

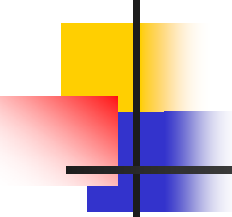
Childhood Obesity in Virginia

Virginia Commission on Youth
May 19, 2003

Georgia S. Hamilton

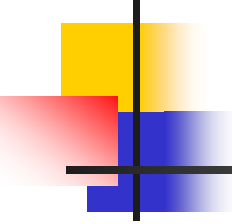


Prevalence of Obesity in the U.S.



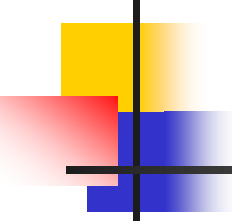
- Obesity among adolescents has tripled since 1980.
- 15% of children ages 6 to 11 were overweight in 2000, up 11% from 1994.
- The number of overweight teens aged 12 to 19 grew from 10.5 to 15.5% over the same period.

Sources: National Center for Health Statistics, *Prevalence of Overweight Among Children and Adolescents: United States, 1999-2000* (2000); Centers for Disease Control and Prevention & National Center for Health Statistics, National Health and Nutrition Examination Survey Data, available at <http://www.cdc.gov/nchs/data/hus/tables/2002/02hus071.pdf>.



Consequences of Obesity

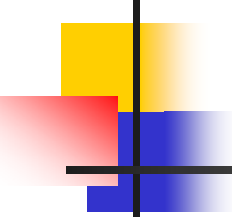
- Overweight adolescents have a 70% chance of becoming overweight adults, which increases to 80% if one or both parents are obese.
- There has been an increase in the number of children with health problems that typically were adult-onset due to overweight:
 - Type II diabetes
 - Cardiovascular disease risk factors



Consequences of Obesity

- These children also encounter psychosocial difficulties:
 - Increased risk for discrimination
 - Low self esteem
 - Poor body image
- This places them at significant risk for developing psychological disorders.

Source: Richard S. Strauss, Childhood Obesity and Self-Esteem, *Pediatrics* (January 2000).



Social Costs of Obesity

- Total direct and indirect costs attributed to overweight and obesity amounted to \$117 billion in 2000.*
- \$33 billion is spent annually on weight reduction products and services by individuals trying to lose weight (33 to 40% of women and 20 to 24% of men).**

*Source: U.S. Dept. of Health and Human Services, Press Release, *Overweight and Obesity Threaten U.S. Health Gains: Communities Can Help Address the Problem, Surgeon General Says*, available at: http://www.surgeongeneral.gov/news/pressreleases/pr_obesity.htm.

**Source: Centers for Disease Control and Prevention, *Chronic Diseases and Their Risk Factors* (1998).



Causes of Childhood Obesity

Decreases in physical activity

- Less than one third of Americans meet the federal recommendations for at least 30 minutes of moderate physical activity at least 5 days a week.*
- 43% of adolescents watch more than 2 hours of television each day.**
- Children, particularly girls, become less active as they move through adolescence.**

*Source: U.S. Dept. of Health and Human Services, Press Release, *Overweight and Obesity Threaten U.S. Health Gains: Communities Can Help Address the Problem*, Surgeon General Says, available at http://www.surgeongeneral.gov/news/pressreleases/pr_obesity.htm.

**Source: Surgeon General of the United States, *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*, available at http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_adolescents.htm.



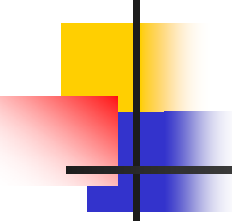
Causes of Childhood Obesity

Across the nation, physical education programs are on the decline:

- From 1991 to 1999, the percentage of students who attended daily physical education classes declined from 42% to 29%.*
- In 1995, less than 25% of high school students participated in daily school physical education. This number rose slightly to 27% in 1997.**
- Nationally, only 28 states have statutes regulating physical activity in the schools.**

*Source: CDC, Physical Activity and Good Nutrition: Essential Elements to Prevent Chronic Diseases and Obesity, *At a Glance* (2002).

**Source: Health Policy Tracking Service, *Issue Brief: Adolescent Health; State Activity, Physical Education* (June 1, 2000), available at <http://stateserv.hpts.org>.

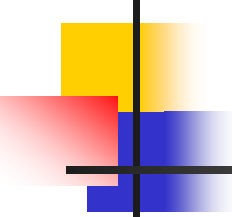


Causes of Childhood Obesity

■ Poor Nutritional Habits

- Only 2% of school-aged children meet the Food Guide Pyramid serving recommendations for all 5 food groups.
- Overall, the percentages of children meeting the recommended number of food group servings are:
 - 14% for fruit
 - 17% for meat
 - 20% for vegetables
 - 23% for grains
 - 30% for milk

*Source: U.S. Department of Agriculture; Food, Nutrition, and Consumer Services, *Foods Sold in Competition with USDA School Meal Programs* (2001).

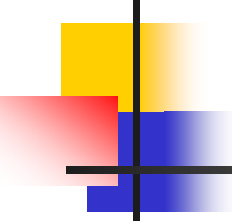


Causes of Childhood Obesity

- Added sugars (used as ingredients in processed foods or added to foods as they are consumed) contribute an average of 20% of total food energy.*
- Overall, 56 to 85% of children (depending on age and gender) consume soda on any given day.*
 - Over a third of teenage males consume more than 3 servings a day.
- More than 84% of children and adolescents eat too much fat, and more than 91% eat too much saturated fat.**
- 51% of children eat less than one serving of fruit a day.**

*Source: USDA, Food, Nutrition, and Consumer Services, *Foods Sold in Competition with USDA School Meal Programs* (2001).

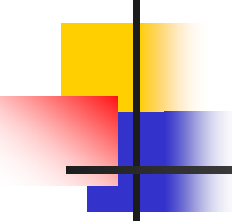
**Source: Centers for Disease Control (1999).



Nutritional Habits of Youth in Virginia

Virginia Department of Health,
*Comprehensive Study of the Nutritional
Status of Children (1998)*

- Fourth grade students at representative schools throughout the state were surveyed -- 853 children in 15 different schools.
- The study was conducted to develop baseline data on Virginia children's nutritional status prior to attempting any interventions.



Nutritional Habits of Youth in Virginia

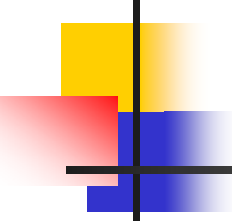
Study data suggests that over one-third of the children surveyed are overweight for their height, given their age and gender.

- 18.5% have Body Mass Index Scores* in the 85 to 95%ile range, suggesting that they are overweight.
- 15.2% have Body Mass Index Scores above the 95%ile range, suggesting that they are obese.
- Minority children were more likely to be overweight or obese.
- *Body Mass Index is calculated from measurements of height and weight. Health professionals often use a BMI “growth chart” to help make this assessment.



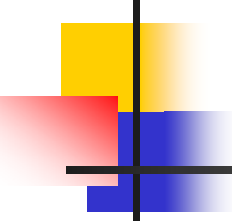
Nutritional Habits of Youth in Virginia

- Approximately 52 to 54% of the children surveyed report participating in physical education class and/or recess. The periods of activity last, on average, 30 minutes or longer.
- 92% of children reported engaging in some form of physical activity the day before. They were more likely to have engaged in an individualized sport or physical activity such as gymnastics, walking, running, or rollerblading (nearly all of the 92%), than a team sport (66%).



Nutritional Habits of Youth in Virginia

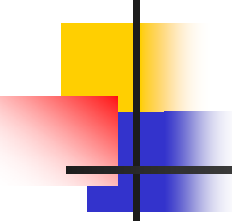
- The majority of children (84%) reported having watched television the previous day, typically for more than 2 hours. Forty-five percent also reported playing video games during that same day.
- Averages were 90 minutes for watching TV and 62 minutes for playing video/computer games.



Nutritional Habits of Youth in Virginia

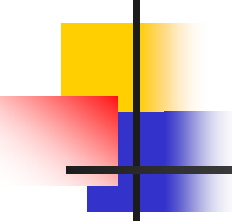
The Virginia Department of Health Women, Infants, Children (WIC) Program Nutritional Risk Report found that, as of March 30, 2002:

- 3.3% of the infants and 18.7% of the children enrolled were classified as obese.
- 13.6% of the infants and 76.6% of the children enrolled have poor eating habits.



Nutritional Habits of Youth in Virginia

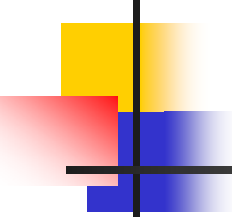
- The WIC *Cool Kids Intervention Program* conducted a pre-initiative assessment in 9 districts across the Commonwealth of the parents of overweight 2 to 4-year-old children enrolled in WIC.



Nutritional Habits of Youth in Virginia

Study findings:

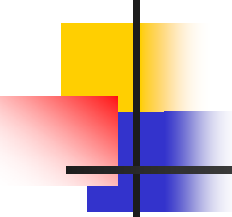
- Parents of overweight children are predominately overweight and obese (31% overweight, 58% obese).
- On average, these children spent 2.9 hours per day in sedentary activities such as television viewing, reading, and video games.
- Both parents and children were regular consumers of high fat foods (average: 10.6 and 11.3 times per week for adults and children, respectively).
- 54% of children's snacks were high in fat and sugar.



Importance of Schools

- Because young people spend the majority of their time in schools, educational institutions have a unique opportunity to encourage, motivate, and promote healthy choices among school-age children.
- The VA Dept of Education Office of Nutrition indicates that 619,000 school lunches and 162,000 school breakfasts are served every day to VA students [112 million lunches, 30 million breakfasts annually].*

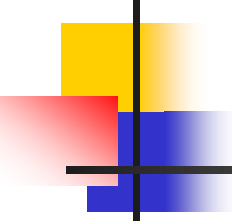
*Source: Virginia Department of Education, Office of Nutrition, *Frequently Asked Questions*, available at: <http://www.pen.k12.va.us/VDOE/Finance/Nutrition/faq.html>.



Importance of Schools

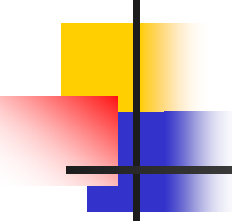
An investment in health is an investment in better academic performance. When children's basic nutritional and fitness needs are met, they have the cognitive energy to learn and achieve.

- Proper nutrition enhances academic performance – breakfast has been found to be particularly important to school performance and reductions in absenteeism and tardiness.*
- Increased physical activity leads to higher academic achievement – increased concentration, improved test scores, reduced disruptive behavior.
 - Improved test scores occur even when academic classroom instruction time is reduced to compensate.**



Challenges in the School Environment

Increased financial demands and limited resources – Nutrition is often overlooked when schools seek additional revenue. Competitive foods represent a source of income that can be spent for discretionary purposes not necessarily related to food service.



Challenges in the School Environment

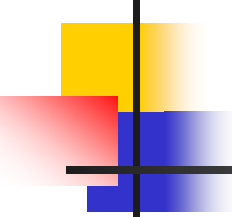
- “Pouring rights” contracts made with vendors such as soft drink companies often have provisions to increase the percentage of profits schools receive when sales volume increases. This creates incentive to promote soft drink consumption and to increase the times these products are available.
- Sixty-nine percent of schools obtain additional funds through business partnerships with food and beverage companies.*

*Source: National Conference of State Legislatures, *Junk Food in Schools* (Summer 2001), available at <http://www.ncsl.org/programs/health/junkfood.htm>.



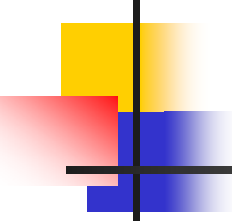
Challenges in the School Environment

- The USDA has found that the greatest challenge to the nutrition in schools are foods made available in competition with meals. There are two classifications:
 - Foods of minimal nutritional value (FMNVs) – provides less than 5% of the RDI for each of the 8 specified nutrients per serving (protein, Vitamin A, Vitamin C, niacin, riboflavin, thiamine, calcium, and iron).
 - All other foods – includes second servings of reimbursable school meals and foods that students purchase in addition to or in place of a reimbursable school meal.



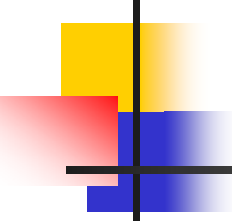
Challenges in the School Environment

- Competitive foods have diet-related health risks.
 - Students prefer fast foods, sweetened beverages, and salty snacks when they are available.
 - When children replace school meals with less nutritious foods and beverages, there is the risk that their daily dietary intake will be inadequate in key nutrients necessary for growth and learning.
 - When competitive foods are purchased in addition to school meals or in large quantities, there is likelihood of over-consumption and the risk of unhealthy weight gain.



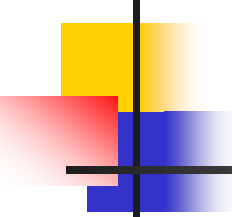
Challenges in the School Environment

- Competitive foods may stigmatize participation in school meal programs – creates the idea that school meals are only for low-income children rather than nutrition programs for all children.



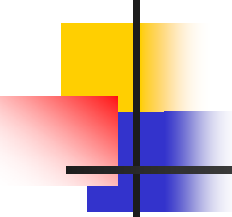
Challenges in the School Environment

- Under the regulations on FMNVs, state agencies and school food authorities (SFA) must establish rules and regulations as necessary to control the sale of FMNVs in food service areas during meal periods, in competition with reimbursable school meals. Additionally, states and SFAs may impose other restrictions on all foods sold at anytime throughout their schools.



Challenges in the School Environment

- The VA Board of Education (BOE) established standards for food sales in schools. These standards prohibit the sale of foods of minimal nutritional value anywhere in a school from 6:00 a.m. until the end of the scheduled breakfast period, and from the beginning of the first scheduled lunch period to the end of the last scheduled lunch period. The revenue from the sale of all foods and beverages during the protected periods must be credited to the school nutrition program account.



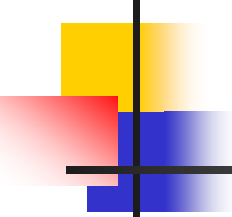
Challenges in the School Environment

- In Virginia, a food or beverage sold *a la carte* must either be a recognized component of the food based meal pattern or contain a minimum of 5% of the Daily Value, per serving or per 100 calories, of one of eight essential nutrients. The eight nutrients are: iron, protein, calcium, vitamin A, vitamin C, niacin, thiamine or riboflavin.



Challenges in the School Environment

- The following eight foods of minimal nutritional value (FMNV) may **not** be sold by the school nutrition programs: soda water; water ices, except those containing fruit or fruit juices; chewing gum; hard candy; jellies and gums; marshmallow candies; fondant; licorice; spun candy; and candy coated popcorn.
- Iced or hot coffee or tea may not be sold to students.



Challenges in the School Environment

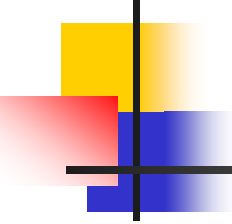
Preparation and serving spaces are frequently inadequate for preparing and serving appealing school meals to all students.

- In some schools inadequate seating capacity requires lunch periods to begin as early as 11 a.m. and end as late as 1:30 p.m.
- With inadequate dining facilities and insufficient time to eat, many students turn to less nutritious foods that are readily accessible in vending machines and snack bars.



Challenges in the School Environment

- **Inadequate meal periods** – In an attempt to increase classroom time, particularly in high schools, the length of meal periods is frequently reduced. Furthermore, many schools schedule activities during the lunch period; therefore children choose foods they can eat quickly, or skip meals altogether.
- **Lack of education standards for school food service managers and directors** – There are no national standards for these individuals, and levels of education vary from advanced degrees to less than high school education.

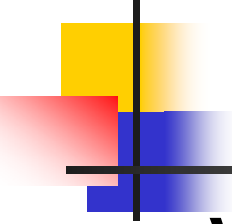


Initiatives in Virginia

Team Nutrition

- Participating schools receive USDA resources to plan and implement education activities.
- Programming focuses on the important role of nutritious school meals, education on nutrition, and a health-promoting school environment.
- The goal is to help students learn to eat healthy.

For more information on Team Nutrition, see the Website at <http://www.fns.usda.gov/tn/>.



Initiatives in Virginia

VA School Food Service Association (VSFSA)

- Certified branch of the American School Food Service Association (ASFSA)
- Consists of food service employees, managers, directors, nutritionists, and industry members who want to ensure good nutrition in VA children
- Many local chapters throughout the state provide training, networking, and professional growth opportunities
- Certification through VSFSA has minimum education/work experience requirements

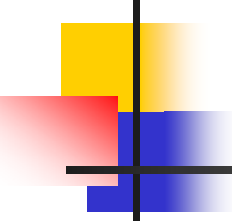


Initiatives in Virginia

VA Action for Healthy Kids*

- Task force directed by the Virginia Cooperative Extension.
- Members include representatives from
 - VA Dept of Health
 - VA Dept of Education
 - American Heart Association
 - American Cancer Society
 - U.S. Department of Agriculture
 - VA School Food Service Association and
 - VA Dietetic Association.

*For more information see their Website at <http://ext.vt.edu/actionforhealthykids/>

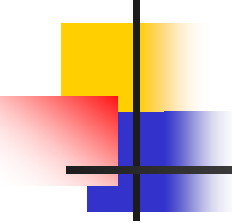


Initiatives in Virginia

VA Action for Healthy Kids

Three main goals for the task force:

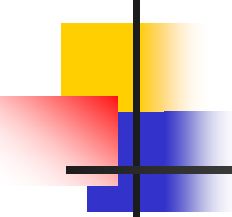
- Ensure that healthy snacks and foods are provided in vending machines, school stores, and other venues within the school control.
- Provide age appropriate and culturally sensitive instruction in health and physical education.
- Encourage the use of school facilities for physical activity programs offered by the school and/or community based organizations outside of school hours.



Initiatives in Virginia

Childhood Obesity Task Force (COTF) in Charlottesville, VA.

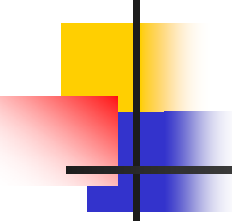
Has a diverse membership, including public schools (Health Advisory Board, PE teachers, food service), sports/recreation organizations, a community and a university hospital, pediatricians, dietitians, a legislative aide to a state delegate, the Virginia Extension Service, the Rural Health Outreach Program, and University of Virginia faculty.



Initiatives in Virginia

Childhood Obesity Task Force (COTF)

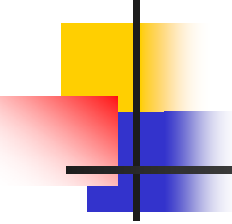
- Collected and analyzed height and weight data for three years (1996-1998) on 15 rural grade schools (~900 children/year) and 7 city grade schools (~300 children/year).
- Conducted a survey of parents of kindergarten to grade 8 children to help identify factors affecting eating habits and physical activity. Based upon returned surveys from 270 parents and further task force discussion, the COTF developed and presented a series of recommendations to the school board.



Initiatives in Virginia

Childhood Obesity Task Force (COTF)

- Conducted a half-day school/community summit on March 29, 2001.
- Awarded small grants provided by the local community hospital, Martha Jefferson Hospital, to six schools for pilot programs to reduce obesity.
- Is providing ongoing technical assistance to schools.

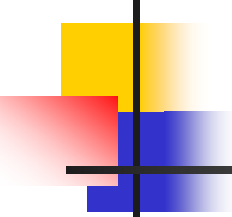


Initiatives in Virginia

VA Department of Health, Office of Family Health Services

Childhood Obesity Programs for the School-Aged Child: School Age Population Task Force is currently gathering data about health behaviors of children ages 6 to 18.

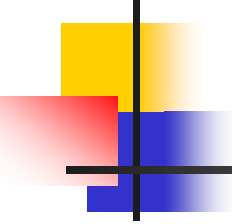
- Focus Group Study
- State Nutrition Survey
- Development of an Awareness Campaign



Initiatives in Virginia

VA Department of Health: Women, Infants, Children Program Initiatives

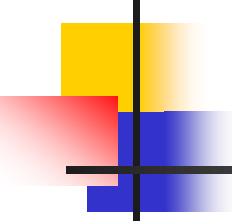
- *Cool Kids Program* – Targeted towards the parents of overweight 2 to 4-year-olds; provides education on improving diet and physical activity patterns within the family.
- *Smart Move! Program* – Conducted by Alexandria WIC program. Trainings and incentives have been offered to staff so that they can encourage participants to integrate physical activity into their daily lives. Includes employee challenges, training, and evaluation.



Initiatives in Virginia

VA Department of Health: Women, Infants, Children Program Initiatives

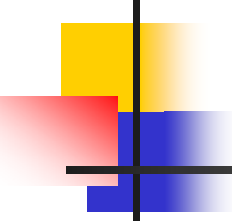
- FitWIC – 3 year grant from the USDA that was offered to five states, including Virginia.
 - Goals: Increase physical activity, increase eating of fruits and vegetables, increase water consumption, to implement client-based goal setting, and to promote and reinforce these principles in associated community organizations.
 - Trying to create strong parental role models.
 - Using counseling and group education to promote these efforts.



Initiatives in Virginia

VA Department of Health: Women, Infants, Children Program Initiatives

- Behaviors specifically promoted:
 - Active play of parents with children
 - Limited TV watching
 - Family meals that are fun
 - Increased consumption of water
 - Increased consumption of fruits and vegetables

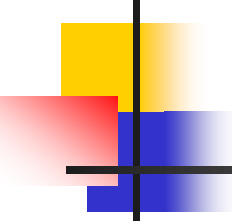


Initiatives in Virginia

VA Department of Health: Women, Infants, Children Program Initiatives

- Piloted in Fairfax. They selected one intervention and one control group.
- UVA formal evaluation found significant increases in parents' active play with children and water consumption in the intervention group.
- VA DOH is hoping to implement the program in all of the health districts.

For more information regarding WIC programs, see their Website at <http://vahealth.org/nutrition/>.

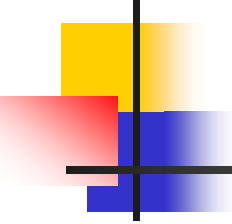


Initiatives in Virginia

Family Fitness Mini-grants (\$300 each)

- Sponsored by partnership of the VA PTA/PTSA and VA Association for Health, Physical Education, Recreation, and Dance.
- Available to local units, councils, and districts of the PTA/PTSA.
- Provides funds to plan family fitness programs and implement them.

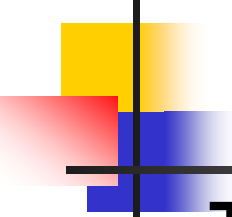
For more information regarding PTA grants, see the Website at <http://vapta.org/Committees/Health/minigrants.htm>.



Other Grants Available

Team Nutrition Training Grants

These can be used to finance training for school food service personnel, the creation of informational materials for students, the creation of training curricula for teachers, and more.

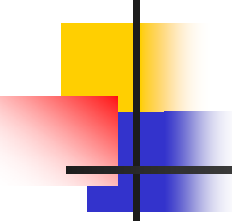


Other Grants Available

Team Nutrition Demonstration Projects –

States implement Team Nutrition initiatives through high visibility projects to provide positive nutrition messages through six channels:

- Classroom activities
- Food service initiatives
- School-wide events
- Home activities
- Community events
- Media events and coverage



Suggestions for Addressing Childhood Obesity in Virginia

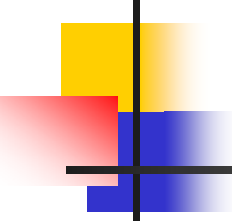
Initiatives for Schools

1. Integrate nutrition and physical activity into the regular curriculum, with time devoted to:
 - Healthy eating
 - Physical education
 - Nutrition and cooking skills



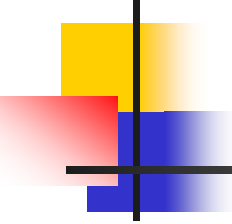
Suggestions for Addressing Childhood Obesity in Virginia

- **Examples of such efforts in other states:**
 - Michigan Team Nutrition – Pyramids Between the Pages
 - Louisiana Team Nutrition – Nutrition Across the Curriculum



Suggestions for Addressing Childhood Obesity in Virginia

2. Establish nutritional code of conduct within and around schools.
 - Provide more healthy food options on school campuses and at school events and more severely restricting sale of foods of minimal nutritional value, including in vending machines.
 - Strike a balance between the budgetary necessity of vending machines and working with vendors to stock more healthy choices.



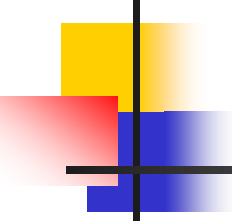
Suggestions for Addressing Childhood Obesity in Virginia

3. Create regulations that are more restrictive than the USDA in the sale of competitive foods.
 - Important to note that states with more restrictive competitive food policies, like LA, WV, GA, MS, maintain rates of participation in school meal programs that are higher than the national average.*



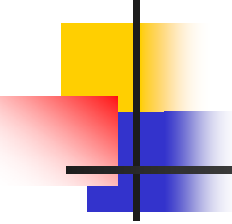
Suggestions for Addressing Childhood Obesity in Virginia

- WV Board of Education prohibits serving the following foods at school *at all times*: chewing gum, flavored ice bars, candy bars, food or drinks containing 40% or more, by weight, of sugar or other sweeteners, juice or juice products containing less than 20% of real fruit or vegetable juice, and foods with more than 8 grams of fat per ounce serving.
- Soft drinks are prohibited at all times in elementary and middle schools, and during breakfast and lunch periods in high schools.



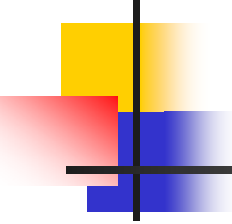
Suggestions for Addressing Childhood Obesity in Virginia

- CA Education Code includes a list of nutritious foods and requires that half of all foods offered for sale each day during regular school hours by any organization on school grounds must come from the list.
- Limits have been set on the number of times student organizations can sell food items on campus and on the number of different types of food items they can sell.



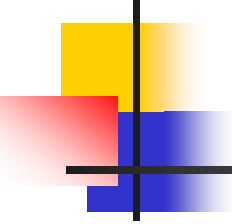
Suggestions for Addressing Childhood Obesity in Virginia

4. Offer creative ways to get students to eat a good breakfast.
 - Example: The “Breakfast in the Classroom” program in Harrisburg, PA. Breakfast is served daily via insulated bags in the classroom. Teachers in the district report that there is decreased tardiness, increased attendance, and improved class participation among students.



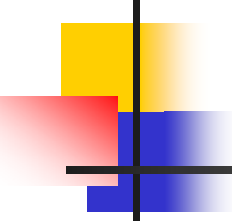
Suggestions for Addressing Childhood Obesity in Virginia

5. Require reasonable lengths for meal periods.
6. Hold “taste-test fairs” of nutritious foods.
7. Give district food service directors control over all foods sold on school campuses and direct all food service monies through food service departments.



Suggestions for Addressing Childhood Obesity in Virginia

8. Create a school referral system for obese children to go to local sports and activity groups.
9. Distribute teacher information packets on tackling obesity, and provide teacher training in:
 - Nutrition
 - Reducing obesity stigma



Suggestions for Addressing Childhood Obesity in Virginia

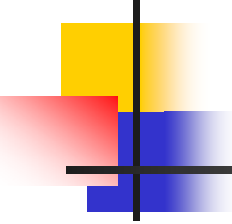
10. Require more physical activity.

- Require physical education at all school grades.
- Provide physical education with an appropriate student/teacher ratio (no more than 25:1).
- Promote after-school physical activity opportunities.
- “Exercise on prescription” schemes for obese children via school or primary care.
- “Open gym nights” in local schools for all community residents.



Suggestions for Addressing Childhood Obesity in Virginia

11. Public service advertising and promotion of healthier food choices on public TV.
12. Develop a health initiative on obesity similar to that of the smoking cessation programs.
13. Make changes to WIC food package to include more fresh fruits and vegetables, less high fat cheese and juice and appropriate state funds for WIC farmer's market program.



Recommendation:

- **Request the Virginia Action for Healthy Kids to compile and present information to the Commission on Youth on potential ways to address the problem of childhood obesity in Virginia.**