Hanover Wellness Education News

January, 2012 http://www.hanoverschools.org

What is Flexibility?

Flexibility is a measure of the range of motion available at a joint or group of joints. It is determined by the shape of the bones and cartilage in the joint and by the length and extensibility of muscles, tendons and ligaments that go across the joint (Corbin, 2008). Together muscles and tendons are known as a muscle- tendon unit or MTU. A fit person can move the body joints through a full range of motion. Flexibility is not the same thing as stretching. Stretching is the major technique used to improve flexibility.

The stretch reflex is a basic operation of the nervous system that helps maintain muscle tone and prevents injury. The stretch reflex is started whenever a muscle is stretched. Stretching lengthens both the muscle fibers and the muscle spindles. This change in the shape of the muscles spindles results in the stretch reflex: the muscle that is being stretched contracts (Corbin, 2008).

Reference

Corbin, C. B. (2008). *Concepts of fitness and wellness: A comprehensive lifestyle approach*. Boston: McGraw-Hill.

Hanover Wellness Education News

February, 2012 http://www.hanoverschools.org

What is Aerobic Endurance?

Aerobic endurance is also known as cardiovascular fitness, aerobic fitness, cardiovascular endurance, cardio-respiratory fitness, and cardiorespiratory endurance (Corbin, 2008). Activities that develop aerobic endurance include dance, swimming, rope jumping, running, bicycling, circuit training, cross country skilling, aerobic exercise machines (e.g., exercise bikes, steppers, treadmills and so forth) and other forms of moderate to vigorous and continuous physical activity.

Cardio-respiratory fitness is the ability of the heart, blood vessels, blood and respiratory system to supply fuel and oxygen to the muscles and the ability of the muscles to utilize fuel to allow sustained exercise. A fit person can persist in physical activity for relatively long periods of time.

The term cardiorespiratory is used by many fitness professionals because it represents the cardiovascular and respiratory system working together.

Reference

Corbin, C. B. (2008). *Concepts of fitness and wellness: A comprehensive lifestyle approach*. Boston: McGraw-Hill.

Hanover Wellness Education News

March, 2012 http://www.hanoverschools.org

What is Skill Related Fitness?

Over the last twenty-five years there has been a shift in interest toward health related fitness rather than skill related fitness. For example, fitness tests like the softball throw, standing broad jump, shuttle run and the fifty-yard dash have been dropped since throwing ability, speed and leg power have little to do with lifelong health. Despite this, we believe that skill related fitness is important and has a place in a quality physical education program. Higher levels of skill related fitness leads to more effective participation in games, gymnastics and dance which, in turn, motivates students to stay active in these areas and to build fitness through regular participation. Skill related fitness can be measured informally during formative assessment during a variety of physical education units.

Agility

Agility is the ability to rapidly and accurately change the direction of the movement of the entire body in space. The shuttle run is a popular test item used to measure agility and could be used as a warm up or learning experience to enhance the movements used in a net/wall game for example.

Balance

Balance is the maintenance of equilibrium while stationary or while moving. Gymnastics can improve static and dynamic balance. Here students could practice balancing on a variety of apparatus along with combining balance with travel and rotation.

Coordination

Coordination is the ability to use the senses with the body parts to perform motor tasks smoothly and accurately. Activities that will enhance coordination could be performed during manipulative skills like throwing and catching, striking, dribbling, volleying and dribbling.

Power

Power is the ability to transfer energy into force at a fast rate. Gymnastics can be a good home for performing activities that will develop power such as a running and leaping, horizontal jumping and vertical jumping. The standing horizontal jump is a popular test to measure power. Students could practice jumping in different directions, pathways and to and from a variety of levels to enhance lower body power for a variety of physical activities.

Reaction Time

Reaction time is the time that elapses between stimulation and the beginning of reaction to that stimulation. Games provide a good place for developing reaction time. For example, dodging defenders in invasion games can enhance reaction time. Good reaction time is also essential for striking in net/wall games like volleyball and tennis.

Speed

Speed is the ability to perform a movement in a short period of time. Many movements present in games require speed. For example, fleeing from a chasing student requires speed. A twenty, forty or fifty yard dash could be used as a warm up or learning experience during a games unit to enhance speed used in invasion games.

Reference

Corbin, C. B. (2008). *Concepts of fitness and wellness: A comprehensive lifestyle approach*. Boston: McGraw-Hill.

Hanover Wellness Education News

April, 2012 http://www.hanoverschools.org

What is Physical Fitness Testing?

During fitness testing we obtain a measurement (e.g.,) from a test. That score is interpreted and reported. Fitness test scoring is traditionally done in a norm referenced (where the student stands relative to a larger group) or a criterion-referenced manner. For example, if a student's score for the mile run was in the 50th percentile (norm referenced score interpretation) that score could be identified as average for that group. Scores can also be interpreted and reported based on criteria that are believed to be within a healthy fitness zone or range of scores. Here, scores are interpreted and reported based on criterion referenced standards. There are two major physical fitness tests: the FITNESSGRAM/ACTIVITYGRAM and The President's Challenge.

FITNESSGRAM/ACTIVITYGRAM

The FITNESSGRAM/ACTIVITYGRAM program (Meredith & Welk, 2007) purpose is to promote lifelong physical activity for youth. FITNESSGRAM is a health related fitness assessment battery. Each test has criterion-referenced standards that are associated with good health. As mentioned previously, ACTIVITYGRAM is a three day assessment of physical activity. FITNESSGRAM recommends the following test items: the PACER (aerobic capacity); 90 degree push up (upper body muscle fitness); curl up (abdominal muscle fitness); trunk lift (trunk extensor strength and flexibility); back saver sit and reach (flexibility); and skinfold measurements (body composition). Finally, students in kindergarten through grade three can be introduced to the program through informal self-testing. Formal testing should begin in fourth grade (Welk & Meredith, 2008).

The President's Challenge

The President's Challenge includes two programs with rewards for measuring physical activity. The Active Lifestyle Program (ALP) purpose is to encourage youth to make a commitment to regular physical activity. It asks people under age 18 to be physically active for at least sixty minutes at least five days per week for a six to eight weeks. Students can record their frequency and amount of time they spend engaged in physical activity and earn an award online at www.presidentschallenge.org. Participants can also record physical activity in the form of steps taken with a pedometer. Girls (6-17) should aim for 11,000 steps each day. Boys (6-17) should accumulate 13,000 steps each day. Those 18 and over should accumulate 8,500 steps per day (PCPFS, 2008).

The second physical activity assessment is the Presidential Champions Program (online program). This five day per week program requires students to earn points for participating in a variety of physical activities. Points are based on the amount of energy each activity burns. Students can also earn physical activity points through pedometer use.

Activity logs for both physical activity assessment programs can be downloaded at http://www.presidentschallenge.org.

The Youth Physical Fitness Program (PCPFS, 2008) includes five test items for students 6-17-years-old that measure muscular strength/endurance, cardiorespiratory endurance, speed, agility, and flexibility. The test items include:

1. Curl-ups or partial curl ups;
2. Shuttle run
3. Endurance run/walk -1 mile for students 10 and up, ½ mile for 8-9-year-olds, ¼ mile for 6-7-year-olds
4. Pull-ups or right angle push ups or flexed arm hang
5. V-sit reach or sit and reach.

The PCPFS (2008) Youth Health Fitness Program (for students ages 6-17) includes:

1. Partial curl ups
2. Endurance run/walk -1 mile for students 10 and up, ½ mile for 8-9-year-olds, ¼ mile for 6-7-year-olds
3. V-sit reach or sit and reach.
4. Right angle push up or pull ups
5. Body mass index (BMI) as a measurement of body composition.

The President's program offers three awards (based on norm-referenced standards). The Presidential Physical Fitness Award recognizes those who score at or above the 85th percentile on all five events. The National Physical Fitness Award is for those who score at or above the 50th percentile on all five events. The Participant Physical Fitness Award is for those who score below the 50th percentile on one or more events. It should be noted that the President's challenge combines health related and skill related fitness.

The (criterion referenced) Health Fitness Award (HFA) program recognizes students who achieve a healthy level of fitness. Participants can earn the HFA by meeting standards in five events: partial curl ups; one mile run/walk; V-sit or sit and reach; right angle push ups or pull ups; and body mass index.

The PCPFS recommends that physical education programs include fitness testing at least twice each year (in the fall and spring). There is no limit to the number of attempts a participant may have for each test item. Before conducting any fitness test you should review and take into consideration each student's health status in order to identify any medical, orthopedic or other health problem (such as allergies, asthma and so forth). Students with disabilities or special needs have the right to an individualized physical fitness program.

References

Meredith, M. D., & Welk, G.J. (Eds.). (2007). *Fitnessgram/Activitygram: Test administration manual: The Cooper Institute*. (4th ed.). Champaign, IL: Human Kinetics.

The President's Council on Physical Fitness and Sports. (2008). *The President's Challenge*.

Washington, DC: United States Department of Health and Human Services.
Welk, G. J., & Meredith, M. D. (Eds.). (2008). Fitnessgram/Activitygram reference guide (3rd ed). Dallas, TX: The Cooper Institute.

Hanover Wellness Education News

May, 2012 http://www.hanoverschools.org

Which Chemicals Added to Foods are Safe?

The Center for Science and the Public Interest (CSPI, 2011) has stated that factory foods contain dubious chemical additives. These chemicals that CSPI has recommended that we avoid include: olestra, saccharin, aspartame, sodium nitrite, sodium nitrate, acesulfame potassium (Ace K), caffeine, and food dyes (e.g., blue 2, green 3, orange B, red 3, yellow 5 and yellow 6), BHA (Butylated Hydroxyanisole), caramel coloring, cyclamate, partially hydrogenated vegetable oil (trans fatty acids), potassium bromate, and propyl gallate. They also recommend that be cautious with the following additives: blue 1, red 40, citrus red 2, stevia and others.

Visit

http://www.cspinet.org/reports/chemcuisine.htm

to learn about more questionable food additives.

The content of this newsletter is not meant to provide anyone with personal medical advice, which you should obtain from your health care provider.

Reference

Center for the Science and the Public Interest. (2011). Chemical cuisine. Retrieved September 1, 2011, from http://www.cspinet.org/reports/chemcuisine.htm

Hanover Wellness Education News

June, 2012 http://www.hanoverschools.org

Got Milk?

Milk is a popular drink for many Americans. However, some question its safety and contribution to one's health. Experts (Harvard University, 2011a, 2011b; PCRM, n.d.; Willett & Skerrett, 2005) have cited negative aspects of milk that include lactose intolerance, questionable protection against osteoporosis, saturated fat content, unneeded naturally occurring hormones (e.g., estrogens, progestins, androgens, and insulinlike growth factors), and possible increased risk of cancer.

Willett and Skerrett (2005) noted that 50 million Americans cannot digest the milk sugar known as lactose nor can most of the world's population. Willett and Skerrett (2005) stated that there are more reasons not to drink milk in large amounts than there are to drink it and has not recommended it as a beverage for adults (they prefer that we think of it as an optional food).

Milk has been cited as a tool for countering the risk of osteoporosis. However, evidence seems to contradict this. The experts (Harvard University, 2011; Willett & Skerrett, 2005) have pointed toward the 12-year Harvard Nurses study of more than 75,000 women that showed no positive effects with increased milk consumption on bone fracture risk. Collard greens, kale, broccoli, spinach, bok choy and other dark green leafy vegetables (and beans) can be great sources of calcium and are well absorbed by the body.

Last, the experts (PCRM, n.d.) noted that physical activity has a large effect on the bone health of youth. Additionally, 5-15 minutes of sun exposure can help with Vitamin D acquisition.

The content of this newsletter is not meant to provide anyone with personal medical advice, which you should obtain from your health care provider.

References

Harvard University. (2011a). The nutrition source: Calcium and milk. Retrieved September 2, 2011, from http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/calcium-and-milk/index.html

Harvard University. (2011b) The nutrition source: Calcium and milk: What's best for your bones and health? Retrieved September 2, 2011, http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/calcium-full-story/index.html

Physicians Committee for Responsible Medicine (n.d.). Health concerns about dairy products. Retrieved September 2, 2011, from http://www.pcrm.org/search/?cid=252

Physicians Committee for Responsible Medicine. (n.d.). New PCRM study shatters milk myth. Retrieved September 2, 2011, from http://www.pcrm.org/search/?cid=1202

Willett, W. C., & Skerrett, P. J. (2005). *Eat, drink, and be healthy: The Harvard Medical School guide to healthy eating ; a Harvard Medical School book co-developed with the Harvard School of Public Health*. New York: Free Press.

Hanover Wellness Education News

July, 2012 http://www.hanoverschools.org

Which plate? The Healthy Eating Plate or Myplate.gov

The food pyramid has been replaced by a colorful plate. However, two nutrition groups have created them. Which one should we choose to guide us toward health eating. The Healthy Eating Plate was developed by the Harvard School of Public Health and Harvard Medical School (2011). It directs consumers to the healthiest choices in the major food groups. Choosemyplate.gov was created by the United States Department of Agriculture (USDA, 2011). The following sections compare and contrast the contents of the two plates.

Whole grains

The Healthy Eating Plate encourages consumers to choose whole grains and limit refined grains, since whole grains are better for health. In the body, refined grains like white bread and white rice act like sugar. Eating too much of these refined-grain foods over an extended period of time can make it harder to control weight and possibly raise the risk of heart disease and diabetes (Harvard University School of Public Health).

Choosemyplate.gov stated that we should make at least half our grains whole grains.

Healthy protein

The Healthy Eating Plate encourages us to select fish, poultry, beans or nuts, protein sources that contain other healthful nutrients. It recommends limiting red meat and avoiding processed meat, since eating even small quantities of these foods on a regular basis raises the risk of heart disease, diabetes, colon cancer, and weight gain (Harvard University School of Public Health).

MyPlate's protein section offers no indication that some high-protein foods are healthier than others, or that red and processed meat are especially harmful to health (Harvard University School of Public Health). It also states that we should go lean with proteins.

Vegetables

The Healthy Eating Plate encourages an abundant variety of vegetables, since Americans are particularly deficient in their vegetable consumption—except for potatoes and French fries. Potatoes are chock full of rapidly digested starch, and they have the same effect on blood sugar as refined grains and sweets, so limited consumption is recommended (Harvard University School of Public Health).

Choosemyplate.gov noted that we should make half our plate fruits and vegetables.

Fruit

The Healthy Eating Plate recommends eating a colorful variety of fruits.

Choosemyplate.gov stated that half of our plate should comprise fruits and vegetables.

Water vs. Dairy

The Healthy Eating Plate encourages us to drink water, or to try coffee and tea (with little or no sugar), which are also great calorie-free alternatives. It encourages us to avoid sugary drinks, since these are major contributors to the obesity and diabetes epidemics. It recommends limiting milk and dairy to one to two servings per day, since high intakes are associated with increased risk of prostate cancer and possibly ovarian cancer; it recommends limiting juice, even 100% fruit juice, to just a small glass a day, because juice contains as much sugar and as many calories as sugary soda (Harvard University School of Public Health).

Choosemyplate.gov encourages us to switch to fat free or low fat (1%) milk. It also includes calcium fortified soy "milk" within its dairy group.

Physical activity

The figure running across the bottom of the Healthy Eating Plate's placemat is a reminder that staying active is half of the weight control equation. The other half is eating a healthy diet with modest portions in order to meet your caloric needs (Harvard University School of Public Health).

Choosemyplate.gov does not mention physical activity.

The content of this newsletter is not meant to provide anyone with personal medical advice, which you should obtain from your health care provider.

References

Harvard University School of Public Health. (2011). *Healthy eating plate vs. USDA's myplate*. Retrieved October 18, 2011, from http://www.hsph.harvard.edu/nutritionsource/healthy-eating-plate/healthy-eating-plate-vs-usda-myplate/index.html

USDA. (2011). *Choose myplate.gov.* Retrieved October 18, 2011, from http://www.choosemyplate.gov/

Hanover Wellness Education News

August, 2012 http://www.hanoverschools.org

What is Food Day?

October 24, 2012

The goal of Food Day is to bring together Americans—parents, teachers, and students; health professionals, community organizers, and local officials; chefs, school lunch providers, and eaters of all stripes—to advocate for healthy, affordable food produced in a sustainable, humane way.

Senator Tom Harkin (D-IA) and Representative Rosa DeLauro (D-CT) were the Honorary Co-Chairs for Food Day 2011, and the day is sponsored by the Center for Science in the Public Interest (CSPI - http://www.cspinet.org), the nonprofit watchdog group that has led successful fights for food labeling, better nutrition, and safer food since 1971. Like CSPI, Food Day will be people-powered and does not accept funding from government or corporations—through restaurants, supermarkets, and others are certainly encouraged to observe Food Day in their own ways.

Food Day is supported by anti-hunger advocates, physicians, authors, politicians, and leaders of groups focused on everything from farmers markets to animal welfare to public health. But the most important ingredient in Food Day is you.

What are the goals of Food Day?

- Promote safer, healthier diets
- Support sustainable and organic farms
- Reduce hunger
- Reform factory farms to protect the environment and animals
- Support fair working conditions for food and farm workers

Food Day is a nationwide celebration of healthy, affordable, and sustainably produced food and a grassroots campaign for better food policies that culminates in a day of action. Food Day aims to bring us closer to a food system with food that is healthy, affordable, and produced with care for the environment, animals, and the women and men who grow, harvest, and serve it.

Hanover Wellness Education News

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What causes childhood obesity?

Childhood obesity is the result of eating too many calories and not getting enough physical activity.

Why focus on food and physical activity environments?

There are a variety of environmental factors that determine whether or not the healthy choice is the easy choice for children and their parents. American society has become characterized by environments that promote increased consumption of less healthy food and physical inactivity. It can be difficult for children to make healthy food choices and get enough physical activity when they are exposed to environments in their home, child care center, school, or community that are influenced by–

- **Sugar drinks and less healthy foods on school campuses.** About 55 million school-aged children are enrolled in schools across the United States,[1] and many eat and drink meals and snacks there. Yet, more than half of U.S. middle and high schools still offer sugar drinks and less healthy foods for purchase.[2] Students have access to sugar drinks and less healthy foods at school throughout the day from vending machines and school canteens and at fundraising events, school parties, and sporting events.
- **Advertising of less healthy foods.** Nearly half of U.S. middle and high schools allow advertising of less healthy foods,[2] which impacts students' ability to make healthy food choices. In addition, foods high in total calories, sugars, salt, and fat, and low in nutrients are highly advertised and marketed through media targeted to children and adolescents,[3] while advertising for healthier foods is almost nonexistent in comparison.
- **Lack of daily, quality physical activity in all schools.** Most adolescents fall short of the recommendation of at least 60 minutes of aerobic physical activity each day, as only 18% of students in grades 9—12 met this recommendation in 2007.[6] Daily, quality physical education in school can help students meet the *Guidelines*. However, in 2009 only 33% attended daily physical education classes.[7]
- **No safe and appealing place, in many communities, to play or be active.** Many communities are built in ways that make it difficult or unsafe to be physically active. For some families, getting to parks and recreation centers may be difficult, and public transportation may not be available. For many children, safe routes for walking or biking to school or play may not exist. Half of the children in the United States do not have a park, community center, and sidewalk in their neighborhood. Only 27 states have policies

References

1. Snyder TD, Dillow SA, Hoffman CM. *Digest 81. of education statistics* 2008. Washington (DC): U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics; 2009. NCES publication number 2009—020.
2. Centers for Disease Control and Prevention. *Children's Food Environment State Indicator Report, 2011*.
3. Institute of Medicine, Food Marketing to Children and Youth: Threat or Opportunity? Washington, DC, National Academies Press; 2005.
4. Pathways and Partnerships for Childcare Excellence. Available at http://www.acf.hhs.gov/programs/ccb/ta/pubs/pathways/pathways_partnerships_v1.pdf [PDF-250k].
5. Kaphingst, KM, and Story M. Child care as an untapped setting for obesity prevention: state child care licensing regulations related to nutrition, physical activity, and media use for preschool-aged children in the united states. *Preventing Chronic Disease: Public Research, Practice and Policy* 2009l 6(1):1—13.Available at www.cdc.gov/pcd/issues/2009/jan/07_0240.htm
6. U.S. Department of Health and Human 2. Services. *2008 Physical Activity Guidelines for Americans*. Washington (DC): U.S. Department of Health and Human Services; 2008.
7. Youth Risk Behavior Surveillance System. 3. 2009 National YRBS Overview. Available at http://www.cdc.gov/HealthyYouth/yrbs/pdf/us_physical_trend_yrbs.pdf [PDF-91k]. Accessed June 9, 2010.

CDC. (2012). *Overweight and obesity.* Retrieved July 2, 2012, from http://www.cdc.gov/obesity/childhood/problem.html

Hanover Wellness Education News

October, 2012 http://www.hanoverschools.org

What causes childhood obesity?

Childhood obesity is the result of eating too many calories and not getting enough physical activity.

Why focus on food and physical activity environments?

There are a variety of environmental factors that determine whether or not the healthy choice is the easy choice for children and their parents. American society has become characterized by environments that promote increased consumption of less healthy food and physical inactivity. It can be difficult for children to make healthy food choices and get enough physical activity when they are exposed to environments in their home, child care center, school, or community that are influenced by (continued from September, 2012)–

- **Limited access to healthy affordable foods.** Some people have less access to stores and supermarkets that sell healthy, affordable food such as fruits and vegetables, especially in rural, minority, and lower-income neighborhoods.[9] Supermarket access is associated with a reduced risk for obesity.[9] Choosing healthy foods is difficult for parents who live in areas with an overabundance of food retailers that tend to sell less healthy food, such as convenience stores and fast food restaurants.
- **Greater availability of high-energy-dense foods and sugar drinks.** High-energy-dense foods are ones that have a lot of calories in each bite. A recent study among children showed that a high-energy-dense diet is associated with a higher risk for excess body fat during childhood.[10,11] Sugar drinks are the largest source of added sugar and an important contributor of calories in the diets of children in the United States.[12] High consumption of sugar drinks, which have few, if any, nutrients, has been associated with obesity.[13] On a typical day, 80% of youth drink sugar drinks.[14]
- **Increasing portion sizes.** Portion sizes of less healthy foods and beverages have increased over time in restaurants, grocery stores, and vending machines. Research shows that children eat more without realizing it if they are served larger portions.[15,16] This can mean they are consuming a lot of extra calories, especially when eating high-calorie foods.
- **Television and media.** Children 8—18 years of age spend an average of 7.5 hours a day using entertainment media, including TV, computers, video games, cell phones, and movies. Of those 7.5 hours, about 4.5 hours is dedicated to viewing TV.[19] Eighty-three percent of children from 6 months to less than 6 years of age view TV or videos about 1 hour and 57 minutes a day.[20] TV viewing is a contributing factor to childhood obesity because it may take away from the time children spend in physical activities; lead to increased energy intake through

snacking and eating meals in front of the TV; and, influence children to make unhealthy food choices through exposure to food advertisements.[21,22]

References

1. Snyder TD, Dillow SA, Hoffman CM. *Digest 81. of education statistics* 2008. Washington (DC): U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics; 2009. NCES publication number 2009—020.
2. Centers for Disease Control and Prevention. *Children's Food Environment State Indicator Report, 2011*.
3. Institute of Medicine, Food Marketing to Children and Youth: Threat or Opportunity? Washington, DC, National Academies Press; 2005.
4. Pathways and Partnerships for Childcare Excellence. Available at http://www.acf.hhs.gov/programs/ccb/ta/pubs/pathways/pathways_partnerships_v1.pdf [PDF-250k].
5. Kaphingst, KM, and Story M. Child care as an untapped setting for obesity prevention: state child care licensing regulations related to nutrition, physical activity, and media use for preschool-aged children in the united states. *Preventing Chronic Disease: Public Research, Practice and Policy* 2009l 6(1):1—13.Available at www.cdc.gov/pcd/issues/2009/jan/07_0240.htm
6. U.S. Department of Health and Human 2. Services. *2008 Physical Activity Guidelines for Americans*. Washington (DC): U.S. Department of Health and Human Services; 2008.
7. Youth Risk Behavior Surveillance System. 3. 2009 National YRBS Overview. Available at http://www.cdc.gov/HealthyYouth/yrbs/pdf/us_physical_trend_yrbs.pdf [PDF-91k]. Accessed June 9, 2010.
8. Centers for Disease Control and Prevention. State Indicator Report on Physical Activity, 2010. Available at http://www.cdc.gov/physicalactivity/downloads/PA_State_Indicator_Report_2010.pdf [PDF-1.5Mb].
9. Larson N, Story M, Nelson M. Neighborhood environments: disparities in access to healthy foods in the U.S. *Am J Prev Med*. 2009;36(1):74—81.e10.
10. Johnson L, Mander AP, Jones LR, Emmett 28. PM, Jebb SA. A prospective analysis of dietary energy density at age 5 and 7 years and fatness at 9 years among UK children. *Int J Obes (Lond)* 2008;32(4):586—593.
11. Johnson L, Mander AP, Jones LR, Emmett 29. PM, Jebb SA. Energy-dense, low-fiber, high-fat dietary pattern is associated with increased fatness in childhood. *Am J Clin Nutr* 2008;87:846—854.
12. Reedy J, Krebs-Smith SM. Dietary sources of energy, solid fats, and added sugars among children and adolescents in the United States. *J Am Diet Assoc* 2010;110(10):1477—84.
13. Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. *Am J Public Health* 2007;97(4):667—675.
14. Wang YC, Bleich SN, Gortmaker SL. 5. Increasing caloric contribution from sugar-sweetened beverages and 100% fruit juices among US children and adolescents, 1988–2004. *Pediatrics* 2008;121(6):e1604—1614.
15. Fisher JO, Rolls BJ, Birch LL. Children's bite size and intake of an entrée are greater with large portions than with age-appropriate or self-selected portions. *Amer J Clin Nutr* 2003;77(5):1164—1170.
16. McConahy KL, Smiciklas-Wright H, Mitchell DC, Picciano MF. Portion size of common foods predicts energy intake among preschool-aged children. *J Amer Diet Assoc* 2004;104(6):975—979.
17. Arenz S, Ruckerl R, Koletzko B, von Kries R. Breast-feeding and childhood obesity – a systematic review. *Int J Obes Relat Metab Disord* 2004; 28:1247—1256.

18. Owen CG, Martin RM, Whincup PH, et al. Effect of infant feeding on the risk of obesity across the life course: a quantitative review of published evidence. *Pediatrics* 2005; 115:1367—1377.
19. Rideout VJ, Foehr UG, Roberts DF. Generation of M2 Media in the Lives of 8-18 Year Olds. A Kaiser Family Foundation Study; 2010.
20. Rideout V & Hamil E. (2006). *The Media Family: Electronic Media in the Lives of Infants, Toddlers, Preschoolers, and Their Parents*. Menlo Park, CA: The Henry J. Kaiser Family Foundation; 2006.
21. Zimmerman FJ, Bell JF. Associations of television content type and obesity in children. *Am J Public Health* 2010;100(2):334—40.
22. Robinson TN. Television viewing and childhood obesity. *Pediatr Clin North Am* 2001;48(4):1017—25.

CDC. (2012). *Overweight and obesity.* Retrieved July 2, 2012, from http://www.cdc.gov/obesity/childhood/problem.html

Hanover Wellness Education News

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Strength and Resistance Training

Regular cardiorespiratory exercise is a great way to preserve stamina and to prevent chronic disease that can slow you down. Strength training (using resistance bands, weight machines, body weight, or lifting weights) is also an effective health-enhancing strategy.

Experts point out that many of the changes associated with getting older are actually due to becoming less active with age. Unless you regularly engage in activities to strengthen your muscles, you'll lose about a half a pound of muscle a year in your 30s and 40s, and that rate can double once you turn 50. As you lose muscle, you lose strength, and that compromises your ability to do even simple things, such as carrying your groceries, getting up from a seated position or gardening. Your metabolism also slows down as you lose muscle, so your body will need fewer calories to maintain itself, and you're likely to gain excess body fat, unless you eat less. And excess fat contributes to a multitude of health problems: heart disease, type 2 diabetes, high blood pressure, and high cholesterol.

14 Reasons to engage in resistance training:
1. Maintain your independence as you get older
2. Improve your quality of life, allowing you to do the things you enjoy with less effort
3. Strengthen and preserve your muscle tissue
4. Strengthen your bones
5. Reduce your risk of falling
6. Improve control of blood sugar
7. Increase your metabolism
8. Improve your body composition to less fat and more muscle
9. Reduce your resting blood pressure
10. Speed up the rate at which food moves through your digestive system, reducing risk of colon cancer
11. Reduce your risk of low back injury
12. Elevate your mood and your self-confidence
13. Relieve pain from osteoarthritis and rheumatoid arthritis
14. Enhance recovery from stroke or heart attack

Reference

American Council on Exercise. (2012). *Strength and resistance training*. Retrieved July 2, 2012, from http://www.acefitness.org/fitfacts/fitfacts_display.aspx?itemid=3293&category=11

Hanover Wellness Education News

December, 2012 http://www.hanoverschools.org

What is the Healthy Eating Plate?

The U.S. government has been recommending American diets for many years. The Harvard School of Public Health (HSPH) claims that these U. S. recommendations were based on out-of-date science and influenced by people with business interests. HSPH has offered the healthy eating plate as a healthy alternative. The Healthy Eating Plate fixes the flaws in USDA's MyPlate, just as the Healthy Eating Pyramid rectifies the mistakes of the USDA's food pyramids. Both the Healthy Eating Plate and the Healthy Eating Pyramid are based on the latest science about how our food, drink, and activity choices affect our health.

The Healthy Eating Pyramid is a simple, reliable guide to choosing a healthy diet. Its foundation is daily exercise and weight control, since these two related elements strongly influence your chances of staying healthy. The Healthy Eating Pyramid builds from there, showing that you should eat more foods from the bottom part of the pyramid (vegetables, whole grains) and less from the top (red meat, refined grains, potatoes, sugary drinks, and salt).

Fill half your plate with produce—colorful vegetables, the more varied the better, and fruits. (Remember, potatoes and French fries don't count as vegetables!) Save a quarter of your plate for whole grains. A healthy source of protein, such as fish, poultry, beans, or nuts, can make up the rest. The glass bottle is a reminder to use healthy oils, like olive and canola, in cooking, on salad, and at the table. Complete your meal with a cup of water, or if you like, tea or coffee with little or no sugar (not the milk or other dairy products that the USDA's MyPlate recommends; limit milk/dairy products to one to two servings per day).

Don't forget that remaining physically active is half of the secret to weight control. The other half is eating a healthy diet with modest portions that meet your calorie needs.

The healthy eating plate recommends (HSPH, n.d.):

- get plenty of produce
- choose whole grains
- choose healthy sources of protein
- use healthy oils
- drink water or other beverages that don't contain sugar.
- limit consumption of refined grains, potatoes, sweets, sugary beverages, red meat, processed meats, milk and juice.

References

Harvard School of Public Health. (2012). Healthy eating plate and healthy eating pyramid. Retrieved July 2, 2012, from http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/pyramid/

Harvard School of Public Health. (n.d.). The nutrition source: Your questions answered. Retrieved July 2, 2012, from http://www.hsph.harvard.edu/nutritionsource/healthy-eating-plate/healthy-eating-plate-questions/index.html