schools. It remains unclear whether excess weight is the cause of poor academic performance or underlying issues such as socioeconomic status, ethnicity, and perhaps lack of parent-child engagement, or absenteeism (20). Regardless of the unclear association between being overweight and impaired academic performance, it is clear that nutrient deficiencies can interfere with cognitive function (21).

# School Food Environment and Influence on Eating Behavior

Foods and beverages sold in schools have been demonstrated to have a substantial influence on the eating behaviors of students (22). School-based policies should restrict foods and beverages consumed throughout the school day (22-24). Competitive foods, foods and beverages available outside of the National School Lunch Program (NSLP), have raised many concerns regarding their nutritional quality. A-la-carte foods, vending machines, school stores and foods and beverages sold for fundraising have been negatively associated with fruit and vegetable consumption, calcium and dietary fiber, however positively associated with calorie and saturated fat intake. Also, fried potatoes accounted for 38% of the total fruit and vegetable intake and 56% of vegetable servings. Students in schools without a-la-carte options and access to vending machines during breakfast and lunch consumed an additional serving of both fruits and vegetables, on average, per day.

According to the report, "Nutrition Standards for Food in Schools: Leading the Way Toward Healthier Youth," many policies include only minimal guidelines and fail to include guidelines set by the National Institute of Medicine recommendations on competitive foods (25). The report identified three primary school nutrition recommendations:

- federally reimbursable meals should be the main source of nutrition at school
- opportunities for competitive foods should be limited, and
- competitive foods should consist of fruits and vegetables, whole grains, and low-fat or non-fat dairy products aligned with the Dietary Guidelines of 2005.

Results of the 2006 School Health Policies and Programs Study (SHPPS) demonstrated a continued need for changes in the school food environment. While many

strides have been made recently in an effort to promote healthier available options, many schools continue to offer foods and beverages high in fat, sodium, and added sugars in vending machines and a-la-carte choices (26). The findings revealed 86% of high schools, 62% of middle schools and 21% of elementary schools have access to foods and beverages sold in vending machines. About three-fourths of schools sell sodas and sport drinks and foods that are high in both fat and sodium. More than one-fifth of schools allow students to purchase foods and beverages from vending machine during the lunch period. These findings are disconcerting given the evidence regarding the increased calorie intake and an increased consumption of less nutrient-dense foods available outside the school lunch program.

## **Nutrition Education in Schools**

Nutrition education plays a critical role in promoting healthy eating habits for a lifetime. At its core, nutrition education should be delivered as a planned and sequential framework to increase the knowledge and skills necessary for adopting healthy food behaviors (27). Nutrition education can be integrated into other curriculum to maximize instruction, since schools continue to increase the emphasis on core-area academic achievement (28).

Studies support multi-year, sequential nutrition education curriculum throughout the school years increases exposure to nutrition education, thus, maximizing limited instruction time (29). Further, healthy dietary behavior is positively associated with the amount of nutrition education received. Using culturally appropriate nutrition education curriculum emphasizing cognitive, affective, and behavioral teaching methods increases the likelihood of healthy dietary behaviors, however fewer than one-third of schools provide nutrition education curriculum that address these areas (30). Most effective school-based nutrition education includes multiple strategies to reinforce nutrition education concepts, family involvement, and increased time and intensity that children spend in nutrition education (31, 32).

# **Child and Adolescent Physical Activity Levels**

Lack of physical activity is one likely contributor to increased weight in children and adolescents (33). Energy balance, or calorie intake equal to calories expended, is

critical for maintaining healthy weight. Again, given the time children spend in school, schools are capable of assuring children meet minimum levels of physical activity. Further, physical activity is instrumental in bone and cardiovascular health and in controlling blood pressure. The recommended level of physical activity in children and adolescents is sixty minutes of moderate to vigorous activity on at least most days, but preferably, everyday (34). The 2005 Youth Risk Behavior Surveillance (YRBS) indicates only 28% of high school students are achieving the minimum physical activity guidelines and only 6% of elementary schools and 8% of secondary schools provide at least thirty minutes of daily physical education (35). Yet, at least thirty minutes of daily physical activity during the school day has demonstrated a positive effect on body composition (36).

Physical education (PE) is critical in providing students with skills, knowledge and concepts to increase the likelihood of incorporating healthy, physically active lifestyles for a lifetime. Schools are not necessarily providing the children with an environment that is conducive being physically active. The National Association of Sport and Physical Education (NASPE) recommend schools provide at least one hundred-fifty minutes of weekly PE for elementary schools and two hundred-twenty five minutes per week for secondary schools (37). Further, children are recommended to expend at least fifty percent of the recommended sixty minutes of daily physical activity during the school day. Only eight percent of elementary schools and six percent of secondary schools require daily PE (38). There is an increasing need to provide additional physical activity opportunities throughout the school day (39). More than 40% of elementary schools and nearly half of secondary schools include regular physical activities outside of physical education including recess, physical activity clubs, and intramural sports. The additional time devoted to physical activity is beneficial to establishing a healthier school environment and creates active lifestyles as the social norm (40).

PE uses physical activity to acquire skills for exercise, incorporates health education to provide knowledge and resources to be healthy and increases the likelihood of future participation in exercise by increasing self-efficacy and self-esteem (41). However, several barriers exist related to participation in and delivery of PE. Currently,

only 56% of students in U.S. public schools are enrolled in PE classes (42). Also, less than one-third of students enrolled in PE are active at least 20 minutes. The No Child Left Behind Act of 2001 places a greater emphasis on student achievement in core academic subjects. In response to achieving the minimum guidelines set by the legislation, states have established tests to measure student achievement in the core area subjects. PE is not tested since it is not considered a core area subject-thereby becoming a lower priority (41).

Recess is another way to increase physical activity in children. Unstructured physical activity allows children to utilize concepts learned in PE, release energy and further develop social skills (43). Further, recess should be characterized as support for learning and increasing physical activity levels. With the combination of recess and PE, schools can easily achieve at least half of the recommended sixty minutes of physical activity during each school day. However, the SHPPS indicated 29% of elementary schools had no scheduled recess for kindergarten through fifth grade (39).

Extracurricular activities that promote physical activity in children and adolescents is another method to increase calorie expenditure (44). Intramural and interscholastic sports and physical activity clubs provide students with a wide variety of physical activity opportunities. However, only 49% of schools offer physical activity programs outside of interscholastic sports (42).

Health education (HE), specifically nutrition education and the importance of daily physical activity, is another component of coordinated school health (45). HE can incorporate the concepts of physical activity and healthy eating into strategies to maintain a physically active, healthy lifestyle. Studies support a behavior-oriented curriculum approach that focuses on the long-term benefits of physical activity and healthy eating. However, six states do not require health education and only 70% of states require nutrition education and fitness concepts. Combined, it has been estimated that teachers spend nine hours per year on both topics (46). Schools can integrate nutrition education and physical activity into other subject areas, science and math for example, to increase exposure to the topics (22).

# **Coordinated School Health Approach**

Nutritious foods, physical education and physical activity, and health education are among components of coordinated school health (47). Coordinated school health consists of eight components to create a health child- physical activity, nutrition services, health services, health education, counseling, family/community involvement, staff health promotion, and a healthy school environment (Appendix C). Still, many schools do not provide these activities to engage schoolchildren in activities that promote better health.

## **State-Level Approach to Expand on Local School Wellness Policies**

Schools have been recognized for their capacity to influence physical activity and healthy eating in children and adolescents (22). In response to the dramatic increase in childhood obesity, public health professionals have urged school administrators to find ways to increase students' improve dietary behavior physical and activity levels. Several initiatives have taken place to address school-based wellness in addition to national policies, both at state and local levels.

Receiving a substantial amount of media attention, in 2003, the Arkansas General Assembly passed Act 1220 to address the childhood obesity crisis (48). The provisions within this landmark legislation included:

- creating a fifteen member statewide Child Health Advisory Committee (CHAC) which would be responsible to make recommendations to the State Board of Education and the State Board of Health regarding nutrition and physical activity standards in public schools,
- hiring community health promotion professionals,
- eliminating vending machines in all elementary schools,
- requiring schools to disclose food and beverage contracts (competitive foods and beverages outside of the USDA National School Lunch Program),
- calculating body mass index (BMI) for all public school students (K-12) with the measure and an explanation of the health effects of being overweight reported on the student's report card, and
- creating a school-district level advisory committee to create local school wellness policies.

Arkansas used its legislative power to change the school health environment in response to the state's continuing struggle as one of the highest ranking states in both adult and child overweight and obesity in the U.S (49). According to the study, resistance from some school administrators regarding some of the provisions of the law

surfaced. Sporadic failure to calculate or report BMI to parents was noted. Privacy concerns of the student's BMI scores, concerns regarding the school's role in assessing BMI instead of health care agencies and the fear that BMI screenings could lead to eating disorders, especially among female students, were noted. Subsequent changes were made to address most of the concerns of school administrators. Student BMI was reported in a separate health report. Support was garnered from local and state public health officials. At the conclusion of the second year of BMI screening, student BMI did not increase. Although more time is needed to assess the effectiveness of this strategy, a halt in the increase of childhood overweight, perhaps, is a step toward decreasing the overweight prevalence- perhaps due to the legislation.

A four percent increase in families limiting fried foods, sodas and sweets was reported (49). Also, eating home cooked meals increased from 27% to 46% and 53% of physicians reported that at least one parent produced a child BMI health report.

The Robert Wood Johnson Foundation report "State Action to Promote Nutrition, Increase Physical Activity and Prevent Obesity" highlights several other state-level initiatives to address child overweight (50). The following are examples of school-based policies adopted and cited in the report, representing a wide range of policies.

In Connecticut, lawmakers approved a measure that would provide incentives for schools participating in the NSLP to serve foods that meet more stringent nutritional guidelines beyond the current minimum USDA requirements (51). If the school division agreed to provide food items that meet the new standards, an additional ten cents per lunch would be allocated to the school division. The result is a substantial revenue increase for the schools.

Delaware lawmakers passed a bill that funds a pilot program in elementary and middle schools to provide PE five days per week, with a minimum of 30 minutes per class in elementary schools and 45 minutes in middle schools (52). Delaware also requires testing for physical fitness levels in elementary, middle, and secondary schools (53). All reports will be shared with parents and will allow for baseline and follow-up measurements to be analyzed raising awareness to childhood obesity and the potential health consequences of being overweight.

## **National Initiative to Address Childhood Overweight**

In response to childhood overweight, the requirement for reauthorization of child nutrition programs, the Child Nutrition and WIC Reauthorization Act of 2004 (CNRA) was enacted (5). While the Act provides guidance for other nutrition programs such as Special Supplemental Nutrition Program for Women, Infants, and Children, it also provides guidance to the National School Lunch Program and the National School Breakfast Program. For those programs, the Act mandated that each school district participating in either of those programs develop a local school wellness policy. The local school wellness policy was to include the following:

- goals for nutrition education, physical activity and other school wellness programs,
- goals for nutrition guidelines for foods provided at school,
- goals to assure that guidelines for school meals met the United States Department of Agriculture (USDA) guidelines,
- goals to develop a plan to monitor the policies, and
- goals to include parents, students, representatives of the school nutrition services, the school board, school administrators and the public in the development and implementation of the policies.

The provisions of the CNRA require school divisions to adopt local school wellness policies at a local level. This allows school divisions to consider the needs unique to the school division. The bill also authorized four million dollars for USDA to collaborate with school divisions to establish healthy school nutrition environments, reducing childhood overweight, and preventing chronic disease related to diet (54).

## Overview of Local School Wellness Policies in the U.S.

A study of local school wellness policies one year after implementation reveals some promising results (55). The study revealed that as of December 2006, 88% of adopted policies in school divisions across 49 states addressed nutrition guidelines for ala-carte foods and beverages and 87% addressed foods and beverages in vending machines. Further, 69% addressed nutrition guidelines for fundraising and 66% foods and beverages for classroom celebrations. However, only 16% of the policies provided specific nutrition requirements for competitive foods and beverages.

A 2007 study examining local school wellness policies was conducted by Action For Healthy Kids examining 256 urban, suburban and rural districts provides additional school nutrition policies (56). The findings revealed:

- 81% contained policies for nutrition education
- 79% contained policies for specifically for physical education
- 88% developed policies to form wellness teams
- 81% of the policies encouraged community and/or family involvement, and
- 78% of the policies established nutrition guidelines based on the Dietary Guidelines for Americans
- 40% of nutrition guidelines specifically addressed whole grains, fruit and vegetables, and low-fat or non-fat dairy products in nutrition education or school meals.

While these studies provided an overview of goals and trends around the country pertaining to local school wellness policies, only a few studies have examined local school wellness policies on a state level. In a study of Pennsylvania local school wellness policies, data from 300 wellness policies collected showed that 83% of school divisions adopted a general nutrition education policy and only 29% addressed the interplay between school foods service and nutrition education (57). Likewise, 82% of the policies for addressed physical activity opportunities yet only 47% included a target of obtaining 60 minutes of physical activity. Finally, only 53% of the policies prohibited the use of foods as rewards or punishment and only 33% included after-school physical activity opportunities. The authors concluded that the majority of the policies were broad and general when addressing nutrition education, physical activity, and other school-based activities (57), questioning the integrity and strength of policies to truly address childhood overweight.

### **Local School Wellness Policies in Virginia**

In 2006, a study was completed to examine proposed local school wellness policy goals in Virginia (6). With every school division contacted, a total of 92 responded, representing 69.7%. The survey consisted of four main categories: nutrition education; physical activity; nutrition standards; and other school-based wellness activities. Overall, many school divisions' anticipated ambitious policies to be adopted according to the survey. The results (Appendix D) showed a mean number of 5.7 goals out of 11 possible choices for food and nutrition guidelines, 3.7 goals out of 9 physical activity guidelines,

and 2.5 goals out of 4 nutrition education guidelines. Non-rural school divisions reported a significantly higher number of goals compared to rural divisions (5.4 versus 3.5).

Nutrition education goals favored classroom teaching with less emphasis on teacher training. Nutrition standards focused on developing guidelines for nutritional values of foods and beverages and for a la carte, vending machines, and concession stands. Also, most schools favored establishing guidelines for food and beverage contracts, use of food as rewards or punishment, and guidelines for foods and beverages available for class parties and celebrations.

Physical activity goals focused on recess requirements and physical activity opportunities outside of physical education. Goals associated with additional resources for physical activity opportunities (gym or outdoor space and more time devoted for physical education) were less accepted.

In terms of evaluation, most school divisions (89.1%) identified at least one goal to measure progress. Goals included collecting height/weight, calculating BMI, and conducting surveys or interviews. Appendix 2 provides a more in-depth overview of the findings.

While local school wellness policies hold promise for facilitating the creation of a healthier school environment, numerous questions still exist regarding their effectiveness and overall impact on children's health.

## Chapter III: An Examination of Local Wellness Policies in Virginia

#### **Abstract**

In response to the dramatic increase in the prevalence of childhood overweight, a provision of the Child Nutrition and WIC Reauthorization Act of 2004 required school divisions participating in the National School Lunch and Breakfast Programs to adopt local school wellness policies (LWP) by the fall of 2006. The local school wellness policies were to include guidelines for nutrition education, physical education (PE) and physical activity, and foods offered on campus. The purpose of this study was two-fold: 1) compare and contrast proposed goals versus adopted policies in Virginia; and 2) analyze the rigor of LWPs in Virginia. All LWPs in Virginia were reviewed with each item scored as required or recommended and specific or broad. Chi-square analyses were used to compare policies that were proposed and adopted. Eighty-one local wellness policies were matched to goals. In general, school divisions did not adopt as many policies as proposed. LWPS met only the minimum requirements mandated. Only 56 (69.1%) had policy language for more than one category in each of the three areas studied with nutrition education policies more popular than physical education/physical activity and nutrition guidelines. For example, 60 schools adopted policies to promote classroom nutrition education, whereas no LWPs contained policy language to improve PE teacherstudent ratio. Further, specificity proved to be a concern. The results suggest that while schools may be meeting the minimum requirements, the LWPs may not be promoting school health to the degree intended.

#### Introduction

Schools provide an excellent opportunity for promoting better health in schoolchildren. Nearly one-and-one quarter million attend public schools (2). Schoolchildren consume and expend a considerable portion of energy (calories) throughout the school day (1). There has been a dramatic rise in the prevalence of childhood overweight in the United States in the past few decades.

In part, due to the response to the rapid increase in childhood overweight, the Child Nutrition and WIC Reauthorization Act of 2004 was passed into law (5). The legislation required that schools participating in the National School Lunch and Breakfast

Program to adopt a local school wellness policy by fall 2006. The policy was to include five components:

- goals for nutrition education, physical activity and other school wellness programs,
- goals for nutrition guidelines for foods provided at school,
- goals to assure that guidelines for school meals met the United States Department of Agriculture (USDA) guidelines,
- goals to develop a plan to monitor the policies, and
- goals to include parents, students, representatives of the school nutrition services, the school board, school administrators and the public in the development and implementation of the policies.

The purpose of this study was two-fold: 1) analyze the language of the policies to provide insight into the integrity of LWPs in Virginia; and 2) compare adopted LWPs in Virginia to proposed goals based on a study completed two years ago. The results from this study highlight trends in school wellness initiatives as they relate to nutrition education, physical activity and food at a state level. Results can be used to render recommendations for effective policies promoting better health in schools and to further strengthen the LWPs in the future.

## Methods

Local wellness policies were collected from 119 (88.8%) of the state's 134 school divisions. Of those 81 were matched to proposed goals.

## Coding

Every LWP was coded to address the rigor of the language for nutrition education, nutrition guidelines, and physical education and physical activity.

Measurement and evaluation goals were not analyzed as part of this study. Items coded "0" were classified as policies that were not included or failed to provide a recommendation or requirement. Each topic was categorized as: 1) recommendation, 2) specific recommendation, 3) requirement, or 4) specific requirement. Language used within the guidelines determined this classification. Language such as "is encouraged," "if possible," "should," and "suggest" indicates a recommendation. Recommendations with specific goals or criteria were labeled specific recommendations. For an item to be classified as a requirement, stronger language such as "will," "shall," "required", and "will exceed" was included. Additional provisions related to the requirement (e.g.

requiring a la carte foods to meet very specific nutrition guidelines) indicated a specific requirement.

## **Analysis**

Descriptive statistics were used to analyze policy trends in the three main areas: nutrition education, nutrition guidelines, and physical education and physical activity. Chi-square analyses were conducted to determine if significant differences in proportions existed. If small cell sizes prohibited chi-square analysis, bivariate spearman correlations were conducted, along with one-way ANOVA to confirm results.

#### **Results and Discussion**

## School Divisions Represented

The 81 local school wellness policies examined in this study represented a total of 848,304 schoolchildren enrolled in these divisions (Appendix E). School division enrollment ranged from 488 to 165,740 with a mean of 10,473 students (median 4,687) (2). Seventy-one (87.7%) of the school divisions were rural and ten (12.3%) non-rural. Per pupil expenditure for school divisions ranged from \$7,705 to \$18,201 with a mean of \$9,505.

## General Information on LWPs

Results indicated that not all school divisions met the minimal requirements of having at least one guideline in each area. In fact, 15 school divisions were deficient in guidelines in one of the three areas (nutrition education, physical education/physical activity, and nutrition), six in two areas, and three in all three areas. Of those, the most discrepancies were seen in nutrition education (11 school divisions) and physical education/physical activity (11); and five were missing nutrition guidelines. In terms of total number of goals and policies, there were fewer adopted policies than proposed goals in all areas: 2.5 goals versus 1.9 policies for nutrition education; 5.2 versus 3.7 for nutrition; and 3.2 versus 2.5 for physical education/physical activity.

LWPs ranged from one page to 46 pages. Twenty-four (29.6%) school divisions adopted a LWP using identical language and format (Appendix F).

### **Nutrition Education**

Of the different required components of the policy, nutrition education (see Table 2) was the most popular proposed and adopted goal. Of the 74 schools planning on

including policy language on nutrition education, 81.1% adopted a policy (60 school divisions). Almost two-thirds of school divisions adopted policies on teacher training and education and marketing - 62.5% and 64.7% respectively.  $\chi^2$  analysis detected a significant difference in proposed goals versus adopted policy regarding teacher training (p=.021); fewer local school wellness policies were adopted in this area than expected. No other statistical significance was detected. Few school divisions had specific requirements in the final policies: only three schools divisions' total of those surveyed adopted specific requirements for classroom teaching (4.1%) and education and marketing (4.4%). The majority of school divisions adopted more "requirements" than "recommendations" for all three categories.

### **Nutrition Guidelines**

In contrast to nutrition education, there was a wider series of school divisions that adopted proposed policies on nutrition guidelines - ranging from one to fifty-four and 2.2% and to 79.4%, respectively (see Table 3). Eighty-four percent of school divisions intended to adopt a policy on nutritional guidelines for foods and beverages. Of these, fifty-four (79.4%) adopted a policy. Nearly half (39, 48.1%) of the adopted policies focused on adherence to the United States Department of Agriculture (USDA) Dietary Guidelines for Americans. Thirteen (19.1%) school divisions adopted specific nutritional guidelines beyond USDA requirements in their adopted policy. Language on a-la-carte items and vending machines resulted in 60 (74.0%) adopted policies, with fourteen (23.3%) of the adopted policies being recommendations and 26 (43.3%) requirements. Of these, 18 of 26 contained specific language. Common examples include restricting total and saturated fat, sodium, and added sugars and assuring that these foods and beverages contained at least a certain level of vitamins, minerals, and dietary fiber in a-lacarte foods. Another example included replacing high-sugar sodas and juice drinks with low-fat milk, 100% fruit juices, and foods that met the preceding nutrition criteria in vending machines.

Celebrations, using food as rewards or punishment, foods and beverages sold for fundraisers, and nutrition guidelines disclosed in food and beverage contracts were identified as goals by about half of the school divisions surveyed. This translated into 25(59.5%) school divisions adopting policies for foods and beverages at celebrations,

with only four (9.5%) adopting a requirement. Twenty-four (55.8%) school divisions adopted a policy regarding the use of foods for rewards or punishment with recommended and required policies nearly equally split between recommendations and requirements. Twenty-six (66.7%) school division surveyed adopted policies addressing food and beverages sold in fundraisers, with more than twice as many recommendations as required policies. Food and beverage contracts experienced the most dramatic difference between proposed goals and adopted policies as only one (2.2%) of the school divisions surveyed actually adopted a policy. Policies addressing portion size and celebrations were adopted by 10 (23.8%) and 25 (59.5%) school divisions, respectively, in contrast to proposed policy goals. Other policy areas that were identified as policy goals include adherence to the Virginia Action for Health Kids (VAFHK) guidelines and sustainable food practices. Of these, four (13.8%) policies were adopted for VAFHK guidelines and 3 (20.0%) sustainable food practices. No significant differences were detected between proposed and adopted policies for any category of nutrition guidelines. For four categories, school divisions adopted more "recommendations" than "requirements" and in seven more "requirements" than "recommendations." Physical Education and Physical Activity

Physical education (PE) standards, physical activity (PA) opportunities, and recess requirements were the most popular activity related goals indicated in the initial survey (see Table 4). These translated into the most popular adopted policies as well, in addition to PE certification and training, which resulted in 15 (51.7%) adopted policies out of 47 (58.0%) school divisions. Recess requirements resulted in the largest number, 35 (72.9%) adopted policies, in the PE and PA component. Increasing physical activity opportunities outside of PE resulted in 32 (69.6%) of policies adopted, however 15 of the 32 policies were recommendations, not requirements. Goals for frequency, intensity, and time (FIT) in PE were identified by 39 (48.1%) school divisions with 20 (51.2%) divisions' adopting a policy. Although only seven (23.3%) divisions adopted policies addressing high school PE requirements, all of the policies were required. Only nine (11.1%) school divisions proposed policy goals addressing PE student to teacher ratio, with no school divisions adopting a policy in this area.  $\chi^2$  analysis detected significant differences in achieving FIT guidelines (p=.002) and walking/biking to school (p=.001).

For all categories in this area, school divisions adopted more "requirements" than "recommendations."

# **Conclusion and Applications**

The local school wellness policies that were reviewed varied in both length and depth. As stated earlier, some were one page in length and some exceeded forty pages. Many were completely identical, perhaps generated from one entity, and distributed to school administrators or health coordinators. On the other hand, a small number of school divisions' adopted rather elaborate and comprehensive LWPs (Appendix G).

Overall trends were observed in adopting more practical policies versus those requiring additional resources to comply. Nutrition education LWPs represented a greater number of required policies than some of the nutrition guidelines components. For example, requirements for nutrition education in the classroom led to more adopted policies than policies for food and beverage contracts and sustainable food practices. Classroom nutrition education is more practical than implementing new food and beverage contracts for the fear of lost revenue and facilitating the practice of sustainable foods. Again, more practical measures resulted in a greater likelihood of policies being adopted.

Similar to nutrition education and guidelines, physical education and physical activity policies were more likely to be adopted in areas which are practical for the school division. Policies requiring daily recess would be practical to adopt by the school divisions', as they are already mandated by the state. Only 48 (59.3) school divisions' anticipated adopting a policy for recess and 35 (72.9%) actually adopted a recess requirement policy.

Finally, what may be the most striking finding was that 21 school divisions did not meet the minimum requirements for the LWP – with 14 being deficient in one area, five in two, and two in all three studied.

Local school wellness policies could be an important first step toward implementing a coordinated school health approach in schools. Guidelines within the framework of the LWPs

## Implications for future research and practice

Local school wellness policies may serve as the first step toward improving the health of youth. School administrators, along with faculty and staff, should identify ways to increase the exposure of nutrition education, nutritious foods and beverages offered at school, and physical education and physical activity. Promoting a healthier school environment could have a substantial effect with regard to the childhood overweight epidemic. Involving parents/guardians, health promotion professionals, and the community in addressing the needs to facilitate a healthier school environment will benefit both the school personnel and schoolchildren. Throughout this process, school administrators may realize the benefits of promoting better health in youth through the school environment equaling both better health and higher academic achievement.

Future research is warranted regarding the effect of local school wellness policies and the impact on improving school health. Future studies could explore the barriers and facilitators involved in adopting school-based policies to address improving health in youth through the school environment. School divisions should examine school health models, such as the CDC's Coordinated School Health Model, and identify strategies for implementing programs known to improve the school health environment. Perhaps further examination into the effectiveness of local school wellness policies can lead to future legislation to address the inadequacy of the provisions within the Child Nutrition and WIC Reauthorization Act. Further, examination into LWPs could provide details regarding the actual changes in the school health environment. Monitoring and evaluating LWPs could uncover details of these changes as it is unknown if the adopted policies are translated into practice. Additionally, this study did not examine individual schools within the division which may have their own wellness policies which could further benefit improving school health.

**Table 2: Nutrition Education in Proposed Versus Actual Local School Wellness Policies** 

Proposed Policy (2006)/Actual Policy (2007)	Planned 2006 n=81 (%)	Recommendation (%)	Specific Recommendation (%)	Requirement (%)	Specific Requirement (%)	Total # of School Divisions with Req. or Rec. (%)
Classroom Teaching	74 (91.3)	4 (5.4)	0	53 (71.6)	3 (4.1)	60 (81.1)
Teacher Training <sup>a</sup>	48 (59.2)	2 (4.1)	0	28 (58.3)	0	30 (62.5)
Education & Marketing	68 (83.9)	3 (4.4)	0	38 (55.8)	3 (4.4)	44 (64.7)

Numbers and percentages under Planned indicate the school divisions that planned policies for each nutrition education component of the 81 school divisions matched for this study. Numbers and percentages in the remaining columns represent the total number of school divisions that adopted a LWP of the school divisions that planned a local school wellness policy.

<sup>&</sup>lt;sup>a</sup>Statistically significant (p<.05) difference in proportions between planned and actual local school wellness policies based on  $\chi^2$  analysis.

Table 3: Nutritional Guidelines for School Foods and Beverages in Proposed Versus Actual Local School Wellness Policies

Proposed Policy (2006)/Actual Policy (2007)	Planned (2006) N=81 (%)	Recommendation (%)	Specific Recommendation (%)	Requirement (%)	Specific Requirement (%)	Total # of School Divisions with Req. or Rec. (%)
Nutritional Guidelines for Foods and Beverages	68 (84.0)	2 (2.9)	0	39 (48.1)	13 (19.1)	54 (79.4)
Portion Size	42 (51.9)	0	1 (2.4)	5 (11.9)	4 (9.5)	10 (23.8)
A-la-carte and Vending	60 (74.0)	11 (18.3)	3 (5.0)	8 (13.3)	18 (30.0)	40 (66.7)
After School Parties	25 (30.9)	6 (24.0)	4 (16.0)	0	2 (8.0)	12 (48.0)
Celebrations	42 (51.9)	13 (31.0)	8 (19.0)	0	4 (9.5)	25 (59.5)
Food As Rewards	43 (53.1)	6 (14.0)	4 (9.3)	8 (18.6)	6 (14.0)	24 (55.8)
Fundraising	39 (48.1)	13 (33.3)	5 (12.8)	1 (2.6)	7 (17.9)	26 (66.7)
Food or Beverage Contracts <sup>3</sup>	45 (55.5)	0	0	0	1 (2.2)	1 (2.2)
VAFHK <sup>2</sup> Guidelines <sup>3</sup>	29 (35.8)	0	0	4 (13.8)	0	4 (13.8)
Sustainable Foods Practice	15 (18.5)	2 (13.3)	0	1 (6.7)	0	3 (20.0)

Numbers and percentages under Planned indicate the school divisions that planned policies for each Nutritional Guidelines for School Foods component of the 81 school divisions matched for this study. Numbers and percentages in the remaining columns represent the total number of school divisions that adopted a LWP of the school divisions that planned a local school wellness policy.

No statistical significance was detected for the above components.  $^2$  Virginia Action for Healthy Kids.  $^3$  Small sample sizes prevented  $\chi^2$  analysis

Table 4: Physical Education (PE) and Physical Activity (PA) in Proposed Versus Actual Local School Wellness Policies

Proposed Policy (2006)/Actual Policy (2007)	Planned (2006) N=81 (%)	Recommendation (%)	Specific Recommendation (%)	Requirement (%)	Specific Requirement (%)	Total # of School Divisions with Req. or Rec. (%)
High School PE Requirement	30 (37.0)	0	0	6 (20.0)	1 (3.3)	7 (23.3)
PE Teacher-Student Ratio <sup>3</sup>	9 (11.1)	0	0	0	0	0
PE Standards	47 (58.0)	1 (2.1)	0	15 (31.9)	0	16 (34.0)
FIT Standards <sup>1a</sup>	39 (48.1)	2 (5.1)	0	16 (41.0)	2 (5.1)	20 (51.2)
PE Certification/Training	29 (35.8)	0	0	15 (51.7)	0	15 (51.7)
PA Outside of PE	46 (56.8)	13 (28.3)	2 (4.3)	16 (34.7)	1 (2.2)	32 (69.6)
Recess Requirements	48 (59.3)	2 (4.2)	0	30 (62.5)	3 (6.3)	35 (72.9)
Walking/Biking to School* <sup>a</sup>	8 (9.9)	$9(112.5)^2$	0	8	1	18 (225.0)

Numbers and percentages in under Planned indicate the school divisions that planned policies for each PE or PA component of the 81 school divisions matched for this study. Numbers and percentages in the remaining columns represent the total number of school divisions that adopted a LWP of the school divisions that planned a local school wellness policy.

<sup>1</sup> Frequency, intensity, and time spent in PE.

<sup>2</sup> Since more schools adopted recommendations in LWP than planned to adopt, the percentage here is above 100.0%.

<sup>&</sup>lt;sup>3</sup> Small sample sizes prevented  $\chi^2$  analysis

<sup>&</sup>lt;sup>a</sup> significant differences in proportions between planned and actual local school wellness policies based on  $\chi^2$  analysis.

## **Chapter IV: Discussion and Conclusion**

Virginia school divisions' local wellness policies (LWP), overall, address only the minimum requirements of the Child Nutrition and WIC Reauthorization Act (CNRA). Most of the recommended and required policies used "general" language to address the components of the LWP. Policy recommendations raise questions regarding the level of commitment by the school divisions to improve the school health environment. For example, "schools should encourage nutritious food and beverage options in vending machines", thus, may or may not lead to stringent nutrition guidelines in vending machines. Also, many similar policies fail to address monitoring of the recommended or required policy. Only a few LWP's collected *require* guidelines to comply with the LWP. Language, again, is a key indicator as to potential changes in the school health environment.

Many LWP guidelines were vague or mandated policies were not addressed. Perhaps many barriers were presented in the implementation process which led to less stringent policies or simply a failure to address the issue. Also, to achieve some goals to promote a healthier school environment requires additional resources. Changes in vending and beverage contracts could result in lost revenue. Additional space, personnel, and equipment would likely be needed to provide additional physical activity opportunities outside of physical education. Providing more nutritious foods during breakfast and lunch requires additional equipment and training. Resistance from classroom teachers to incorporate physical activity in the classroom and eliminating food as rewards may have also surfaced. Other known strategies to promote better health may have been avoided due to a fear of interfering with classroom time devoted to achieving higher Standards of Learning test scores, which places added pressure on school administrators and classroom teachers. After school physical activity and nutrition education programs require dedicated personnel and additional physical resources.

Many LWP's contained one and one-half page of general, sometimes vague policy guidelines. Fifty-six of the eighty-one (69.1%) matched LWP's two or more areas in nutrition education, physical activity, and nutrition guidelines. Interestingly, twenty-four LWP's used identical language and format, perhaps from one entity. Is this suggestive of a lack of motivation to plan and implement a LWP? It would be interesting

to determine whether or not the LWP was developed as new guidelines to promote school health, or simply drafting a policy to ensure compliance with federal law. Perhaps school divisions or individual schools within the division may already have more stringent policies developed prior to July 1, 2006, the deadline for an adopted LWP.

Political pressure regarding the school's attempt to adopt more rigorous policies may have been presented. Economical issues surrounding restricting vending machines to provide more nutritious options may have influenced the decision to adopt policies with this regard. Collecting BMI data and other methods to categorize weight status has met resistance in other school divisions' nationally (49). Further, school administrators and parents have expressed resistance in programs that emphasize health, particularly school nutrition. A disconnect exists between the schools responsibility to maximize achievement scores and providing a coordinated school health program. Essentially, many school administrators and parents assume the schools do not have the responsibility of assuring that schoolchildren receive health services and education centering on nutrition and physical activity.

Local school wellness policies have the potential to create a healthier school environment. The goal is to establish a coordinated approach to school health. The Centers for Disease Control (CDC) has created an eight-component model to assist schools with supporting a healthy environment (58) (Appendix C). Schools should not have the responsibility of single-handedly improving the health of schoolchildren. However, schools do have an opportunity to greatly influence the health behaviors in children. The coordinated school health model, previously referred as "comprehensive" school health" involves providing health education, including nutrition education. To enhance nutrition education, school nutrition services can promote healthy foods as tasty and trendy. Also, food services can influence dietary behaviors by providing a warm and friendly environment for children to eat. Consistent messages' regarding the importance of consuming healthy foods is also important. School administrators can greatly influence these services and ensure cooperation. Beyond academics and learning of health concepts, schools can involve families and the community to establish healthy, physically active lifestyles as the social norm. Modeling healthy behaviors is instrumental in changing the health behaviors as a school. This is facilitated through

efforts to promote better health for faculty and staff members. Psychological and counseling services can assist with mental and social health, along with guiding interventions to change unhealthy behaviors. Health services, such as school nurses, can collect and monitor child body mass index (BMI) data, further educate the importance of healthy foods and regular physical activity, and communicate with parents to address any health concerns.

Nutrition education for all children is essential for to increase the likelihood of consuming healthier foods. Proper nutrition, along with increased physical activity, are major contributors for a healthy lifestyle. Most states require nutrition education of some form to be included in the health curriculum. Inadequate amount of time spent discussing nutrition, along with the depth of the topics covered, are of great concern. According to a recent study, 61% of U.S. schools do not have a nutrition education coordination program (26). Also, the amount of time spent discussing nutrition education in the classroom was thirteen hours per school year, far less than the recommended fifty hours. Less than thirty percent of nutrition education is taught as a separate curriculum. Approximately seventy-two percent is incorporated into health and physical education and in science curricula. Fifty-two percent of teachers who design nutrition lessons in the classroom do not have adequate nutrition training. These percentages were significantly higher among kindergarten through second grade teachers. At this point, the need for more stringent requirements regarding the quality and amount of physical education and nutrition education in the schools are paramount. There have been many programs designed and implemented across our nation's schools to assist teachers and parents with providing useful information and resources pertaining to the benefits and consequences of nutrition and physical activity behaviors.

Classroom teachers can greatly influence the attitudes and behaviors of children. Nutrition education can be integrated into other curriculum and incorporating healthier teaching practices (using foods as rewards or punishment) can be controlled through policy and using other forms of rewards (extended recess time) as ways to reinforce good behavior. Classroom teachers should not restrict physical activity punishment. Many strategies can be used to increase physical activity while learning (learning in motion.)

Physical education also plays a vital role in allowing children to expend more energy during the school day. In the previous twenty-five years, participation in physical education has decreased dramatically. President George Bush introduced "No Child Left Behind" in 2001. Described as "sweeping education reform", this initiative placed additional responsibility and accountability to every school in the U.S. with regard to students' academic achievement. Many schools were forced to accommodate the need for more time spent during the school day providing additional instruction in the core areas of knowledge, math, science, reading, and writing, by reducing the time spent in physical education (PE). This developed during the surge of increased weight in children and the rapid increase in type 2 diabetes.

According to the National Association of Sport and Physical Education (NASPE), student enrollment in physical education declined significantly in the past decade. In 1991, 49% of high school students were enrolled in a physical education class (38). Further, high school students enrolled in physical education dropped to 28% in 2003 and only 27% of high school students have PE on a daily basis. Elementary schools have also reduced the time each student will spend in physical education. Only 8% of elementary schools required daily participation in structured physical education totaling 150 minutes per week, currently the minimum standards for elementary physical education recommended by NASPE and the American Heart Association. The minimum standards for physical education for secondary schools include 225 minutes of physical education per week. Only one state, Montana, requires schools to provide the minimum amount of physical education. However, this is only mandatory until the tenth grade. Illinois and New Jersey are the only states that require K-12 physical education, however both states fail to meet the weekly time recommendations spent in physical education class. Nationally, the average elementary student will spend only 77 minutes per week in structured physical education class. This is roughly half of the recommended amount.

Another issue regarding physical education in schools is the quality of instruction. Currently, only 28 states require physical education teachers in elementary schools to possess a state teaching license. Thirty-three states will allow physical education classes to be taught from individuals possessing an alternative form of teaching license (NASPE). A recent study analyzing physical education in Texas elementary schools

found that the average third-grade student acquired only three minutes and twenty-four seconds of moderate or vigorous activity for every forty minutes of instruction time (59). As a result, states need to design and implement guidelines for physical education in every school. A reference for legislators could be the recommended guidelines provided by NASPE. Some guidelines could include daily physical education (150 minutes for elementary schools and 225 minutes in secondary schools) in all K-12 schools.

The theory and practice of physical education is evolving into a new curriculum. In years past, physical education has been viewed as an unsafe emotional environment for many children, specifically, those that are overweight who need an increased amount of physical activity. Many PE classes consist of elimination games and team sport oriented games. There is a strong argument for discontinuing these activities. In elimination games, such as tag games and invasion or elusive activities in a competitive format, typically results in the elimination of the children who are overweight. The net result is more time spent inactive during class (60). From a psychological perspective, these events have detrimental implications with regard to the likelihood of living a physically active lifestyle in adulthood. There is a need for a shift in the physical education curriculum nationwide. The focus needs to be centered in more leisure activities along with individual or dual activities that are more conducive for lifelong commitment to physical activity.

Gender specific sports and activities need to be addressed. Several studies have concluded boys accumulate more moderate to vigorously active than females that results in increased energy expenditure (0.075 vs. 0.072) (61). The curriculum design must have activities that are more conducive for total student population (62). Some recommended activities include aerobics, dance, and gymnastics for example. Female students need to be encouraged to participate in strength training exercises and avoid activities that are usually considered male oriented or male dominated activities.

# Limitations of this study

Local wellness policies reviewed provides some insight into the efforts of school divisions promoting better school health. However, one cannot assume that all of the policies adopted have led to changes in the school health environment. School divisions, perhaps, had already made significant changes in school health promotion and the LWP

served as fulfilling a mandate. Moreover, school divisions may have additional policies regulating school health that were not collected or distributed for the purposes of this study. Sample size of this study is another limitation. Of the reviewed LWP, eighty-one (71.1%) matched the 2006 survey. Many school divisions did not adopt policies in all areas which, in some cases, statistical analysis was not allowed.

Additional wellness policies in individual schools may add to the existing LWP adopted by the school division. Also, wellness policies may have existed prior to the adopting the LWP and may not have been included in the final LWP. Further, the lack of evaluation and monitoring of the LWPs makes it difficult to examine the current school health environment as some policies may or may not be followed.

#### References

- 1. Metos J, Nanney M. The Strength of School Wellness Policies: One State's Experience. J Sch Health. 2007;77:367-372.
- 2. Virginia Department of Education. Fall Enrollment Report, 2007-08. Available at: <a href="http://www.doe.virginia.gov/VDOE/Publications/">http://www.doe.virginia.gov/VDOE/Publications/</a>. Accessed December 19, 2007.
- 3. The University of Baltimore Childhood Obesity Report Card. Baltimore, MD, 2006. <a href="http://www.ubalt.edu/experts/obesity">http://www.ubalt.edu/experts/obesity</a>. Accessed January 23, 2008.
- 4. US Department of Health and Human Services: Office of Disease Prevention and Health Promotion. Healthy People 2010: Understanding and Improving Health. 2<sup>nd</sup> ed. Washington, DC: United States Government Printing Office; 2000.
- 5. US 108<sup>th</sup> Congress, Child Nutrition and WIC Reauthorization Act of 2004. S 2507. Available at: <a href="http://agriculture.senate.gov/Legislation/Compilations/FNS/CNWRA04.pdf">http://agriculture.senate.gov/Legislation/Compilations/FNS/CNWRA04.pdf</a>. Accessed December 19, 2007.
- 6. Serrano E, Kowaleska A, Hosig K, Fuller C, Fellin L, Wigand V. Status and Goals of Local Wellness Policies in Virginia: A Response to the Child Nutrition and WIC Reauthorization Act of 2004. Journal of Nutrition Education and Behavior. 2007;39(2):95-100.
- 7. Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and Trends in Overweight Among Children and Adolescents, 1999-2000. JAMA. 2002;288:1728-32.
- 8. Mei Z, Grummer-Strawn LM, Pietrobelli A, Goulding A, Goran MI, Dietz WH. Validity of body mass index compared with other body-composition screening indexes for the assessment of body fatness in children and adolescents. Am J Clin Nutr. 2002:978-985.
- 9. NHANES data on the Prevalence of Overweight Among Children and Adolescents: United States, 2003-2004. CDC National Center for Health Statistics. Available at:

  <a href="http://www.cdc.gov/nccdphp/dnpa/obesity/childhood/prevalence.htm">http://www.cdc.gov/nccdphp/dnpa/obesity/childhood/prevalence.htm</a>. Accessed December 19, 2007.
- 10. Freedman DS, Khan LK, Dietz WH, Srinivasan SR, Berenson GS. Relationship of Childhood Overweight to Coronary Heart Disease Risk Factors in Adulthood: The Bogalusa Heart Study. Pediatrics. 2001;108:712-718.

- 11. Serdula MK, Ivery D, Coastes RJ, Freedman DS, Williamson DF, and Byers T. Do Obese Children Become Obese Adults? Preventive Medicine 1993;22:167-177.
- 12. Dietz W. Health Consequences of Obesity in Youth: Childhood Predictors of Adult Disease. Pediatrics. 1998;101:518-525.
- 13. US Department of Health and Human Services. The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity. Rockville, MD:Public Health Service, Office of the Surgeon General, 2001.
- 14. Centers for Disease Control and Prevention. Consequences of Obesity and Overweight. Atlanta, GA, 2007. Available at: <a href="http://www.cdc.gov/nccdphp/dnpa/obesity/childhood/consequences.htm">http://www.cdc.gov/nccdphp/dnpa/obesity/childhood/consequences.htm</a>. Accessed January 9, 2008.
- 15. Fagot-Campagna A, Narayan KMV, Imperatore G. Type 2 Diabetes in Children: Exemplifies the Growing Problem of Chronic Diseases. BMJ. 2001;322:377-378.
- 16. Rodriguez MA Winkleby MA, Ahn D, Sundquist J, Kraemer HC. Identification of Populations Subgroups of Children and Adolescents with High Asthma Prevalence: Findings from the Third National Health and Nutrition Examination Survey. Arch Pediatr Adolesc Med. 2002;156:269-275.
- 17. Mallory GB, Fiser DH, Jackson R. Sleep-associated Breathing Disorders in Morbidly Obese Children and Adolescents. J Pediatr. 1998;115:892-897.
- 18. Swartz MB, Puhl R. Childhood Obesity: A Societal Problem to Solve. Obesity Reviews. 2003;4(1):57-71.
- 19. Geier AB, Foster GD, Womble LG, McLaughlin J, Borradaile KE, Nachmani J, Sherman S, Kumanyika S, Shults J. The Relationship Between Relative Weight and School Attendance Among Elementary Schoolchildren. Obesity. 2007;15(8):2157-2161.
- 20. Parker L. The Relationship between Nutrition and Learning: A School Employee's Guide to Information and Action. Washington DC. National Education Association, 1989.
- 21. Schwimmer JB, Burwinkle TM, Varni JW. Health-Related Quality of Life of Severely Obese Children and Adolescents. JAMA. 2003;289(14):1813-1819.
- 22. Story M, Kaphingst K, French S. The Role of Schools in Obesity Prevention. Future Child. 2006;16(1):109-142.

- 23. Action For Healthy Kids. The Learning Connection: The Value of Improving Nutrition and Physical Activity in Our Schools. 2004. Available at: <a href="http://www.actionforhealthykids.org/pdf/Learning%20Connection%20-%20Full%20Report%20011006.pdf">http://www.actionforhealthykids.org/pdf/Learning%20Connection%20-%20Full%20Report%20011006.pdf</a>. Accessed November 27, 2007.
- National Institutes of Medicine. Preventing Childhood Obesity: Health in the Balance. Washington DC, 2005. National Academy of Sciences. Available at: <a href="http://www.nap.edu/catalog.php?record\_id=11015">http://www.nap.edu/catalog.php?record\_id=11015</a>. Accessed December 12, 2007.
- 25. Stallings VA, Yaktine AL. Nutrition Standards for Foods Sold in Schools: Leading the Way Toward Healthier Youth. Washington DC, 2007. National Academies Press.
- 26. O'Toole TP, Anderson S, Miller C, Guthrie J. Nutrition Services and Foods and Beverages Available at School:Results from the School Health Policies and Programs Study 2006. J Sch Health. 2007.;77:500-521.
- 27. Symons CW, Cinelli B, James TC, Groff P. Bridging Student Health Risks and Academic Achievement through Comprehensive School Health Programs. J Sch Health. 1997;67:220-227.
- 28. Harris KJ, Paine-Andrews A, Richter KP, et al. Reducing Elementary Schoolchildren's Risks for Chronic Disease through School Lunch Modifications, Nutrition Education, and Physical Activity Interventions. J Nutr Educ. 1997; 29:196-202.
- 29. Centers for Disease Control and Prevention. Guidelines for School Health Programs to Promote Lifelong Healthy Eating. US Dept of Health and Human Services. MMWR Morb Mortal Wkly Rep. 1996; 45 (RR-9):1-41.
- 30. Celebuski C, Farris E, Carpenter J. Nutrition Education in Public Elementary and Secondary Schools. National Center for Education Statistics: Statistical Analysis Report. Washington, D.C.
- 31. Hosig K, Dollahite J, Rodibaugh R, White KA. Impact of a School-based Community Intervention Program on Nutrition Knowledge and Food Choices in Elementary School Children in the Rural Arkansas Delta. J Nutr Educ. 1998; 30:289-301.
- 32. Britten P, Lai MK. Structural Analysis of the Relationship Among Elementary Teachers' Training, Self-efficacy, and Time Spent Teaching Nutrition. J Nutr Educ. 1998; 30: 218-223.

- 33. Jebb SA, Moore MS. Contribution of a Sedentary Lifestyle and Inactivity to the Etiology of Overweight and Obesity: Current Evidence and Research Issue. Med Sci Sports Exerc 1999;31:S534-41.
- 34. American Heart Association. Exercise (Physical Activity) in Children. Washington, DC, 2006. Available at:
  <a href="http://www.americanheart.org/presenter.jhtml;jsessionid=TU5XCZQDMCVMCCQFCXPSDSQ?identifier=11406">http://www.americanheart.org/presenter.jhtml;jsessionid=TU5XCZQDMCVMCCQFCXPSDSQ?identifier=11406</a>. Accessed April 8, 2008.
- 35. Eaton DK, Kann L, Kinchen S, Ross J, Hawkins J, Harris WA, et al. Youth Risk Behavior Surveillance-United States, 2005. MMWR Surveillance Summary 2006 2005;SS-5:55.
- 36. Burgeson C, Wechsler H, Brener N, Young J, Spain C. Physical Education and Activity: Results from the School Health Policies and Programs Study 2000. J Sch Health. 2001;71.7:279-293.
- 37. National Association of Sport and Physical Education. Physical Activity for Children: A Statement of Guidelines for Children Ages 5-12. Reston, VA: National Association of Sport and Physical Education; 2004.
- 38. National Association of Sport and Physical Education. Shape of the Nation: Executive Summary. Reston, VA, 2001.
- 39. Lee SM, Burgeson CR, Fulton JE, Spain CG. Physical Education and Physical Activity:Results from the School Health Policies and Programs Study 2006. J Sch Health. 2007;77:435-463.
- 40. Weschler H, Devereaux RS, Davis M, Collins J. Using the School Environment to Promote Physical Activity and Healthy Eating. Prev Med. 2000;31:S121-S137.
- 41. Burgeson CR. Physical Educations Critical Role in Educating the Whole Child and Reducing Childhood Obesity. State Education Standard.2004;5(2):27-32.
- 42. Grunbaum JA. Youth Risk Behavior Surveillance-United States 2003. Morbidity and Mortality Weekly Report. 2004.53(2):1-96.
- 43. National Association of Sport and Physical Education. Position Paper: Recess in Elementary Schools, 2001. Reston, VA, 2001. Available at: <a href="http://www.aahperd.org/naspe/pdf">http://www.aahperd.org/naspe/pdf</a> files/pos papers/current res.pdf. Accessed December 8, 2007.
- 44. Policy Leadership for Active Youth. School-Based Physical Activity Interventions to Prevent or Treat Childhood Overweight. 2005. Available at: <a href="http://www.mcg.edu/institutes/gpi/ResearchPaper.pdf">http://www.mcg.edu/institutes/gpi/ResearchPaper.pdf</a>. Accessed December 8, 2007.

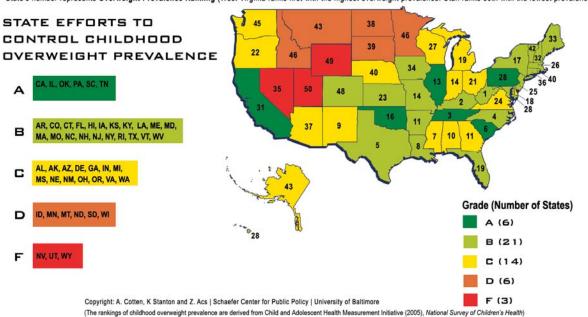
- 45. Deschesnes M, Martin C, Hill AJ. Comprehensive Approaches to School Health Promotion: How to Achieve Broader Implementation? Health Promotion International. 2003;18(4):387-396.
- 46. Centers for Disease Control and Prevention. Secondary School Health Education Related to Nutrition and Physical Activity, Selected Sites, United States, 2004. Morbidity and Mortality Weekly Report. 2006;55(30):821-4.
- 47. Allensworth DD, Kolbe LJ. The Comprehensive School Health Program: Exploring an Expanded Concept. Journal of School Health. 1987;57(10):409-12.
- 48. Ryan RW, Card-Higginson P, McCarthy SG, Justus MB, Thompson JW. Arkansas Fights Fat: Translating Research into Policy to Combat Childhood and Adolescent Obesity. Health Affairs. 2006; 25:992-1004.
- 49. Fay W. Boozman College of Public Health. Year Two Evaluation, Arkansas Act 1220 of 2003 to Combat Childhood Obesity. 2006 Available at: <a href="http://www.uams.edu/coph/reports/act1220eval.pdf">http://www.uams.edu/coph/reports/act1220eval.pdf</a>. Accessed December 20, 2007.
- 50. Robert Wood Johnson Foundation. Balance: A Report on State Action to Promote Nutrition, Increase Physical Activity and Prevent Obesity, 2006. Available at: <a href="http://www.rwjf.org/programareas/resources/product.jsp?id=15936&pid=1138">http://www.rwjf.org/programareas/resources/product.jsp?id=15936&pid=1138</a>. Accessed January 8, 2008.
- 51. 2006 Connecticut General Assembly, Healthy Foods and Beverages in Schools, 2006. sub SB 373. Available at: <a href="http://www.cga.ct.gov/2006/SUM/2006SUM00063-R02SB-00373-SUM.htm">http://www.cga.ct.gov/2006/SUM/2006SUM00063-R02SB-00373-SUM.htm</a>. Accessed January 8, 2008.
- 52. 134<sup>th</sup> Delaware General Assembly, Assessment and Fitness of Public school Students, 2006. HCR 37. Available at:
  <a href="http://legis.delaware.gov/LIS/LIS143.NSF/vwLegislation/HCR+37?Opendocume">http://legis.delaware.gov/LIS/LIS143.NSF/vwLegislation/HCR+37?Opendocume</a>
  <a href="mailto:nttp://ntmailto:
- 53. ibid
- 54. American Dietetic Association. Summary on Local Wellness Policies Required by CNA Reauthorization, 2006. Available at: <a href="http://www.eatright.org/ada/files/LocalWellnessPoliciesSummary.pdf">http://www.eatright.org/ada/files/LocalWellnessPoliciesSummary.pdf</a>. Accessed April 5, 2008.
- 55. Weber, JA. Measuring the Progress on School Wellness Policies: Are Nutrition Standards Making the Grade? J Am Diet Assoc. 2007;107(8):1293-1295.

- 56. Action for Healthy Kids. Wellness Tool: Tools to Use, 2005. Available at: <a href="http://www.actionforhealthykids.org/wellnesstool/">http://www.actionforhealthykids.org/wellnesstool/</a>. Accessed January 7, 2008.
- 57. Jomaa LH, Chopade SN, Baylis MS, Orlofsky C, McDonnell ET, Probart CK. Local Wellness Policies of School Districts in Pennsylvania. JADA Conference Proceedings. 2007.
- 58. Centers for Disease Control: National Center for Chronic Disease Prevention and Health Promotion. Coordinated School Health Program. Available at: <a href="http://www.cdc.gov/HealthyYouth/CSHP/">http://www.cdc.gov/HealthyYouth/CSHP/</a>. Accessed January 29, 2008.
- 59. Nader P, Friedman S. Frequency and Intensity of Activity of Third-Grade Children in Physical Education. Arch Pediatr Adolesc Med.2003;157:185-190.
- 60. Ekelund U, Aman J, Yngve A, Renman C, Westerterp K, Sjostrom M. Physical Activity but not Expenditure is Reduced in Obese Adolescents: A Case-control Study. Am J Clin Nutr. 2002;76:935-941.
- 61. Motl R, Dishman R, Saunders R, Dowda M, Pate R. Perceptions of Physical and Social Environment Variables and Self-Efficacy as Correlates of Self-Reported Physical Activity Among Adolescent Girls. J Pediatr Psy.2006:1-7.
- 62. Heitzler C, Martin S, Duke J, Huhman M. Correlates of Physical Activity in a National Sample of Children Aged 9-13 Years. Prent Med. 2006;42:254-260.

## **APPENDICES**

# **APPENDIX A:** University of Baltimore Childhood Obesity Report Card





## APPENDIX B: Child Nutrition & WIC Reauthorization Act of 2004

## Section 204 of Public Law 108-265—June 30, 2004 Child Nutrition and WIC Reauthorization Act of 2004 SEC. 204 LOCAL WELLNESS POLICY

- (a) IN GENERAL Not later than the first day of the school year beginning after June 30, 2006, each local education 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, at a minimum—
- 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;
- 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;
- 3) Provides an assurance that guidelines for reimbursable school meals shall not be less restrictive than regulations and guidance issued 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 section 9(f)(1) and 17(a) of the Richard B Russell National School Lunch Act (42 U.S.C. 1758(f)(1), 1766(a)0, as those regulations and guidance apply to schools;
- 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 operational responsibility for ensuring that the school meets the local wellness policy; and
- 5) Involves parents, students, and representatives of the school food authority, the school board, school administrators, and the public in the development of the school wellness policy.
- (b) TECHNICAL ASSISTANCE AND BEST PRACTICES. -
- (1) IN GENERAL. The Secretary, in coordination with the Secretary of Education and in consultation with the Secretary of Health and Human Services, acting through the Centers for Disease Control and Prevention, shall make available to local educational agencies, school food authorities, and State educational agencies, on request, information and technical assistance for use in—
- (A) Establishing healthy school nutrition environments;
- (B) Reducing childhood obesity; and
- (C) Preventing diet-related chronic diseases.
- (2) CONTENT. Technical assistance provided by the Secretary under this subsection shall—
- (A) Include relevant and applicable examples of schools and local educational agencies that have taken steps to offer healthy options for foods sold or served in schools;
- (B) Include such other technical assistance as is required to carry out the goals of promoting sound nutrition and establishing healthy school nutrition environments that are consistent with this section:
- (C) Be provided in such a manner as to be consistent with the specific needs and requirements of local educational agencies; and
- (D) Be for guidance purposes only and not be construed as binding or as a mandate to schools, local educational agencies, school food authorities, or State educational agencies.
- (3) FUNDING. -
- (A) IN GENERAL. On July 1, 2006, out of any funds in the Treasury not

otherwise appropriated, the Secretary of the Treasury shall transfer to the Secretary of Agriculture to carry out this subsection \$4,000,000, to remain available until September 30, 2009.

(B) RECEIPT AND ACCEPTANCE. – The Secretary shall be entitled to receive, shall accept, and shall use to carry out this subsection the funds transferred under subparagraph (A), without further appropriation.

## **APPENDIX C: CDC Coordinated School Health Model**

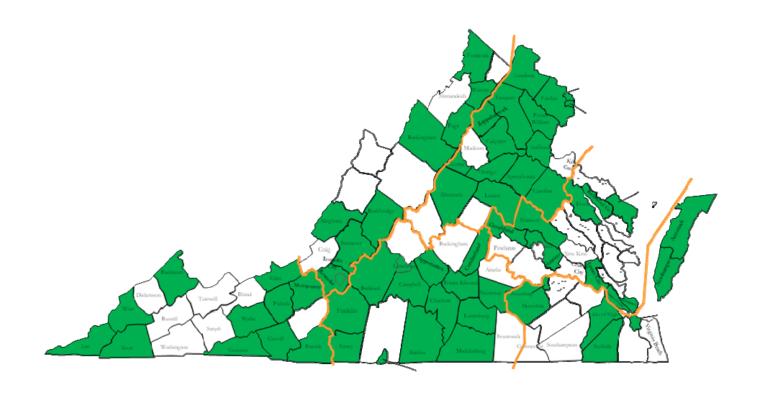


# **APPENDIX D: 2006 Local Wellness Policy Survey Results**

Proposed Goals	Rural n (%)*	Urban n (%)*	Total n (%)*
Nutrition Education	Kurar II (70)	Olban ii (/oj	10tai ii (/0)
Classroom teaching	9 (69.2)	73 (92.4)	82 (89.1)
Education, marketing, and promotions outside classroom	10 (76.9)	65 (82.2)	75 (81.5)
Teacher training	7 (53.8)	47 (59.5)	54 (58.7)
Other	10 (76.9)	0	10 (10.9)
Physical Activity	, ,		, ,
High school graduation requirements for physical education (p.e.)	2 (15.4)	31 (39.2)	33 (35.9)
Time, frequency, and/or intensity requirements for p.e.	4 (30.8)	39 (49.4)	43 (46.7)
Teacher-to-student ratio requirements for p.e.	1 (7.7)	8 (10.1)	9 (9.8)
Standards/requirements for p.e.	6 (46.2)	41 (51.9)	47 (51.1)
Staff training/certification for p.e.	4 (30.8)	27 (34.2)	31 (33.7)
Physical activity outside of p.e. (such as classroom-based activities)	6 (46.2)	45 (57.0)	51 (55.4)
Recess requirements (minutes per day or type of recess or free-play time) to promote physical activity	4 (30.8)	47 (59.5)	51 (55.4)
Walking or biking to school	8 (61.5)	0	8 (8.7)
Other	0	3 (3.8)	3 (3.3)
Nutrition Standards	O	3 (3.0)	5 (5.5)
Guidelines for nutritional value of food items and beverages	8 (61.5)	65 (82.3)	73 (79.3)
Guidelines for portion size	5 (38.5)	39 (49.4)	44 (47.8)
Guidelines for à la carte, vending, student stores, or concession stands	5 (38.5)	59 (74.7)	64 (69.6)
Guidelines for after-school programs, field trips, or school events	3 (23.1)	28 (35.4)	31 (33.7)
Guidelines for parties, celebrations, or meetings	4 (30.8)	43 (54.4)	47 (51.1)
Guidelines for food rewards	5 (38.5)	43 (54.4)	48 (52.2)
Guidelines for food-related fundraising	4 (30.8)	41 (51.9)	45 (48.9)
Guidelines for food or beverage contracts	5 (38.5)	44 (55.7)	49 (53.3)
Guidelines established by Virginia Action for Healthy Kids	3 (23.1)	26 (32.9)	29 (31.5)
Qualifications of food-service staff	3 (23.1)	22 (27.8)	25 (27.2)
Other	0	3 (3.8)	3 (3.3)
Other School-based Wellness Activities			
Improvement of access to school nutrition programs	5 (38.5)	43 (54.4)	48 (52.2)
Time and scheduling of meals (such as time allotted for students to eat)	3 (23.1)	35 (44.3)	38 (41.3)
Surroundings for eating (physical setting in which students eat)	2 (15.4)	29 (36.7)	31 (33.7)
Marketing of food and/or beverages (such as type of marketing permitted to students)	5 (38.5)	44 (55.7)	49 (53.3)
Sustainable food practices (environmentally friendly practices such as locally grown and seasonal foods, school gardens)	2 (15.4)	12 (15.2)	14 (15.2)
Access to facilities for physical activity after school hours	7 (53.8)	32 (40.5)	39 (42.4)
After-school programs (offering physical activity or nutrition)	4 (30.8)	45 (57.0)	49 (53.3)
Coordinated school health approach	8 (61.5)	47 (59.5)	55 (59.8)
School health councils (separate from school health advisory boards)	0	10 (12.7)	10 (10.9)
Community/family involvement (improve communications to families on	10 (76.9)	49 (62.0)	59 (64.1)
health or nutrition topics such as body mass index results)  Staff wellness (physical activities and/or nutrition services to benefit staff)	6 (46.2)	E6 (70.0\	62 (67 4)
Other	6 (46.2) 0	56 (70.9) 0	62 (67.4) 0

Goals are based on the Action for Healthy Kids' fundamentals for local wellness policy document. \*Percentages calculated based on rural (n=13), urban (n=79), total (n=92)

# APPENDIX E: Map of School Divisions Represented in this Study



# **APPENDIX F: General Local Wellness Policy Sample**

File: JHCF Policy Page 1 of 2

#### STUDENT WELLNESS

### I. Policy statement

The Staunton City School Board recognizes the link between student health and learning and desires to provide a comprehensive program promoting healthy eating and physical activity for all students in the division.

### II. Goals

The Staunton City School Board has established the following goals to promote student wellness.

### A. Nutrition Education

- Nutrition education is offered in the school cafeteria, as well as, in the classroom, with coordination between the foodservice staff and other school personnel, including teachers.
- Students and parents will receive consistent nutrition messages from all aspects of the school program.

### B. Physical Activity

• Students are given opportunities for physical activity during the school day through physical education (PE) classes, organized athletics and club activities, daily recess periods for elementary school students emphasizing physical activity, and the integration of physical activity into the academic curriculum where appropriate.

File: JHCF Policy Page 2 of 2

fields, and/or other areas accessible to students are being implemented

 A system of communicating with parents/guardians will be established at each school for the purpose of eliciting support and providing information on wellness.

#### D. Nutrition Guidelines

- Nutrition guidelines have been selected by the division for all foods available
  on every school campus during the school day. The objectives of the
  guidelines are to promote student health and reduce childhood obesity.
- The nutritional content of foods and beverages provided by school personnel during the school day shall reflect state and federal nutritional standards.

#### III. Implementation

The Central Office Administrator in charge of Health Services will be responsible for overseeing the implementation of this policy and will develop procedures for evaluating the wellness policy, including indicators that will be used to measure its success.

curriculum where appropriate.

Students are given information relating to community based activities.

### C. Other School-based Activities

- An adequate amount of time is allowed for students to eat meals in adequate lunchroom facilities.
- Physical activities and/or nutrition services or programs designed to benefit staff health have been considered and, to the extent practical, implemented.
- Alternatives to school-based marketing of foods and beverages, such as fundraising, and advertisements in school publications, school buildings, athletic

# **APPENDIX G: Specific Local Wellness Policy Sample**

## Hampton City School Division's Wellness Policy on Nutrition and Physical Activity

The Hampton City School is committed to providing school environments that promote and protect children's health, well-being, and ability to learn by supporting healthy eating and physical activity. Therefore, in accordance with Public Law 108-265, Nutrition and

Reauthorization Act of 2004, it is the policy of the Hampton City School Division that:

Child Nutrition Programs comply with federal, state and local requirements. Child Nutrition Programs are accessible to children.

The school division engages students, parents, teachers, food service professionals, health professionals, and other interested community members in developing, implementing, monitoring, and reviewing district-wide nutrition and physical activity policies.

All students in grades K-12 have opportunities, support, and encouragement to be physically active on a regular basis. Foods and beverages sold or served at school meet the nutrition recommendations of the Guidelines for Americans. Qualified school nutrition professionals provide students with access to a variety of affordable, nutritious, and appealing foods that meet the health and nutrition needs of students; will accommodate the religious, ethnic, and cultural diversity of the student body in meal planning; and will provide clean, safe and pleasant settings and adequate time for students to eat. To the extent practicable, all schools participate in available federal school meal programs to include the National School Breakfast Program and the National School Lunch Program (including after-school snacks). Schools provide nutrition education and physical education to foster lifelong habits of healthy eating and physical activity. Schools will establish linkages between health education, school meal programs, and related community services. The school environment is safe, comfortable, pleasing, and allows ample time and space for eating meals. Food and/or physical activity is not used as a reward or punishment.

## Hampton City School Division's Wellness Policy on Nutrition and Physical Activity

The Hampton City School Division is committed to providing school environments that promote and protect health. well-being, and liability to by supporting healthy eating **and** physical activity. Therefore, in accordance with Public Law 108-265, Child and WIC Reauthorization Act of 2004, it is the policy of the Hampton City School Division that: Child Nutrition Programs comply with federal, state and local requirements. Child Nutrition Programs are accessible to all children.

School division engages students, parents, teachers, food service professionals, health professionals, and other interested members in developing, implementing, monitoring, and reviewing district-wide nutrition and physical activity policies in grades K-12 have opportunities, support, and encouragement to be physically active on a regular basis. Foods and beverages sold or served at school meet the nutrition recommendations of the U.S. Dietary Guidelines for Americans

Qualified school nutrition professionals provide students with access to a variety of affordable, nutritious, and appealing foods that meet the health and nutrition needs of students; will accommodate the religious, ethnic, and cultural diversity of student body in meal planning; and will provide clean, safe, and pleasant settings and adequate time for students to eat. To the maximum extent practicable, all schools participate in available federal school meal programs to include the National School Breakfast Program and the National School Lunch Program (including after-school snacks). Schools provide nutrition education and physical education to foster lifelong habits of healthy eating and physical activity. Schools will establish linkages between health education, school meal programs, and related. The school environment is safe, comfortable, pleasing, and allows ample time and space for eating meals. Food physical activity is not used **as** a reward or punishment.

# Proposed

# Wellness Policy Guidelines

### **To Achieve These Goals:**

City Schools designed a three-year phase-in approach to support efforts to create a healthier environment for students and staff based on flexibility, credible guidelines from across the nation, and local needs. The guidelines will be divided into three parts:

- I. Nutrition Standards
- 1. 2. Nutrition Education
- 2. 3. Physical Activity and Education

Within each part, there will be three levels to be phased in over a three-year period.

Bronze (Minimum Requirements)

- 1. 2. Silver (More Healthful than Bronze)
- 2. 3. Gold (More Healthful than Silver)

School Meals, A la Carte, and After-school Snack Programs will be phased in the first year at the Silver

Vending, Classroom Celebrations. Class Rewards, and Fundraisers will be phased in the first year at the Bronze

During the third year, after-school sponsored events will be phased in at the Bronze level.

In addition, all activities and guidelines in this policy are consistent with the recommended actions outlined in *Healthy Kids* and the *Virginia Healthy Initiatives*. These policies will be implemented by a cooperative effort between the school administrators, Food and

Nutrition Services, the School Health Coordinators, the Physical Education Department, parents, and community volunteers.

Food and Nutrition Services will administer the production and service of school meals and after-school snacks through the National School Lunch Program and the National School Breakfast Program. They must meet, at a minimum, nutrition requirements established by local, state, and federal statutes and regulations. Qualified nutrition professionals will administer the school meal programs. As part of the district's responsibility to operate a food service program, continuing professional development should be provided for all nutrition professionals in schools. Staff development programs should include appropriate certification and/or training programs for child nutrition directors, school nutrition managers, and cafeteria workers, according to their levels of responsibility.



The School Health Coordinators and the Physical Education Department will facilitate the development of a process to provide parents with a health-related fitness report that includes body mass index.

The Physical Education Department will administer the physical activity and education program. They must meet, at a minimum, the requirements established by local, state, and federal statutes and regulations. Health and Physical Education Specialists will teach the classes.

There should be a wellness committee established in each school. It can be a sub-committee of the school health committee. The committee should include the following:

Building Administrator
Instructional Leader for the Health and Physical Education Department
School Nurse
Curriculum Specialist for Health and Physical Education
A Student

A Parent

A School Nutrition Professional

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The committee should: Assess the policy, and environmental needs of the school in order to implement the Wellness Policy. Develop a process to gather and record the relevant information needed to implement the Wellness Policy.

Each school committee should be established no later than October 1,2006.

## I. Nutrition Standards:

Meals served through child nutrition programs in

City Schools will offer and promote the following: Be appealing and attractive to children be served in clean and pleasant settings Meet, at a minimum, nutrition requirements established by local, state, and federal statutes and regulations Offer a variety of fruits and vegetables

# **Nutrition Standards (cont'd)**

- **Serve**only low-fat (1%) and fat-free milk or a nutritionally equivalent non-dairy alternative (to be defined by the USDA)
  - 1 Ensure that half of the served grains are whole grain

Through surveys and taste-tests of new entrees, schools engage students and parents in selecting foods sold through the meal programs

in order to identify new, and appealing food choices. In addition, Food and Nutrition Services will share information about the nutritional content of meal with parents and students. Such information will be made available on menus, and point-of-purchase materials.

**Breakfast:** To ensure that all children have breakfast either at home or at school, in order to meet their nutritional needs and enhance their ability to learn. Schools will:

Operate the School Breakfast Program Arrange bus schedules and utilize methods to serve school breakfasts that encourage participation. including serving breakfast in the classroom, and "grab and go" breakfast Will notify parents and students of the availability of the School Breakfast Program Through newsletter articles, take-home material, or other means, Food and Nutrition Services, in collaboration with schools. will encourage children participate in the School Breakfast Program.

**Free and Reduced-priced Meals:** Schools will make every effort to eliminate any social stigma attached to and prevent the overt school meals to all students: use nontraditional methods for serving school meals such as "grab-and-go "or classroom breakfast.

**Meal Times and Scheduling:** Schools will, where practicable:

Provide students with at least 10 minutes to eat after sitting down for breakfast and 20 minutes after sitting down for lunch Schedule meal periods at appropriate times, lunch should be scheduled between 11 a.m. and 1 p.m. Avoid scheduling tutoring, club, organizational meetings, or activities during mealtimes unless students may eat during such activities.

Schools will, where practicable: Fundraising Activities: To support children's health and school nutrition-education efforts, school

• Schedule lunch periods to follow recess periods in elementary schools

### Meal Times and Scheduling (cont'd)

- Provide students access to hand washing or hand sanitizing before they eat meals or snacks
- Take reasonable steps to accommodate the tooth-brushing regimens of students with special oral health needs (e.g. orthodontia or high tooth decay risk)

Sharing of Foods and Beverages: Schools will discourage students from sharing their foods or beverages with one another during meal or snack times, given concerns about allergies and other restrictions on some children's diets.

Foods and Beverages Sold Individually (i.e., foods sold outside of reimbursable school meals, such as through vending machines, cafeteria a la carte (snack) lines, fundraisers, school stores, etc):

**Elementary Schools:** Food and Nutrition Services will approve and provide all food and beverage sales to students in elementary schools. Given young children's limited nutrition skills, food in elementary schools should be sold as balanced meals. If available, foods and beverages sold individually should be limited to:

- Low-fat and non-fat milk
- Fruits
- · Non-fried vegetables
- Water
- · Whole grain-based snacks.

Middle and High Schools: In middle and high schools, all foods and beverages sold individually outside the reimbursable school meal programs (including those sold through a la carte [snack] lines, vending machines, student stores, or fundraising activities) during the school day, or through programs for students after the school day, will meet the following nutrition and portion size standards:

## **Beverages Allowed:**

- · Water or seltzer water without added caloric sweeteners
- Fruit and vegetable juices and fruit-based drinks that contain at least 50% fruit juice and that do not contain additional caloric sweeteners
- Unflavored or flavored low-fat or fat-free fluid milk and nutritional-equivalent nondairy beverages (to be defined by USDA)

## **Beverages Not Allowed:**

· Soft drinks containing caloric sweeteners

## Beverages Not Allowed (cont'd)

- Iced teas
- Fruit-based drinks that contain less than 50% real fruit juice or that contain additional caloric sweeteners
- Beverages containing caffeine, excluding low-fat or fat-free chocolate milk (which contain trivial amounts of caffeine)

## Foods:

A food item sold individually will:

- Have no more than 35% of its calories from fat (excluding nuts, seeds, peanut butter, and other nut butters) and 10% of
  its calories from saturated and trans fat combined;
- Have no more than 35% of its weight from added sugars;
- Contain no more than 230 mg of sodium per serving for chips, cereals, crackers, French fries, baked goods, and other snack items;
- Contain no more than 480 mg of sodium per serving for pastas, meats, and soups; and will contain no more than 600 mg of sodium for pizza, sandwiches, and main dishes.

A choice of at least two fruits and/or non-fried vegetables will be offered for sale at any location on the school site where food are sold. Such items could include, but are not limited to:

- · Fresh fruits and vegetables
- 100% fruit or vegetable juice
- Fruit-based drinks that are at least 50% fruit juice and that do not contain additional caloric sweeteners
- Cooked, dried, or canned fruits (canned in fruit juice or light syrup)
- · Cooked, dried, or canned vegetables (that meet the above fat and sodium guidelines).

### **Portion Sizes:**

Limit portion sizes of foods and beverages sold individually to those listed below:

- · One and one-quarter ounces for chips, crackers, popcorn, cereal, trail mix, nuts, seeds, dried fruit, or jerky
- · One ounce for cookies
- · Two ounces for cereal bars, granola bars, pastries, muffins, doughnuts, bagels, and other bakery items
- · Four fluid ounces for frozen desserts, including, but not limited to, low-fat or fat-free ice cream
- · Eight ounces for non-frozen yogurt
- · Twelve fluid ounces for beverages, excluding water
- The portion size of a la carte entrees and side dishes, including potatoes, will not be greater than the size of
  comparable portions offered as part of school meal. Fruits and non-fried vegetables are exempt from portionsize limits.



Fundraising activities either not involve food or will use only foods that meet the above nutrition and portion size standards for

foods and beverages individually. Schools will encourage fundraising activities that promote physical activity. The school district will make available list of ideas for acceptable fundraising activities.

a

Snacks: With an emphasis on serving fruits and vegetables as the primary snacks and water as the primary beverage, snacks served during the school day, in after-school care, or enrichment programs will make a positive contribution to children's diets and health. Schools will assess if and when to offer snacks based on timing of school meals, children's needs, children's ages and considerations. The school division will disseminate a list of healthful snack items to teachers, after-school program personnel, and parents (see attachment 2).

**Rewards:** Schools **will** not use foods or beverages as rewards for academic performance or good behavior, and will not withhold food or beverages (including food served through school meals) as a punishment. (see attachment 3)

**Celebrations.** Schools should limit celebrations that involve food during the school day.

All food items served must meet established standards. The district will disseminate a list of healthy party ideas to parents and (see attachment 4).

## **Nutrition Education and Promotion:**

Hampton City School Division aims to teach, encourage and support healthy eating by students. Schools will provide nutrition education and engage in nutrition promotion that: Is offered at each grade level as part of a sequential, comprehensive, standards-based program designed to provide students with the knowledge and skills necessary to promote and protect their health Is part of not only health education classes, but also classroom instruction in subjects such as math, science, language arts, social sciences, and elective subjects Includes enjoyable developmentally-appropriate, culturally-relevant, participatory activities, such as contests, promotions, taste testing, farm visits, and school gardens Promotes fruits, vegetables, whole grains, produce, low-fat and fat-free dairy products, healthy food preparation methods, and health-enhancing nutrition practices

Emphasizes caloric balance between food intake and energy expenditure Links school meal programs, other school foods, and nutrition-related community services Includes training for teachers and other staff.

**Communication with Parents:** The division will support parents' efforts to provide a healthy diet and daily physical activity for their children. The district will:

Offer healthy eating seminars for parents, send home nutrition information

Post nutrition tips on school

Provide nutrient analyses of school menus.

Schools should encourage parents to pack healthy lunches and snacks and to refrain from including beverages and foods that do not meet the stated nutrition standards for individual foods and beverages. The division will provide parents a list of foods that meet district's snack standards and ideas for healthy celebrations, parties, rewards, and fundraising activities. (see attachment 4) Nutrition messages **will**be put on or into materials sent home with students. In addition, the district will provide opportunities for parents to share their healthy food practices with others in the school community.

**Food Marketing in Schools:** School-based marketing will be consistent with nutrition education and health promotion. As such, schools will limit food and beverage marketing to the promotion of foods and beverages that meet the nutrition standards for meals or for foods and beverages sold individually the promotion of healthy foods, including vegetables, whole grains, and fat dairy products is encouraged.

Examples of Allowable marketing techniques may include, but are not limited to:

Vending machines covers promoting water
Pricing that promote healthy options on a la carte lines or vending machines
Sales of fruit for fundraisers
Coupons for discount gym memberships.

**Examples of marketing techniques Not include, but are not limited to:** 

Logos and brand names, vending machines, books or curricula, textbook covers, school supplies, scoreboards, school structures, and equipment

Educational incentive programs that provide food as a reward

Programs that provide school with supplies when families buy low-nutrition food products In-school television, such as Channel One Free samples or coupons Food sales (of minimal nutritional value) through fundraising activities.

#### **Physical Activity and Education:**

Due to student and adult sedentary behavior, the reduced amount of physical activity in the educational setting, reduction or elimination of recess time and physical education classes, the health status of students is declining. The best resource to reverse present day obesity trend is the making the Physical Activity and Education mandatory in grades K-12 and ensuring that each has certified Physical Educators. The system will provide opportunities for physical activity and education during the regular school day.

In order to meet the following goals, the Physical Activity and Education portion of Hampton City Schools' Policy will phased in over a three-year period:

- •Provide all students in grades Pre-K through 12, including students with disabilities, special needs and in alternative settings the opportunity to participate in moderate to vigorous physical activity on a regular basis each week during the entire school year.
- Schools provide a physical and social environment that encourages safe and enjoyable physical activity Provide a sequential curriculum that is consistent with the Virginia Physical Education Standards, Physical Fitness and the Governor's Fitness Program Provide certified Health and Physical Education instructors Provide a period of recess for Pre-K through grade five Provide before and after school programs Provide opportunities for Family and Community Activities Provide safe routes to and from school Integrate importance of Nutrition and Physical Activity into core subjects Provide and encourage Nutrition and Physical Activities for all district personnel

The program should be implemented at the Bronze level.

I.
Nutrition Standards for School Meals -National School Lunch Program (NSLP) and National School Breakfast Program (NSBP)

Bronze	Silver	Gold
(Minimum Requirements)	(More Healthful than Bronze)	(More Healthful than Silver)
school meals comply with USDA regulations and state policies.	All school meals comply with USDA regulations and state policies.	All school meals comply with USDA regulations and state policies.
Barriers to student participation in school nutrition programs are eliminated:  After leaving the serving line, students will have minutes to eat breakfast and 15 minutes to eat lunch.  The cafeteria is clean. orderly, and inviting.  Adequate seating is available to accommodate all students served during the lunch period.  While consuming their meals. students are allowed to converse with each other.  Whenever feasible, secondary schools should operate "closed" lunch periods to encourage students to eat a nutritious	Barriers to student participation in school nutrition programs are eliminated:  After leaving the serving line. students will have 10 minutes to eat breakfast and minutes to eat lunch.  The cafeteria is clean, orderly, and inviting.  Adequate seating is available to accommodate all students served during the lunch period.  While consuming their meals, students are allowed to converse with each other.  Whenever feasible, secondary schools should operate "closed" lunch periods to encourage students to eat a nutritious	Barriers to student participation in school nutrition programs are eliminated:  After leaving the serving line, students will have minutes to eat breakfast and 20 minutes eat lunch.  The cafeteria is clean. orderly. and inviting.  Adequate is available to accommodate all students during the lunch period.  While consuming their meals. students are allowed to converse with each other.  Whenever schools should operate "closed" lunch periods to encourage students to eat a nutritious
lunch.	lunch.	lunch.

<b>Breakfast:</b> At least 25% ofpre-packaged cereals offered contain: No more than 35% weight from total sugar (or less than 9 gm per calories) and At least 1 <b>gm</b> of fiber per serving. Foods containing whole grains are offered at least day a week.	<b>Breakfast:</b> At least of pre-packaged cereals offered contain: No more than 35% weight from total sugar (or less than 9 gm per calories) and <b>At</b> least I gm of fiber per serving. Foods containing whole grains are offered at least 3 days a week.	Breakfast: pre-packaged cereals contain: No more than weight from total sugar (or less than 9 per calories) At least I gm of fiber per serving. Foods containing whole grains are offered daily.
Fresh, canned, dried or frozen vegetables are offered at least once a week.	Fresh, canned, dried or frozen vegetables are offered at least 3 days a week.	Fresh. canned, dried. or frozen fruits or vegetables are offered daily.

Bronze (Minimum Requirements)	Silver (More Healthful than Bronze)	Gold (More Healthful than Silver)
Breakfast (cont'd): Low-fat (1%) and skim milk are offered daily.	Breakfast (cont'd): Low-fat (1%) and skim milk are offered daily.	Breakfast (cont'd): Low-fat (1%) and skim milk are offered daily.
Lunch: After leaving the sewing line, students should have at least 15 minutes to eat lunch.	Lunch: After leaving the serving line, students should have at least 20 minutes to eat lunch.	Lunch: After leaving the serving line, students should have at least 20 minutes to eat lunch.
An <b>entrée</b> with total fat <16 gm per sewing is offered at least I day a week.	An <b>entrée</b> with total fat <16 gm per serving is offered at least 2 days a week.	An <b>entrée</b> choice with total fat < I6 gm per serving is offered at least 3 days a week.
At least 2 chaices of fruits and/or vegetables are offered daily.	At least 3 choices of fruits and/or vegetables are offered daily.	At least 4 choices of fruits and/or vegetables are offered daily.
At least 4 different fruits and/or vegetables are offered weekly.	At least 5 different fruits and/or vegetables are offered weekly.	At least 5 different fruits and 5 different vegetables are offered weekly.
Fresh fruit or vegetables are offered at least 2 days per week.	Fresh fruit or vegetables are offered at least 3 days per week.	Fresh fruit or vegetables are offered at least 4 days per week.
A whole grain item is offered once a week.	A whole grain item is offered 3 times a week.	A whole grain item is offered daily.
[,ow-fat (1%) and skim milk are offered daily.	Low-fat (1%) and skim milk are offered daily.	Low-fat (IOh) and skim milk arc offered daily
Salad dressing contains no more than 15 gm of fat per ounce.	Salad dressing contains no more than 12gm of fat per ounce.	Salad dressings contain no more than 6 gm of fat per serving
<b>Desserts</b> with more than 5 gm of fat per serving are offered no more than 3 times a week.	Desserts with more than 5 gm of fat per serving are offered no more than twice a week.	Desserts with more than 5 gm of fat per serving are offered no more than once a week.

## II. Nutrition Standards for A La Carte: All other food and beverage items sold by the school food service program in the school cafeteria or other locations where school meals are served or eaten.

Bronze imu 🕾 Requirements)	Silver (More Healthful than Bronze)	Gold (Moe Healthful than Siver)
A carte items comply /ith USDA regulations pt hibiting the s ale of 'oods of Minimal Nutritional Value" wher school meals are served or eaten during the meal period.	A la carte items comply with USDA regulations prohibiting the sale of "Foods of Minimal Nutritional Value" where school meals are served or eaten during the meal period.	A la carte itms comply with USDA ranggations prohibiting he sale of "Foods of Mini mal Nutriional 'alue" where school meals are served eatend ang the meal period.
A la carte items are limited to:  The same portion size as any food served that day in the NSLP or NSBP. Fruits or vegetables Yogurt Other items – at least 25% of items offered meet all of the following criteria per serving:  Fat – except for nuts, seeds, and nut butters, not more than 35% of total calories from fat (or < 4 gm per 100 calories)  Sugar – Except for fruit without added sugar, not more than 35% of weight from total sugar (or < 9gm per 100 calories.  Calories – Not more tha 200 calorics per selling unit.	A la carte items are limited to:  • The same portion size as any food round that day in the NSLP or NSBP.  • Fruits or vegetables  • Yogurt  • Other items – at least 50% of items offered meet all of the following criteria per serving:  it – except for nuts, seeds, and nut butters, not more than 35% of total calories from fat (or < 4 gm per 100 calories)  Sugar – Except for fruit without added sugar, not more than 35% of weight from total sugar (or < 9gm per 100 calories.  Calories – Not more than 200 calories per selling unit.	A la carte items are limited to:  • The same portion size of any food item served that day in the NSLP or NSBP.  • Fruits or vegetables  • Low-fat milk and/or yogurt  • Other items – All items offered meet all   the following criteria per serving:  Fat – except for nuts, seeds, and nut butters, not more than 35% of total calories from fat (or ≤ 4 gm per 100 calories.  Sugar – Except for fruit without added sugar, no more than 35% of weight from total sugar (or ≤ 9gm per 100 calories.  Calories Not more than 200 calories per selling unit.
A la arte bieve rages are limited to:  Watter, non calorice  Milk, < 360 caloriies  Soy or Rice beverrages with not more th 35% of veight fromtotal sug < (<9 g m per 100 calories)  25% 5 % fruit juies	A la carte beven are limit d to:  Water, mc alor ic  Milk, < 3 Oalor ories  Soy or Riceve e rag with not more than 35% of veigt frfr total sugar (<9 g m per 100 calories)  50% - 1100% fr . jui es	A la ca so be werage esa relimited to:  We ter, non 1-sa loic  Mi ilk< 361 (b) cries  So by a Ricebe varages with not some that 5% of wight from al augar (< 9 g gaper 10 calaries)  30 00 fruit jic es

ill. Nutrition Standards for Foods and Beverages Sold in Vending Machines and School Stores	5

Bronze (Minimum Requirements)	Silver (More Healthful than Bronze)	Gold (More Healthful than Silver)
All vended foods and beverages are sold in compliance with USDA regulations prohibiting the sale of "Foods of Minimal Nutritional Value" where school meals are served or eaten during the meal period.	The sale of "Foods of Minimal Nutritional Value" is not allowed on school property in areas accessible to students:  In elementary schools and middle schools until after the end of the school days  In secondary schools until one hour after the end of the last lunch period	The sale of "Foods of Minimal Nutritional Value" is not allowed on school property in areas accessible to students:  In elementary schools and middle schools In secondary schools until after the end of the school day
Vended Foods – At least 50% of items must meet all of the following criteria per selling unit:	Vended Foods – At least 75% of items must meet all of the following criteria per selling unit:	Vended Foods – All items must meet all of the following criteria per selling unit:
Fat – except for nuts, seeds, and nut butters. not more than 35% of total calories from fat (or < 4 gm per 100 calories)	Fat – except for nuts, seeds, and nut butters. not more than 35% of total calories from fat (or < 4 gm per 100 calories)	Fat – except for nuts. seeds, and nut butters. not more than 35% of total calories from fat (or < 4 gm per 100 calories)
Sugar - Except for fruit without added sugar, not more than 35% of weight from total sugar (or < 9 gm per 100 calories)	Sugar - Except for fruit without added sugar. not more than 35% of weight from total sugar (or < 9 gm per 100 calories)	Sugar – Except for fruit without added sugar. not more than 35% of weight from total sugar (or < 9 gm per 100 calories)
Calories - Not more than 200 calories per selling unit.	Calories – Not more than 200 calories per selling unit.	Calories - Not more than 200 calories per selling unit.
<ul> <li>A la carte beverages are limited to:</li> <li>Water. non-caloric</li> <li>Milk. &lt; 360 calories</li> <li>Soy or Rice beverages with not more that 35% of weight from total sugar (&lt; 9 gm per 100 calories)</li> <li>25 - 50% fruit juices</li> <li>Electrolyte replacement beverages that contain no more than 48 gm of sweetener per 20-ounce selling unit may be offered in drink machines located near high school athletic training centers.</li> </ul>	A la carte beverages are limited to:  • Water, non-caloric  • Milk, < 360 calories  • Soy or Rice beverages with not more that 35% of weight from total sugar (< 9 gm per 100 calories)  • 50 – 100% fruit juices  • Electrolyte replacement beverages that contain no more than 48 gm of sweetener per 20-ounce selling unit may be offered in drink machines located near high school athletic training centers.	A la carte beverages are limited to:  • Water. non-caloric  • Milk, < 360 calories  • Soy or Rice beverages with not more that 35% of weight from total sugar (< 9 gm per 100 calories)  • 100% fruit juices  • Electrolyte replacement beverages that contain no more than 48 gm of sweetener per 20-ounce selling unit may be offered in drink machines located near high school athletic training centers.

#### IV.

#### **Bronze (Minimum Requirements)**

All foods and beverages are offered in compliance with USDA regulations prohibiting the sale of "Food of Minimal Nutritional Value" where school meals are served or during the meal period.

Students are encouraged to drink water throughout the day.

Foods and beverages used for classroom celebrations will:

Meet the following requirements

Not be provided until after the lunch
period

Food: Fat -except for nuts. seeds. and nut butters, not more than of total calories from fat (or 4 gm per calories)

Sugar Except for fruit without added sugar, not more than 35% of weight from total sugar (or 9 gm per calories)

Beverages are limited to: Water, non-caloric Milk. 360 calories Soy or Rice beverages with not more that 35% of weight from total sugar 9 gm per calories) 25 - fruit juices



IV. Nutrition Standards for Classroom Celebrations, Classroom Rewards, and Fundraisers

Bronze	Silver	Gold
(Minimum Requirements)	(More Healthful than Bronze)	(More Healthful than Silver)
All foods and beverages are offered in compliance with USDA regulations prohibiting the sale of "Food of Minimal Nutritional Value" where school meals are served or exten during the meal period.	All foods and beverages are offered in compliance with USDA regulations prohibiting the sale of "Food of Minimal Nutritional Value" where school meals are served or eaten during the meal period.	All foods and beverages are offered in compliance with USDA regulations prohibiting the sale of "Food of Minimal Nutritional Value" where school meals are served or eaten during the meal period.
Students are encouraged to drink water throughout the day.	Students are allowed to have individual water bottles in the classroom.	Students are allowed to have individual water bottles in the classroom.
Foods and beverages used for classroom celebrations will:      Meet the following requirements     Not be provided until after the lunch period	Foods and beverages used for classroom celebrations will:  Meet following requirements  Not be provided until after the lunch period	Foods and beverages used for classroom celebrations will:  • Meet following requirements • Not be provided until after the lunch period
Food: Fat -except for nuts. seeds. and nut butters, not more than 35% of total calories from fat (or < 4 gm per 100 calories)	Food: Fat – except for nuts, seeds. and nut butters. not more than 35% of total calories from fat (or < 4 gm per 100 calories)	Food: Fat -except for nuts. seeds, and nut butters. not more than 3596 of total calories from fat (or < 4 gm per 100 calories)
Sugar – Except for fruit without added sugar, not more than 35% of weight from total sugar (or < 9 gm per 100 calories)	Sugar – Except for fruit without added sugar. not more than 35% of weight from total sugar (or < 9 gm per 100 calories)	Sugar - Except for fruit without added sugar. not more than 35% of weight from total sugar (or < 9 gm per 100 calories)
Calories – Not more than 200 calories per selling unit	Calories -Not more than 200 calories per selling unit	Calories Not more than 200 calories per selling unit
Beverages are limited to:  Water, non-caloric  Milk. < 360 calories  Soy or Rice beverages with not more that 35% of weight from total sugar (< 9 gm per 100 calories)  25 – 50% fruit juices	Beverages are limited to:  Water. non-caloric  Milk, < 360 calories  Soy or Rice beverages with not more that 35% of weight from total sugar (< 9 gm per 100 calories)  50% - 100% fruit juices	Beverages are limited to:  Water. non-caloric  Milk. < 360 calories  Soy or Rice beverages with not more that 35% of weight from total sugar (< 9 gm per 100 calories)  100% fruit juices

### Nutrition Standards for Classroom Celebrations, Classroom Rewards, and Fundraisers Silver Gold (More Healthful than Bronze) (More

**Healthful than Silver**) All foods and beverages are offered in compliance with USDA regulations prohibiting the sale of "Food of Minimal Nutritional Value" where school meals are served or eaten during the meal period. foods and beverages are offered in compliance with USDA regulations prohibiting the sale of of Minimal Nutritional Value" where school meals are served or eaten during the meal period.

Students are allowed to have individual water Students are allowed to have individual water bottles in the classroom. bottles in the classroom.

Foods and beverages used for classroom

celebrations will: Meet following requirements Not be provided until after the lunch period Foods and beverages used for classroom celebrations will: Meet following requirements Not be provided until after the lunch period

Food: Fat -except for nuts, seeds. and nut butters. not more than 35% of total calories from fat (or 4 per calories) Food: Fat -except for nuts. and nut butters. not more than 200 total calories from (or 4 per calories) Sugar -Except for fruit without added sugar. not Sugar -Except for fruit without added sugar. not more than of weight from total sugar (or 9 more than 35% of weight from total sugar (or 9 per calories)

Calories -Not more than 200 calories per selling Calories Not more than calories selling unit unit

Beverages are limited to: Water. non-caloric Milk, 360 calories Soy or Rice beverages with not more that 35% of weight from total sugar 9 gm per calories) 50% -100% fruit juices Beveages are limited to: Water. non-caloric Milk. 360 calories Soy or Rice beverages with not more that 35% of weight from total sugar 9 per calories) 100% fruit juices

Nutrition Standards for Classroom Celebrations, Classroom Rewards, and Fundraisers (cont'd)

Bronze (Minimum Requirements)	Silver (More Healthful than Bronze)	Gold (More Healthful than Silver)
At least 25% of fundraising activities will not involve the sale of food and/or beverages.	At least 50% of fundraising activities will not involve the sale of food and/or beverages.	At least 75% of fundraising activities will not involve the sale of food and/or beverages.
Fundraising activities that involve the sale of food or beverages will not take place until after the end of the last lunch period.	Fundraising activities that involve the sale of food or beverages will not take place until after the end of the last lunch period.	Fundraising activities that involve the sale of food or beverages will not take place until after the end of the last lunch period.
Refreshments provided for students' participation in school events adhere to the Bronze level guidelines for vended foods and beverages.	Refreshments provided for students' participation in school events adhere to the Silver level guidelines for vended foods and beverages.	Refreshments provided for students' participation in school events adhere to the Gold level guidelines for vended foods and beverages.

Nutrition Education: Classroom, Cafeteria, Events During the School Day, Family and Community, and Staff Wellness

**Bronze** 

#### **Silver**

(More Healthful than Bronze)

#### (Minimum Requirements)

All students in grades Pre-K-12, including students with disabilities, special healthcare students with disabilities, special healthcare needs and in alternative education settings, have the opportunity to participate in a variety have the opportunity to participate in a variety of learning experiences that support the development of life-long healthful eating development of life-long healthful eating habits.

**Classroom:** The nutrition education curriculum is sequential and consistent with curriculum is sequential and consistent with the current Virginia State Board of Education the current Virginia State Board of Education approved health education teaching standards approved health education teaching standards for Pre-K through grade 12. for Pre-K through grade 12.

All students in grades Pre-K-12, including students with disabilities, special healthcare needs and in alternative education settings, have the opportunity to participate in a variety of learning experiences that support the development of life-long healthful eating habits.	All students in grades Pre-K-12, including students with disabilities, special healthcare needs and in alternative education settings, have the opportunity to participate in a variety of learning experiences that support the development of life-long healthful eating habits.	All students in grades Pre-K-12, including students with disabilities, special healthcare needs and in alternative education settings, have the opportunity to participate in a variety of learning experiences that support the development of life-long healthful eating habits.
Classroom: The nutrition education curriculum is sequential and consistent with the current Virginia State Board of Education approved health education teaching standards for Pre-K through grade 12.	Classroom: The nutrition education curriculum is sequential and consistent with the current Virginia State Board of Education approved health education teaching standards for Pre-K through grade 12.	Classroom: The nutrition education curriculum is sequential and consistent with the current Virginia State Board of Education approved health education teaching standards for Pre-K through grade 12.

#### **Gold (More Healthful than Silver)**

Students in grades Pre-K-12, including students with disabilities, special healthcare needs and in alternative education settings, have the opportunity to participate in a variety of learning experiences that support the development of life-long healthful eating habits.

**Classroom:** The nutrition education curriculum is sequential and consistent with the current Virginia State Board of Education approved health education teaching standards for Pre-K through grade 2.

Nutrition education is based on the Dietary Guidelines for Americans. Active learning involves the students in food preparation.	Nutrition education is based on the Dietary Guidelines for Americans. Active learning involves the students in food preparation.	Nutrition education is based on the Dietary Guidelines for Americans. Active learning involves the students in food preparation.
At least I hour of health education curriculum per quarter are provided for all students as part of a comprehensive health education curriculum that focuses on understanding the relationship between personal behavior and health.	At least 2 hours of health education curriculum are provided for all students as part of a comprehensive health education curriculum that focuses on understanding the relationship between personal behavior and health.	At least 3 hours of health education curriculum are provided for all students as part of a comprehensive health education curriculum that focuses on understanding the relationship between personal behavior and health.
At least 25% of nutrition education instruction involves hands-on activities that engage students in enjoyable, developmentally-appropriate. culturally relevant, participatory activities.	At least 50% of nutrition education instruction involves hands-on activities that engage students in enjoyable, developmentally-appropriate, culturally relevant, participatory activities.	At least 75% of nutrition education instruction involves hands-on activities that engage students in enjoyable, developmentally-appropriate, culturally relevant, participatory activities.

Cafeteria: Attractive current nutrition education materials are prominently displayed in the dining area and are changed at least every 9 weeks.	Cafeteria: Attractive current nutrition education materials are prominently displayed in the dining area and are changed at least every 6 weeks.	Cafeteria: Attractive current nutrition education materials are prominently displayed in the dining area and are changed at least every 4 weeks.
Students are encouraged to start the day with a healthful breakfast and to choose nutritious foods throughout the day.	Teachers discuss with students the nutrition education materials displayed in the dining areas.	Teachers collaborate with school nutrition staff to use cafeteria as a learning laboratory that allows students to apply critical thinking skills.
Students participate in taste tests to obtain their input on foods offered in the cafeteria.	Students participate in taste tests and/or surveys to obtain their input on foods offered in the cafeteria.	Students learn about the nutrition requirements for school meals and some students are involved in helping plan menus.
Events During the School Day: Each year, some individual classrooms participate in one or more events that are either centered on nutrition or include nutrition as a main component.	Events During the School Day: Each year, at least one school—wide interactive event is conducted that is either centered on nutrition or contains nutrition as a main component.	Events During the School Day: A community or media partner is involved in at least one school-wide event by helping with planning or actively participating in the event. Both before and after the event. related lessons are used to reinforce learning of the information presented at the event.
Events may include, but are not limited to: Traveling Health Exhibit Health professionals as guest speakers Health fairs Farm/food production field trips School gardens	Events may include, but are not limited to: Traveling Health Exhibit Health professionals as guest speakers Health fairs Farm/food production field trips School gardens	Events may include, but are not limited to: Traveling Health Exhibit Health professionals as guest speakers Health fairs Farm/food production field trips School gardens
Family and Community: Parents and family members are invited to join students for school meals.	Family and Community: Family members are encouraged to become actively involved in programs that provide nutrition education.	Family and Community: Community members are encouraged to become actively involved in school programs that provide nutrition education.

# Nutrition Education: Classroom, Cafeteria, Events During the School Day, Family and Community, and Staff Wellness (cont'd)

Bronze (Minimum Requirements)	Silver (More Healthful than Bronze)	Gold (More Healthful than Silver)
Families are provided with information that encourages them to teach their children about health and nutrition, and to provide nutritious meals for their families.	Opportunities are provided for parents to share their healthful practices with the school and community.	Nutrition information is provided to the broader community.
Staff Wellness: The school encourages each member of the staff (Certified and Non-certitied) to serve as a healthy role model for students.	Staff Wellness: The school encourages each member of the staff (Certified and Non-certified) to serve as a healthy role model for students.	Staff Wellness: The school encourages each member of the staff (Certified and Non-certified) to serve as a healthy role model for students.
The school staff wellness committee plans and implements ongoing activities for school staff that promote health and wellness.	The school staff wellness committee plans and implements ongoing activities for school staff that promote health and wellness.	The staff wellness committee develops, promotes and oversees a multifaceted plan to promote staff health and wellness. The plan is based on solicited input from school staff and outlines ways to encourage healthful eating; physical activity, and other elements of a healthful lifestyle among school staff.
The school staff is encouraged to participate in wellness plans	At least one school—wide activity is conducted each year that promotes staff wellness.	Wellness competitions for staff members be tween schoolr are planned and encouraged.

VI. Physical Activity and Education

Bronze (Minimum Requirements)	Silver (More Healthful than Bronze)	Gold (More Healthful than Silver)
General: All students in grades K through grade 12, including students with disabilities, special health care needs and in alternative educational settings, have the opportunity to participate in moderate to vigorous physical activity on a regularly scheduled basis each school week during the entire school year.	General: All students in grades K through grade 12, including students with disabilities, special health care needs and in alternative educational settings, have the opportunity to participate in moderate to vigorous physical activity on a regularly scheduled basis each school week during the entire school year.	General: All students in grades K through grade 12, including students with disabilities, special health care needs and in alternative educational settings, have the opportunity to participate in moderate to vigorous physical activity on a regularly scheduled basis each school week during the entire school year.
Physical Education Classes: The school provides a physical and social environment that encourages safe and enjoyable physical activity for all students. including those that are not athletically gifted. Students have the opportunity to participate in lifetime physical activities (e.g. walking, Pilates, swimming. golf, tennis. etc.)	Physical Education Classes: The school provides a physical and social environment that encourages safe and enjoyable physical activity for all students, including those that are not athletically gifted. Students have the opportunity to participate in lifetime physical activities (e.g. walking, Pilates, swimming, golf, tennis. etc.)	Physical Education Classes: The school provides a physical and social environment that encourages safe and enjoyable physical activity for all students. including those that are not athletically gifted. Students have the opportunity to participate in lifetime physical activities (e.g. walking, Pilates, swimming, golf, tennis. etc.)
The physical education curriculum is sequential and consistent with Virginia Physical Education Standards. Physical Fitness and the Governor's Fitness Program.	The physical education curriculum is sequential and consistent with Virginia Physical Education Standards, Physical Fitness and the Governor's Fitness Program.	The physical education curriculum is sequential and consistent with Virginia Physical Education Standards. Physical Fitness and the Governor's Fitness Program.
Certified Health and Physical Education Educators should teach the classes.	Certified Health and Physical Education Educators will teach the classes.	Certified Health and Physical Education Educators will teach the classes.
Students will receive 150 minutes of physical education per week for elementary students. Middle and high school students should receive 180 minutes per week of physical activity.	Students will receive 151 - 200 minutes of physical education per week for elementary students. Middle and high school students should receive 181 to 210 minutes per week of physical activity.	Students should receive 201 - 225 minutes of physical education per week for elementary students. Middle and high school students should receive 211 to 225 minutes per week of physical activity.

**Physical Activity and Education (cont'd)** 

Bronze (Minimum Requirements)	Silver (More Healthful than Bronze)	Gold (More Healthful than Silver)
During at least 25% of the physical education class, <b>students</b> should engage in moderate to vigorous physical activity class.	During at least 50% of the physical education class, students should engage in moderate to vigorous physical activity class.	During at least 75% of the physical education class, students should engage in moderate to vigorous physical activity class.
Physical activity facilities on school grounds are safe.	Students have an opportunity to participate in physical activity electives or clubs.	School physical fitness facilities are available whenever instruction is not occurring.
Adequate age-appropriate equipment is available for all students to participate in physical activity.	Implement an intramural program before and/or after school for middle and high school students.	Provide a comprehensive intramural/recreational physical activity program that meets the needs and interests of students and staff.
Concepts of life-long health and physical fitness are taught to all students.	Concepts of life-long health and physical fitness are taught to all students.	Concepts of life-long health and physical fitness are taught to all students.
Principles of team sports are taught and participation is encouraged.	Provide an interscholastic sports program that attracts comparable numbers of girls and boys.	Provide a comprehensive interscholastic sports program that attracts comparable numbers of girls and boys.
Throughout the Day: Classroom health education reinforces the knowledge and self-management skills needed to maintain a physically-active lifestyle and to reduce time spent on sedentary activities, such as watching television.	Throughout the Day: When circumstances make it necessary for students to remain indoors and inactive for two or more hours. the students are given periodic breaks during which they are encouraged to stand and be moderately active.	Throughout the Day: Opportunities for physical activity are regularly incorporated into other subject areas (i.e. math. language arts, social studies. etc.)

**Physical Activity and Education (cont'd)** 

Bronze (Minimum Requirements)	Silver (More Healthful than Bronze)	Gold (More Healthful than Silver)
Each day should start with some type of physical activity for both students and staff.	Each day should start with some type of physical activity for both students and staff.	Classroom teachers provide short physical activity breaks between lessons or classes, as appropriate.
Elementary teachers should be provided the "Take 10" curriculum	Elementary teachers use the "Take 10" curriculum.	Elementary teachers use the "Take 10" curriculum.
Staff development should be provided to implement "Take 10" curriculum.	Staff development is provided to implement "Take 1 0 curriculum.	Staff development is provided to implement "Take 10" curriculum.
Punishment: Physical activity is not used (e.g. running laps, push-ups) or withheld (e.g. recess, physical education) as punishment. This guideline does not apply to extracurricular sports teams.	Punishment: Physical activity is not used (e.g. running laps, push-ups) or withheld (e.g. recess, physical education) as punishment. This guideline does not apply to extracurricular sports teams.	Punishment: Physical activity is not used (e.g. running laps, push-ups) or withheld (e.g. recess. physical education) as punishment. This guideline does not apply to extracurricular sports teams.
Physical activity should be used as a reward in lieu of food or candy.	Physical activity should be used as a reward in lieu of food or candy.	Physical activity should be used as a reward ill lieu of food or candy.
Recess:  Pre-K through grade 5 should have at least 15 minutes of recess every day.	Recess: Pre-K through grade 5 should have at least 20 minutes of recess every day.	Recess: Pre-K through grade 5 should have at least 25 minutes of recess every day.
Moderate to vigorous physical activity is encouraged verbally and through the provision of adequate space and age-appropriate equipment.	Recess provides a variety of moderate to vigorous physical activities led by trained staff.	Recess provides a variety of moderate to vigorous physical activities Icd by trained staff.
Withholding recess should not be used as punishment.	Withholding recess should not be used as punishment.	Withholding recess should not be used as punishment.

**Physical Activity and Education (cont'd)** 

Bronze (Minimum Requirements)	Silver (More Healthful than Bronze)	Gold (More Healthful than Silver)
Before and After School: By providing adequate space, equipment, and opportunities, daily periods of moderate to vigorous physical activity for all students are encouraged.	Before and After School: All elementary, middle, and high schools offer extracurricular physical activity programs, such as physical activity clubs or intramural programs.	Before and After School: All elementary, middle, and high schools offer estracurricular physical activity programs, such as physical activity clubs or intramural programs.
Family and Community: Information is provided to help families incorporate physical activity into the lives of all household members.	Family and Community: Families and community members are encouraged to institute programs that support physical activity. such as walk to school programs.	Family and Community: A school/community committee should be formed to work with officials to continually improve opportunities for physical activity in and around the school and community.
Twice a year. parents will be asked to participate in a family or community physical activity event sponsored by the school or school division.	Three times a year. parents will be asked to participate in a family or community physical activity event sponsored by the school or school division.	Four times a year, parents will be asked to participate in a family or community physical activity event sponsored by the school or school division.
Twice a year, parents will be provided information with the latest data pertaining to nutrition and physical activity.	Three times a year, parents will be provided information with the latest data pertaining to nutrition and physical activity.	Four times a year, parents will be provided information with the latest data pertaining to nutrition and physical activity.
Safe Routes to School: The school district will develop an environment that is safe and conducive to students physically commuting to and from school activities.	Safe Routes to School: The school district will develop an environment that is safe and conducive to students physically commuting to and from school activities.	Safe Routes to School: The school district will develop an environment that is safe and conducive to students physically commuting to and from school activities.
Students/parents should be provided with traffic safety education for pedestrians and bicyclists.	Studentslparents will be provided with traffic safety education for pedestrians and bicyclists.	Provide/Produce maps of the best and safest routes for bicycles and walking paths to and from school.

Bronze (Minimum Requirements)	Silver (More Healthful than Bronze)	Gold (More Healthful than Silver)
Safe Routes to School (cont'd): Encourage students who live within a one-mile radius of the school to walk or ride a bike to school.	Safe Routes to School (cont'd): Encourage students who live within a one-mile radius of the school to walk or ride a bike to school.	Safe Routes to School (cont'd): Encourage students who live within a one-mile radius of the school to walk or ride a bike to school.

#### **Monitoring and Policy**

**Monitoring.** The superintendent or designee will ensure compliance with established district policy. At the district

City Schools will form a rom the school committees.

This committee will be responsible for compiling the yearly progress reports and forwarding to the superintendent or the principal or designee (should include, but not limited to a physical education teacher. building administrator, students. PTA. food service policy in his/her school and will report on the

Compliance to the HCS Wellness Committee.

At the district level, to ensure compliance with policy school

School nutrition services will report on this matter to the (or. if done at the school level, to the school areas and principal or designee). In addition, school district will report on School Meals Initiative (SMI) review and resulting changes. District has not received a SMI from the state agency within the past five years, the district request from the state that review be scheduled as so n as possible.

The superintendent or designee will provide a summary report every three years on district-wide compliance the district's established wellness policy, based on from schools within the district. That report will be provided to the school hoard and distributed to school health councils, parent/teacher organizations, school principals, and school health services personnel in the district

Review. To help with the development of school's plan. Each will conduct a Index (SHI). The SHI results and Policy will then be used to identify and prioritize school wellness needs and develop a plan to meet those needs.

At the end of the school year, the will assess the school's progress by using the *Physical Activity Scorecard*.

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assessments will be repeated every three years to help review wellness policy compliance, assess progress, and determine areas in d of improvement. The district, and individual schools within the district, will, as necessary, revise those polices and develop work is to facilitate their implementation.

This policy will occur with the advice and recommendations of the School Health Advisory Board.