



## **Physical Activity**



# PANTA



### Assessment and Planning

- Promoting Healthy Youth, Schools, and Communities: A Guide to Community-School Health Councils. 2003. American Cancer Society. This guide is designed to assist school districts in developing new school health councils, strengthening existing councils, and maintaining them as effective entities that can support and guide school health practices, programs and policies. The guide includes a CD-ROM that aids in customizing worksheets and other materials. Visit the American Cancer Society Web site at www.cancer.org or the American School Health Association Web site at www.ashaweb.org.
- School Health Index. 2005. Centers for Disease Control and Prevention



(CDC). Easy-to-use enable school health councils and others to analyze the strengths

and weaknesses of their school health policies, curricula and services. It is available free to download or request a hard copy. A new interactive web version is also available at

www.cdc.gov/healthyyouth. Technical assistance is available upon request by contacting Jim Tackett with KDE CSH at (502) 564-2154 or james.tackett@education.ky.gov.

Advancing Community Public Health Systems in the 21<sup>st</sup> Century: Emerging Strategies and Innovations from the Turning Point Experience. Rhein, M, Lafronza, V, Bhandari, E, Hawes, J, Hofrichter, R. NACCHO, 2001. An innovative book that can be used as a

guide to enhance the ways communities provide healthcare, environments and strategies to enhance health in the 21st century. Published by the National Association of



County and City Health Officials. www.naccho.org, under Publications and Tools. (\$19.95)

**Preventing Obesity and Chronic Diseases** through Good Nutrition and Physical Activity. A Report of the National Center for Chronic Disease Prevention and Health Promotion. CDC, Revised July 2005. This report focuses on ways to provide better and more efficient prevention of chronic diseases by implementing simple, evidencebased strategies in various settings throughout different ages. http://www.cdc.gov/nccdphp/

publications/factsheets/prevention/ obesity.htm.

**Promoting Physical** Activity: A Guide for Community Action. U.S. Department of Health and Human Services. Public Health Services, Centers for Disease Control and Prevention. National Center for Chronic



Disease Prevention and Health Promotion, Division of Nutrition and Physical Activity. Champaign, IL: Human Kinetics, 1999. A guide promoting and explaining ways communities can mobilize to provide easy, inexpensive and readily available ways to

promote physical activity for all ages. http://www.cdc.gov/nccdphp/dnpa/ pahand.htm.

 Bright Futures in Practice: Physical Activity. A set of guidelines and a practical development approach to help health professionals, families, and others who care for children of all ages to be more effective in physical activity. <u>http://</u> www.brightfutures.org/physicalactivity/ about.htm



Training is available based on participant numbers. To request a training, contact Emma Walters with the Nutrition Services Branch at <u>Emma.Walters@ky.gov</u> or phone (502) 564-3827, extension 3854.

### State and Federal Laws

#### **State Laws**

- KRS 160.345 (11) Schools containing grades K-5, (kindergarten through fifth grade) or any combination thereof, must adopt and implement a "local wellness policy" providing for daily moderate to vigorous physical activity for students and encouraging healthy choices. If they desire, schools may use up to 30 minutes of the instructional day to provide for physical activity. Principals in these schools must annually assess each student's level of physical activity.
- KRS 158.856 Requires an annual evaluation and report on the nutrition program at all schools, and requires local school boards to discuss the findings of the nutrition report and solicit public comments. The law also requires that boards annually present a plan to improve the nutrition environment in the district. It must be presented on or before January 31 of each year.

#### **Federal Laws**

Child Nutrition and WIC Reauthorization Act of 2004 – Requires that the first day of the school year after June 30, 2006, each district will have established local school wellness policies for the schools in the district that include goals for nutrition education, physical activity, and other school-based activities.

The wellness policies will also include nutrition guidelines for all foods available on school campus during the school day. The development of the wellness polices should involve parents, students, school food service, school administrators and the community.

The group should also establish a plan for measuring implementation of the local wellness policies and designate one or more people to ensure the school meets the policies.

### Data

- 30 percent of Kentucky high-school students are overweight or at risk of becoming overweight.<sup>1</sup>
- 35 percent of low-income children between 2 and 5 years of age in Kentucky are overweight or at risk of becoming overweight.<sup>2</sup>
- 44 percent of Kentucky's children had not participated in sufficient vigorous physical activity during the past 7 days.
- 79 percent of Kentucky's children had not participated in sufficient moderate physical activity during the past 7 days.
- 11 percent of Kentucky's children did no physical activity at all during the past 7 days.
- 65 percent of Kentucky's children are not enrolled in regular physical education classes.
- 76 percent of Kentucky's children do not have physical education daily.

Overall, about 70 percent of Kentucky men (67.9 percent nationally) and 55 percent of Kentucky women (51.3 percent nationally) are overweight or obese. Some 62 percent of white Kentucky adults and 71 percent of black adults are overweight or obese. The percentage of blacks nationwide is about the same, and 57.7 percent of whites are overweight or obese.

More than 14.5 percent of Kentucky high school students are overweight, compared with 10.5 percent nationwide. Some 15.3 percent of Kentucky high school students are at risk of becoming overweight, compared with 13.6 percent nationwide.

Only 35 percent of Kentucky high school students are enrolled in physical education classes, compared with 51 percent nationally. Only 26 percent of Kentucky high school girls are in physical education classes, compared with 48 percent nationally.

Kentuckians with less education are more likely be more overweight and less likely to be active. Only 29 percent of Kentucky adults get the recommended amount of physical activity, compared with 45 percent nationally.



Kentuckians' weight problems translate into health problems: 34 percent have arthritis, the nation's second highest rate; 33 percent have high blood pressure, the fifth highest; 30 percent have high cholesterol, the 18th highest.

Results of the National Health and Nutrition Examination Survey (NHANES) for 1999–2002 indicate that:

- Non-Hispanic black (21 percent) and Hispanic-American adolescents (23 percent) ages 12-19 were more likely to be overweight than non-Hispanic white adolescents (14 percent).
- Hispanic-American children ages 6 to 11 were more likely to be overweight (22 percent) than non-Hispanic black children (20 percent) and non-Hispanic white children (14 percent).
- In addition to the 16 percent of children and teens ages six to 19 who were overweight in 1999-2002, another 15 percent were considered at risk of becoming overweight (a BMI-for-age between the 85th and 95th percentiles).
- Meanwhile, the percent of children who are overweight (defined as BMI-for-age at or above the 95th percentile of the CDC Growth Charts) continues to increase. Among children and teens ages 6 -19, 16 percent (over 9 million) are overweight according to the 1999-2002 data, or triple what the proportion was in 1980.

Other data results indicate an estimated 16 percent of children and adolescents ages 6–19 years are overweight. For children, overweight is defined as a body mass index (BMI) at or above the 95th percentile of the CDC growth charts for age and gender. See Table 1 below for a review of the survey results.

Table 1. Prevalence of overweight among children and adolescents ages 6–19 years, for selected years 1963–1965 through 1999–2002 (NHANES)						
	Age (years) <sup>1</sup>	1963–1965 1966–1970 <sup>2</sup>	1971–1974	1976–1980	1988–1994	1999–2002
	6–11	4%	4%	7%	11%	16%
	12–19	5%	6%	5%	11%	16%

<sup>1</sup>Excludes pregnant women starting with 1971-74. Pregnancy status not available for 1963-65 and 1966-70.

<sup>2</sup>Data for 1963-65 are for children 6-11 years of age; data for 1966-70 are for adolescents 12-17 years of age, not 12-19 years.

### Evidence-Based Curricula and Best Practices

The following are examples of available evidence-based curricula:

- Coordinated Approach To Child Health (CATCH) – K-5: Designed to promote physical activity, healthy food choices, and preventing tobacco use in elementary school children. By teaching children that eating healthy and being physically active every day can be fun. The CATCH program has proven that establishing healthy habits in childhood can promote healthy behaviors that carry over into adulthood. www.sph.uth.tmc.edu/catch/
- **Planet Health** Middle School: Developed by the Harvard Prevention Research Center



as a middle school interdisciplinary nutrition and physical activity curriculum. It focuses on skills and competencies, introduces and reinforces simple health messages, promotes active learning and literacy, and

integrates classroom and family learning experiences. **www.humankinetics.com** 

• Sports, Play and Active Recreation for Kids (SPARK) – K-8 and after school: The

focus of SPARK is the development of healthy life-styles, motor skills and movement knowledge, and social and personal skills. www.sparkpe.org



- Eat Well & Keep Moving K-5: Developed by the Harvard Prevention Research Center as an upper elementary school interdisciplinary nutrition and physical activity curriculum. Involves collaboration among food services, physical education, and parent/community involvement.<u>www.humankinetics.com</u>
- **Take 10!** K- 5: A classroom-based physical activity program that maintains a focus on academics. Includes 10-minute periods of varied activity and movement in all academic areas that requires minimal teacher preparation. <u>www.take10.net</u>
- Michigan Model for Comprehensive School Health Education – K-12th grade comprehensive school health education curriculum. The K-6 curriculum is organized around the 10 content areas of comprehensive school health education. The 7-12 curriculum is organized around the six critical behaviors identified by the CDC. www.emc.cmich.edu
- **Recharge** After school for grades 3-6: Team-based innovative after-school program filled with activities that teach kids the

core concept of how energy in – good nutrition – makes for energy out – physical activity. It is available from Action for Healthy



Kids and the National Football League. **www.actionforhealthykids.org** 

The following are examples of best practices:

• VERB<sup>™</sup> It's what you do – A national, multicultural, social marketing campaign coordinated by the U.S. Department of Health and Human Services' Centers

for Disease Control and Prevention (CDC). The VERB campaign encourages young people ages 9–13 (tween years) to be physically



active everyday. The campaign combines paid advertising, marketing strategies, and partnership efforts to reach the distinct audiences of tweens and adults/ influencers. For more information go to: <u>http://www.cdc.gov/youthcampaign/</u>. Visit the tween site at <u>http://www.verbnow.com/</u>

 Powerful Girls, Powerful Bones – A program designed to teach young girls how to eat right, be physically active and achieve their best when it comes to the health of their

bones. Aimed at teaching healthy and fun ways to learn weight bearing activities and the nutrition needed in order to avoid osteoporosis. For more information go to: http://www.cdc.gov/powe



http://www.cdc.gov/powerfulbones/

 Healthy Kids Challenge – A step-by-step guide that involves school administrators and board members, teachers, school food service directors, family, children and community partners to build healthy



communities. The majority of activities are written for grades K-5, yet can be adapted to any age group. You can receive free information at www.healthykidschallenge.com If you have specific questions, or needs, please call 888-259-6287 or via e-mail at **vickie@st-tel.net**. There are several support documents available including: "Letter to Administrators," "Benefits to Schools," Need for HKC Statistics," and "The Challenge Starter Tool".

- President's Challenge This communitybased program encourages youth from ages 6 through 17 to begin and continue daily exercise and activity, to reach healthy levels of cardiovascular endurance, body composition, muscular strength/endurance, and flexibility. There are currently three different programs offered with the President's Challenge: Active Lifestyle Program, Physical Fitness Program, and Health Fitness Program. Any of the above programs may be selected to be promoted in your community.
  www.presidentschallenge.org
- Safe Routes to Schools Is a popular program spreading across Canada and the U.S. designed to decrease traffic and pollution and increase the health of children and the community. The program promotes

walking and biking to school through education and promotes incentives that show how much fun walking and biking can be. The program also addresses the safety concerns of parents by encouraging



greater enforcement of traffic laws, educating the public, and exploring ways to create safer streets. www.saferoutestoschool.org

 Walking School Bus - What is a Walking School Bus? It is a small group of students accompanied by one or more adults on their walks to and from school. Typically, the students live near one another. Chances are, they already walk to school, with or without adult supervision. The benefit of the Walking School Bus is that it provides a consistent, supervised system in which children can walk under the watchful eye of an adult– usually a parent or caregiver. http://www.walkingbus.org/index.html



### Policy and Environmental Change

Policy and environmental change interventions are population-based approaches that complement and strengthen other public health programs and activities that traditionally have focused on individual behavior change.

Policies include laws, regulations, and formal and informal rules. Examples include all schools offering physical education during school hours; laws and regulations for what should be included in vending machines at schools; laws and regulations to restrict smoking on school campuses; or regulations permitting students to carry and administer their own asthma medications.

Environmental changes are implemented to improve the economic, social, or physical environments of the school. Examples include incorporating walking paths or recreation areas into school campuses; offering low-fat foods in school cafeterias; removing designated smoking areas from school campuses; or reducing exposure to asthma triggers, such as secondhand smoke in schools.

#### **Model Policies**

Suggested school health policies for schools to adapt and implement to provide physical activity opportunities for students and staff include:<sup>3</sup>

- Students in grades K-12 having opportunities, support, and encouragement to be physically active on a regular basis.
- Schools providing physical education to foster lifelong habits of physical activity.
- Classroom health education will complement physical education by reinforcing the knowledge and selfmanagement skills needed to maintain a physically active lifestyle and to reduce time spent on sedentary activities, such as watching television.
- Opportunities for physical activity to be incorporated into other content lessons.
- Classroom teachers providing short physical activity breaks between lessons or classes, as appropriate.

- Elementary school students having at least 20 minutes per day of supervised recess, preferably outdoors. During recess, schools should encourage moderate to vigorous physical activity verbally, and through the provision of adequate space and equipment.
- Elementary, middle, and high schools offering extracurricular physical activity programs, such as physical activity clubs or intramural programs.
- After-school childcare providing and encouraging daily periods of moderate to vigorous physical activity for all participants.

• Teachers and other school and community personnel will not use physical activity (e.g. running laps, push-ups) or withhold opportunities for physical activity (e.g. recess, physical education) as punishment.



### The American Academy of Pediatrics Policy Statement (excerpt)<sup>4</sup>

The incidence of obesity and overweight among American children has tripled since the 1960's, according to the National Health Nutrition Examination Survey (2000). To address this issue the American Academy of Pediatrics (AAP) issued a policy statement in May 2006, Active Healthy Living: Prevention of Childhood Obesity through Increased Physical Activity.

This statement encourages all doctors and health care professionals to promote better nutrition and more physical activity among children by working with families and communities, especially through in-school programs.

This policy statement also advised doctors to check children's weight, diet and level

of physical activity more regularly. It encourages doctors to work with families at identifying what impedes healthy living and to suggest positive moves when needed.

The statement stresses the importance of parental example—parents who eat well and adopt a healthy lifestyle serve as excellent role models for their children. The policy statement also asks that doctors encourage:

- Bringing back compulsory physical activity programs
- Community and school programs aimed at getting children active
- Make sure school recess times are protected

- More research into the prevention of childhood obesity and more funding for it
- More safe recreational facilities which can allow children to become more active, such as parks, playgrounds, cycling paths, etc.
- School programs aimed at good nutrition
- School wellness councils



### Resources

Internet Resources Last accessed 9/1/06

AAHPERD, 2006 Shape of the Nation Report **www.aahperd.org** 

ADA EVIDENCE LIBRARY www.adaevidencelibrary.com

American Academy of Pediatrics www.aap.org

American Heart Association **www.americanheart.org** 

Body and Mind Teachers Corner **www.bam.gov/teachers/index.htm** 

Body Recall Inc www.bodyrecallinc.org

CDC Division of Adolescent and School Health http://www.cdc.gov/HealthyYouth/

CDC Division of Nutrition and Physical Activity http://www.cdc.gov/nccdphp/dnpa/ Fit'N Active Kids <u>www.safetylca.org/i/</u> 200406.asp?loc=i&tag=i2&pg=newsletters.asp&page= 200406childsafety.htm

Fitnessgram/Activity Gram www.cooperinst.org/ftgmain.asp

Kentucky Association for Health, Physical Education, Recreation and Dance (KAHPERD) <u>www.kahperd.com</u>

Kentucky Association for School Health **www.kentuckyschoolhealth.org** 

Kentucky Department for Public Health **www.chfs.ky.gov** 

Kentucky Department of Education **www.education.ky.gov** 

Kentucky Education Television Network **www.ket.org** 

National Association for Sport and Physical Education <u>www.aahperd.org/naspe/template.cfm</u> National Coalition for Promoting Physical Activity: **www.ncppa.org/about.html** 

Partnership for a Fit Kentucky: www.fitky.org

The Community Guide: www.thecommunityguide.org

Wellness Junction: www.wellnessjunction.com

#### **Additional Resources**

Last accessed 9/1/06

Cohen, J. **Overweight Kids: Why Should We Care?** California Research Bureau, 2000: 1-42. A review of the problem of obesity among children and how we can provide solutions to the problem.

www.library.ca.gov/crb/00/08/00-008.pdf

**DHHS Research**, major resources, questions and answers on Policy and Administration: **www.hhs.gov**.

#### Fit, Healthy, and Ready to Learn: A School

*Health Policy Guide*. 2006 National Association of State Boards of Education. Is designed to help state and local decision makers establish effective policies that promote high academic



achievement and lifelong health habits. It provides guidance on general school health policies and program development, as well as specific information on physical education program design, safety requirements, food service programs, smoking cessation services, and lifelong sun safety habits. **www.nasbe.org**.

Fletcher GF, Balady G, Blair SN, Blumenthal J, Caspersen C, Chaitman B, Epstein S, Froelicher ESS, Froelicher VF, Pina IL, Pollock ML. **Statement on Exercise: Benefits and Recommendations for Physical Activity Programs for all Americans. American Heart Association Medical/Scientific Statement, 1996**. A paper on the benefits of exercise and how each American, regardless of age, can benefit by its daily implementation. A combination of recommendations and simple applications. <u>http://circ.ahajournals.org/cgi/</u> <u>content/full/94/4/857</u>

Foo, MA, Robinson, J, Rhodes, M, Lew, LS, Chao, M, Dy, SS, Eir, W. **Identifying policy opportunities to increase physical activity in the Southeast Asian Community in Long Beach, California.** *Journal Of Health Education,* 1999; 30 (2 Supplement): S58-S63. Innovative ways to increase physical activity through changes in policy and the built environment. Many different crossover techniques to be applied in other communities. Frank, LD, Engelke, P. <u>http://www.cdc.gov/cdp/</u> <u>he.htm,</u> enter report name in Simple Search.



How Land Use and Transportation Systems Impact Public Health: A Literature Review



of the Relationship Between Physical Activity and Built Form. ACE's Working Paper #1. CDC, 2000: 147 pp. A paper on the importance of the built environment in improving daily physical activity and health. As well as how the misuse of land use and transportation can

limit physical activity and have adverse effects on the national health levels. Review pdf at: <u>http://www.cdc.gov/nccdphp/dnpa/physical/</u> <u>health\_professionals/active\_environments/</u> <u>aces.htm</u>

*Heart Monitors*. Heart monitors can equip you with the tools to develop personalized health and fitness portfolios, objectively assess your patient's health and fitness, and track individual performance. The individual will learn to monitor and maintain a health-enhancing level of physical fitness and take personal ownership of working to improve their fitness and skill level. Heart monitors should only be purchased and used in conjunction with a recommended physical activity program.

#### Increasing Physical Activity Through Community Design: A Guide for Public Health

*Practitioners*. This guide focuses on helping to create an active community environment, looking at the broader scope of where there are and aren't opportunities to safely walk and bicycle. It involves land use design, retrofitting the transportation infrastructure, funding, and

much more. This step-bystep guide discusses how health professionals, community leaders, local planners, transportation agency officials, and citizens can work together to develop active community environments. www.bikewalk.org. Click



www.bikewalk.org. Click NCBW Publications.

Kentucky's Nutrition and Physical Activity State Action Plan February 2005. This document includes Kentucky specific data, which will provide a basic understanding of the severity of the problem facing Kentucky, describes structural changes in society that have contributed to the problem, describes the CDC framework for addressing the problem and lists the goals, objectives and strategies Kentucky has set to address these issues. www.fitky.org.

Kentucky School Board Association, Model Policies on School Health. Contact Dara Bass, Director of Policy and Procedure Service, 1-800-372-2962, extension 220.

Lindberg, Rebecca, MPH, RD. Active Living: On the Road with the 10,000 steps program. *Journal of the American Dietetic Association*, 1000;100(8). Implementation of the 10,000 steps a day program under

the Surgeon General's recommendations. Improving health with simple steps and



providing an active living guide where every little bit counts. <u>http://xnet.kp.org/</u> <u>permanentejournal/spring03/steps.html</u>

#### Partnership for a Fit Kentucky (PFK).

Partnership for a Fit Kentucky is an umbrella organization with the role of being the clearinghouse for all nutrition and physical

activity interventions throughout the state. PFK collaborates with Kentucky's Action for Healthy Kids (AFHK) to reduce duplication and maximize resources in order to create systemic and strategic changes that



result in healthier school environments. For more information about PFK contact Elaine Russell with the Obesity Prevention Program at <u>Elaine.Russell@ky.gov</u> or 502-564-3827, extension 3843.

*Pedometers*. Pedometers are used as a mental reminder that fitness is important. Pedometers

provide motivation to increase daily physical activity levels. They provide the ability to measurer how much exercise (steps, miles, calories) one has accomplished. Pedometers can vary in type and function.



Pedometers should only be purchased and used in conjunction with a recommended physical activity program.

### Promoting Health: Intervention Strategies for Social and Behavioral Research. Institute of

Medicine, National Academy Press, Washington, DC, 2000. More ways in which social marketing can provide solutions for health problems connected with physical inactivity and poor nutrition. This report identifies important areas of research and



includes over 20 recommendations regarding

needed steps in intervention, research, funding and training. http://www.iom.edu/cms/3793/5551.aspx

Siegel, M, Doner, L. **Marketing public health:** strategies to promote social change. Aspen Publications, Gaithersburg, MD, 1998. A book on social marketing and promotion of change connected to health behaviors.

*The Commonwealth of Kentucky Transportation Cabinet's Pedestrian & Bicycle Travel Policy July 2002.* This book provides guidance to improve accessibility and safety for non-motorized travel—such as walking or biking—on Kentucky's urban and rural roadways. Public interest in and demand for pedestrian and bicycle

facilities are determined at the planning and preliminary engineering public-involvement stages of a transportation project.



This policy can be used to promote and to educate

local officials about healthy transportation alternatives and how they can factor walking and biking into all new or reconstructed roadway projects in their community. Web site: <u>http://</u> <u>www.bikewalk.ky.gov/</u> Click on Law and Policies. Click Pedestrian and Bicycle Travel Policy.

*Wellness Policy Guidance*. Developed in collaboration with the CDC and the U.S. Department of Education. This U.S. Department of Agriculture (USDA) web site provides information on how to create, implement, and evaluate wellness policies that meet the requirements of federal law.

http://www.fns.usda.gov/tn/healthy/ wellnesspolicy.html

### **Frequently Asked Questions**

#### What is the difference between physical activity, physical exercise, and physical fitness?

#### **Physical Activity**

Physical activity is any bodily movement produced by skeletal muscles that result in an expenditure of energy.

#### **Physical Exercise**

Exercise is physical activity that is planned or structured. It involves repetitive bodily movement to improve or maintain one or more of the components of physical fitness—cardiorespiratory endurance (aerobic fitness), muscular strength, muscular endurance, flexibility, and body composition.

#### **Physical fitness**

Physical fitness is a set of attributes a person has in regards to their ability to perform physical activities that require aerobic fitness, endurance, strength, or flexibility and is determined by a combination of regular activity and genetically inherited ability.

#### How can physical activity help prevent overweight and obesity?

Physical activity, along with a healthy diet, plays an important role in the prevention of overweight and obesity. In order to maintain a stable weight, a person needs to balance the amount of calories consumed and the number of calories burned.

Although the body burns calories for everyday functions such as breathing, digestion and routine daily activities, people can consume more calories than they need for these functions. A good way to burn off extra calories and prevent weight gain is to engage in regular physical activity beyond routine activities.



*The Dietary Guidelines for Americans 2005* offers the following example of the balance between consuming and using calories:

Consuming 100 more calories each day than you burn results in 10 additional pounds in one year.

For more information on the role of physical activity in preventing overweight and obesity, visit:

Dietary Guidelines for Americans 2005. <u>http://www.healthierus.gov/dietaryguidelines/</u> Department of Health and Human Services (HHS) and the Department of Agriculture (USDA)

The Surgeon General's Call to Action to Prevent and Decrease Obesity and Overweight: Overweight and Obesity: What You Can Do: <u>www.surgeongeneral.gov</u>.

#### How does being overweight or obese affect a person's health?

When people are or overweight or obese, they are more likely to develop health problems such as the following:

- Hypertension
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Type 2 Diabetes
- Coronary Heart Disease
- Stroke
- Gallbladder Disease
- Osteoarthritis
- Sleep apnea and respiratory problems
- Some cancers (endometrial, breast, and colon)

The more overweight a person is, the more likely they will have health problems. Among people who are overweight and obese, weight loss can help reduce the chances of developing these health problems. Studies show that if a person is overweight or obese, reducing body weight by 5 to 10 percent can improve one's health.

To read more about how being overweight or obese can affect health, visit:

Do You Know the Health Risks of Being Overweight? National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK): http://win.niddk.nih.gov/publications/health\_risks.htm.

The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity, Overweight and Obesity: Health Consequences: **www.surgeongeneral.gov**.

#### What are some of the factors that contribute to overweight and obesity?

Researchers have found that several factors can contribute to the likelihood of someone's becoming overweight or obese.

**Behaviors:** What people eat and their level of physical activity help determine whether they will gain weight. A number of factors can influence diet and physical activity, including personal characteristics of the individual, the individual's environment, cultural attitudes, and financial situation.

**Genetics:** Heredity plays a role in determining how susceptible people are to becoming overweight or obese. Genes can influence how the body burns calories for energy and how the body stores fat.

To read more about the factors that can contribute to overweight and obesity, visit

The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity, Overweight in Children and Adolescents **www.surgeongeneral.gov**.

Obesity and Genetics: A Public Health Perspective. CDC, Office of Genomics and Disease Prevention http://www.cdc.gov/genomics/training/perspectives/obesity.htm. 

#### How much physical activity should our children receive for proper development?

Both the U.S. Surgeon General and the Centers for Disease Control and Prevention (CDC) recommend that children and adolescents participate in at least 60 minutes of moderate level physical activity on most days of the week. Children and adolescents can choose any type of moderate or higher intensity physical activity, such as brisk walking, playing tag, jumping rope, or swimming, as long as it is adds up to at least one hour a day.

For children and adolescents, regular physical activity has beneficial effects on the following aspects of health:

- Healthy weight
- Increased muscular strength
- Improved cardiorespiratory (aerobic) fitness
- Increased bone mass (through weight-bearing physical activities)
- Healthy blood pressure (for hypertensive youth)
- Lower levels of anxiety and stress
- Improved self-esteem and sleep patterns leading to increased capacity for learning
- Relief from the symptoms of depression

Children and adolescents who are just beginning to be physically active should start out slowly, gradually building to a higher level in order to prevent the risk of injury or feeling defeated from unrealistic goals. It is important that children and adolescents are encouraged to be physically active by doing things that interest them. This will help them establish an active life-style.

### References

Last accessed 9/1/06

- 1. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System 2003.
- 2. Centers for Disease Control and Prevention. Pediatric & Pregnancy Nutrition Surveillance System 2003.
- 2. National Alliance for Nutrition and Activity. Model School Wellness Policies. http://www.schoolwellnesspolicies.org/.
- American Academy of Pediatrics. Active Healthy Living: Prevention of Childhood Obesity through Increased Physical Activity, Pediatrics. 2006; 1834-1842.
  <u>http://aappolicy.aappublications.org/cgi/content/full/pediatrics;117/5/1834</u>

### **Contact Information**

#### **Cabinet for Health and Family Services**

Kentucky Department for Public Health 275 East Main Street Frankfort, KY 40621 502-564-4830, 1-800-462-6122 http:chfs.ky.gov



Irene Centers, BA – Program Manager, Tobacco Prevention and Cessation Irene.Centers@ky.gov, phone extension 3808. Funding from the Centers for Disease Control and Prevention

Christos Dimitriadis, MS - Physical Activity Coordinator, Obesity Prevention Program Christos.Dimitriadis@ky.gov, phone extension 3847. Funding from the Centers for Disease Control and Prevention

Victoria Greenwell, BSW, MA - Administrator, Coordinated School Health Victoria.Greenwell@ky.gov, phone extension 3588. Funding from the Centers for Disease Control and Prevention Division of Adolescent and School Health

Jennye Grider, BA – Coordinator, Physical Activity Program Jennye.Grider@ky.gov, phone extension 3795. Funding from the Preventative Health and Health Services Block Grants

Tricia McLendon, MPH – Coordinator, Asthma Program Patricia.McLendon@ky.gov, phone extension 3819

Elaine Russell, MS, RD, LD - Nutrition Services Coordinator, Obesity Prevention Program Elaine.Russell@ky.gov, phone extension 3843. Funding from the Centers for Disease Control and Prevention



#### **Kentucky Department of Education**

Nutrition and Health Services 2545 Lawrenceburg Road Frankfort, KY 40601 (502) 564-2706 <u>http:education.ky.gov</u>



Jim Tackett, M.Ed., CHES – Consultant, Coordinated School Health, James.Tackett@education.ky.gov

Stephanie Bunge, M.Ed., CHES – Consultant, Coordinated School Health, Stephanie.Bunge@education.ky.gov

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