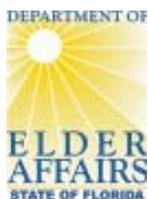


A Resource Manual Designed to Provide
Nutrition Education to Florida's Citizens

The Florida Interagency
Food and Nutrition Committee

2004

Members of the Florida Interagency Food and Nutrition Committee



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 Black and white camera-ready copies of handouts found throughout the kit are available for your use.

Snack Smart, Move More PowerPoint Presentation is available at www.fldoe.org/nutrition

The *Snack Smart, Move More* Campaign

Introduction

The Florida Interagency Food and Nutrition Committee is excited to share with you its *Snack Smart, Move More* campaign kit, which is being distributed to key program staff in public schools, health departments, area health education centers (AHECs), WIC clinics, Cooperative Extension offices, child day care centers, Area Agencies on Aging, elder nutrition service provider agencies, and food stamp offices throughout the state.

This kit was created as one component of a statewide nutrition education initiative called *Snack Smart, Move More*, launched during National Nutrition Month®, March 2004. In an effort to reduce the incidence of overweight and obesity, Florida citizens are being encouraged to choose healthy snacks and to participate in regular physical activity.

Today, nearly 1 in 5 Florida adults is obese. Just a few years ago, only 1 in 10 Florida adults was obese. The statistics for children are equally alarming. Since 1980, the incidence of childhood overweight has doubled nationally. Such a large increase in obesity in such a short period of time constitutes an epidemic. Obesity can increase the risk for developing chronic diseases like diabetes, heart disease, high blood pressure, high cholesterol, arthritis, and some cancers.

Please take a moment to familiarize yourself with the nutrition education materials contained both in this kit and online at www.fldoe.org/nutrition to determine which materials you can use to effectively promote the *Snack Smart, Move More* message to your clients and customers. Your plans should include how you can sustain this important message throughout the entire year!

The materials in this campaign kit may be duplicated for educational purposes only; they may not be reproduced or sold for commercial purposes. If you wish to adapt a document, and a by-line appears at the end of that document, please give the author the proper credit.

Please join us as we work to promote the important message, *Snack Smart, Move More*. If you would like more information about this initiative or would like to view PDF files of all the materials that are contained in the campaign kit, please visit our *Snack Smart, Move More* website at www.fldoe.org/nutrition.

Florida Launches *Snack Smart, Move More* Nutrition Education Initiative

Press Release

The Florida Interagency Food and Nutrition Committee launched a statewide nutrition education initiative, *Snack Smart, Move More*, during National Nutrition Month®, March 2004. This campaign is designed to promote smarter nutrition choices and daily physical activity in our lives.

Poor nutrition and physical inactivity are two of the connecting factors that have prompted this campaign. Since 1986, the obesity rates among Florida adults have increased by 63%. Data from the 2003 Youth Risk Behavior Survey (YRBS) show that, based on self-reported height and weight, 14% of high school students are at risk for overweight, and 12.4% are overweight. Since 1991, daily participation in physical education classes has been decreasing, with less than one-third of high school students participating in daily physical education. Overweight and obesity among youth has been linked to children developing Type 2 diabetes, a disease once associated primarily with older adults.

A healthier lifestyle can help decrease the risk for many of the diseases associated with poor nutrition and physical inactivity. Using the *Snack Smart, Move More* concept can help you take the first step towards a healthier lifestyle.

First, snack smart. Select more healthful snacks like fruits and vegetables, whole grains, and lowfat dairy products. Try new ways of eating your favorite fruits or vegetables.

Second, move more. Use the stairs whenever possible. Park your car a little further than you normally do and walk. Try turning off the television and taking the family for a walk after dinner. Join us in taking steps to a healthier Florida.

The Florida Interagency Food and Nutrition Committee, sponsor of the *Snack Smart, Move More* campaign, works to coordinate efforts among state agencies to provide effective nutrition, food security, and food safety programs and services to the public. Agencies sponsoring this nutrition education initiative include the Florida Department of Health; Florida Department of Children and Families; Florida Department of Education; Florida Department of Elder Affairs; University of Florida IFAS Extension; Florida Department of Agriculture and Consumer Services; and the Florida Area Health Education Centers (AHEC) Network.

Find more information and materials online at www.fldoe.org/nutrition/.

—Gladys Borges, M.S.
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Literature Reviews

The Benefits of Healthful Snacking

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Snacking is a part of life for many Americans (Jahns 2001, Nicklas 2001, Nielsen 2002). For the majority of people in this country who have adequate resources, there is no shortage of food or opportunities to consume it. Snacks are frequently offered at social gatherings, business functions, sports events, and school functions. It is not unusual for snacks at these events to consist of sweet or salty high-fat foods such as cookies, brownies, candy, chips, and soft drinks. Although enjoying these foods on occasion is acceptable, excessive consumption can replace nutrient-dense foods, reduce the nutritional adequacy of the diet, and contribute to excessive weight gain and associated health risks.

Healthy snacking is appropriate for many people, but frequent consumption of high-calorie, low nutrient-dense foods can have negative health outcomes. Consumers need assistance in knowing how to select snack foods that will enhance the nutritional quality of their diets and prevent unwanted weight gain.

Snacking Patterns and Trends

Researchers at the University of North Carolina at Chapel Hill reviewed national food consumption data to determine snacking trends and changes in nutrient contributions from snacks among young people in the U.S. between 1977 and 1996 (Jahns 2001). Their sample consisted of 21,236 young people, ages 2 to 18. In all age groups the prevalence of snacking (which was self-defined in this study) increased over the course of the 20-year study. Although the average size and calorie contribution of individual snacks consumed remained about the same over the years, the number of snacking occasions increased significantly which resulted in an increase in the daily calorie contribution from snacks. Snacks tended to be higher in calories and fat and lower in calcium than non-snack eating occasions (such as meals).

The same research group examined trends in energy intake by the *eating location* and the *type of foods* among adolescents, 12 to 18 years of age and young adults, 19 to 29 years of age (Nielsen 2002). Not surprisingly, over the time period from 1977-78 to 1994-96, more of the energy intake, especially that from snacks, was obtained away from home, at restaurants and fast food outlets. This change was greater in the older age group. Young people in both age groups significantly increased their consumption of pizza, cheeseburgers, and salty snacks. The researchers pointed out the importance of focusing

nutrition education on “away from home” food consumption and snacking, to help young people make more healthful food choices.

One of the contributors to the increase in snacking among school-aged children is the presence of snack foods and soft drink vending machines in schools, which make food readily available throughout all or much of the school day (Ritchie 2001, Crooks 2003). Whether or not school vending machine snacks are contributing significantly to the rise in childhood overweight is the subject of much lively discussion and debate among nutrition educators and other health professionals (Ritchie 2001, Crooks 2003, Weight Realities 2002).

Researchers at Arizona State University examined eating patterns and body mass indexes of 1,756 men and 1,511 women between 18 and 65 years of age (Hampl 2003). Based on self-reported data collected from two nonconsecutive 24-hour dietary recalls, as part of the Continuing Survey of Food Intakes by Individuals (CSFII) in 1994-96, the most frequently consumed snacks were coffee, cola (sweetened and unsweetened), milk, ice cream, and fruit. Men were more likely to snack in the evening, multiple times, or never. Men and women who were classified as multiple snackers had higher daily energy intakes than other types of snackers, but their Body Mass Index numbers were not significantly different. Multiple snackers were more likely to meet their protein requirements, and male multiple snackers had the highest (energy-adjusted) calcium intake. This study points to several positive aspects of snacking, which can be encouraged and enhanced through nutrition education.

Snacking and Risk of Overweight in Young People

Childhood overweight is on the rise in this country, with between 10 and 16 percent of children in various age groups classified as overweight – defined as having a body mass index over the 95th percentile for their age and gender group (Ogden 2002). A number of lifestyle factors, including physical inactivity, excessive television viewing, and unhealthy eating patterns, are associated with the rise in body fat and weight in children and youth in the U.S. Changes in eating patterns, such as increases in meals eaten away from home, portion sizes, meal-skipping, and snacking, may be involved in this trend (Nicklas 2001).

Television viewing is consistently associated with increased risk of overweight in children (Ritchie 2001). This activity affects risk in a number of ways. First, it is a sedentary activity and few calories are expended during the time children are watching TV. Second, when children are watching television they are not engaged in physical activity, so it is replacing more active pursuits. Third, many children’s shows are accompanied by commercials for high-calorie and/or low nutrient dense foods, which can encourage excessive snacking of unhealthy foods. An analysis of nutrition information provided by commercials during network shows viewed by 2 to 11-year olds found that nearly one-quarter of the programming time was used for commercials and 23 percent of commercials (108 of 467 commercials) were food-related (Byrd-Bredbenner 2000). Of 352 food references in food and beverage advertisements 175 (50%) were for low nutrient dense, high-sugar or high-fat foods. The researchers found that about half of the nutrition-related information presented in food and beverage advertisements was inaccurate or misleading. One of the most promising areas of focus for reducing childhood overweight is decreasing the amount of time spent in front of the television set. This behavior change can positively influence snacking patterns of children and reduce their exposure to nutrition misinformation.

Snacking Through the Life Cycle Young Children

As a child passes from being an infant to a toddler, feeding changes from “on-demand” to a regular schedule of meals and snacks (Satter 1987). Snacks are important for young children since they can only eat small amounts of food at a time, and can’t wait many hours between meals. Parents and caregivers should provide young children with snacks that consist of nutritious foods appropriate for the child’s age that make a significant contribution to the nutritional quality of the diet.

In choosing snacks for young children (under the age of 4), caregivers need to avoid foods that are potential choking hazards (Graves 1997). These include:

- ⊗ spoonful of peanut butter
- ⊗ hard candy, gum drops, chewing gum
- ⊗ fruits with pits such as cherries
- ⊗ hot dogs and similar foods served whole or sliced into rounds

- ⊗ marshmallows
- ⊗ popcorn, pretzels, chips
- ⊗ raisins and other dried fruit
- ⊗ nuts, seeds, peanuts
- ⊗ whole grapes (okay to cut into small pieces; **not** rounds)
- ⊗ ice cubes
- ⊗ large chunks of meat or cheese, fish *with bones*.

Those who don't have the time or inclination to prepare "cute" snacks, like foods formed into familiar shapes or served in unique ways, can take heart from a recent study that found no difference in snack consumption among preschoolers served either "cute" or "regular" versions of various snacks (Branen 2002).

Teenagers and Young Adults

Many teenagers have high calorie needs, especially during growth spurts, and snacks can help them get the calories they need. Snacks provide about one-fourth of the typical teen's calorie intake, but unfortunately many of the choices they make are nutritionally less than desirable. Snacks chosen by teens often are high in fat and/or sodium, and low in key nutrients such as iron, calcium, vitamin A, vitamin C, and folate (Rolfes 1998).

A few changes that could have significant health impacts on teens would be to *decrease* soft drinks and *increase* lowfat or fat free milk, *decrease* chips and other high-fat snacks and *increase* fruits and vegetables (not counting French fries), *decrease* large-portion fast foods and *replace* them with lower-fat/calorie choices in fast food places. Although some teens can afford to consume high-calorie fast food meals, they may be missing out on critical nutrients by frequently eating this type of meal. Teens need to know how to balance low nutrient-dense meals with meals and snacks rich in vitamins, minerals, and phytochemicals from whole grains, fruits, vegetables, and legumes. One method of encouraging older teens and young adults to consume more healthful snacks is a point-of-purchase intervention such as having posters and table tents in the cafeteria, appropriate placement of foods to encourage students to pick them up, and so on. This approach has been successful in increasing consumption of yogurt, pretzels, and whole fruit among college students in a college cafeteria (Buscher 2001).

Working Adults

All working people can include healthful snacks as a part of their day, although some work environments are more conducive to healthy snacking than others. People who work in an office often have an easier time storing healthful snacks than people who work in a factory or those who work outside with no access to food storage of any kind. Where a refrigerator is available, people are able to keep snacks such as yogurt, milk, juices, fruits, and cut up vegetables. Still, even in challenging circumstances simple snacks such as dried fruit, juice in boxes, cut up veggies, and whole grain crackers, along with bottled water, can be eaten out in a field, at a construction site, or "on the go."

Persons with Diabetes

For persons with diabetes, regular snacks can help blood glucose control. Snacks need to be included in the overall diet plan to account for the carbohydrates, fat, protein, and calories they provide (Glick 1998). Including a balance of carbohydrate, fat, and protein in a snack may be beneficial for blood glucose control. Persons living with diabetes should have a health care team to help them design an eating plan that includes healthy snacks.

Elders

Some older persons, especially those 75 years of age and older, may be at high nutritional risk. When elders cannot consume enough food at meals to meet their calorie and nutrient needs, healthful snacks in the form of foods, or medical nutrition supplements for those with special needs, can be helpful in preventing nutrient deficiencies and other health problems (Position of the ADA 2000). A recent study conducted in Israel found dietary intake of key nutrients was significantly lower among men 75 years and older compared with those aged 65 to 74, and one of the factors that contributed to low nutrient intakes was lack of snacks in their eating pattern (Shahar 2003).

Healthful Snack Choices Fruits and Vegetables

A diet rich in fruits and vegetables is associated with reduced risk for major chronic diseases such as heart disease, stroke, and cancer, as well as cataracts and age-related functional decline (Committee on Diet and Health 1989, Liu 2003). In combination

with a low-fat eating plan, a diet rich in fruits and vegetables has been found to lower blood pressure (Sacks 2001). The health benefits of fruits and vegetables relate to their low fat and calorie content, contribution of dietary fiber, vitamins and minerals, and the phytochemicals they contain (Liu 2003). People of all ages can enjoy a variety of fruit and vegetable snacks.

Young children often enjoy raw vegetables more than cooked ones, although with very young children care must be taken to ensure that vegetables do not pose a choking hazard (Rolfes 1998). Carrot sticks, celery sticks with peanut butter (and raisins for “ants on a log”), zucchini and cucumber rounds, and other vegetables make quick and nutritious snacks for children over the age of four. Most young people enjoy the naturally sweet taste of fruits, and the variety of fresh, canned (in juice or extra light syrup), and dried fruits available make it easy to find something for every palate. For thirst, children, as well as adults, should drink water rather than fruit juices. Six to eight ounces of 100% juice daily is enough for children; if they drink too much juice, they often do not eat well, and may not get all of the nutrients they need (Satter 1987). When fruits and vegetables are pre-prepared and readily available, they can take the place of high-fat convenience snacks more often. This can be helpful when hungry children and teenagers get home from school and need a quick snack.

Older persons may have difficulty chewing certain fruits and vegetables, especially when raw, so cooked vegetables and canned fruits are often preferred (Rolfes 1998). Nutrition educators should encourage elders to select a variety of fruits and vegetables that they are able to eat, in order to get the nutrients and dietary fiber they need for good health.

Whole Grain Foods

Grains form the base of the Food Guide Pyramid because they are major sources of complex carbohydrates, which provide calories, as well as vitamins and minerals. It is recommended that several servings per day of grain foods eaten be whole grains since they provide dietary fiber (CNPP 1996, USDA 2000). Whole grain snacks can include whole wheat breads and crackers, oatmeal, popcorn, and leftover vegetarian dishes such as bulgar wheat and brown rice. Check Nutrition Facts labels on packaged foods to determine dietary fiber content of grain foods; some “wheat” breads contain no dietary fiber or just 1 gram per slice. One of the changes recommended by the

Food Guide Pyramid review committee is that at least half of grain servings eaten be whole grains (CNPP 2004). People of all ages enjoy a variety of grain foods and should be encouraged to select whole grains whenever possible.

People may want to limit consumption of crackers and other grain snacks that contain partially hydrogenated oil, since the trans fatty acids formed in the hydrogenation process can adversely affect blood cholesterol levels. In 2006, the Nutrition Facts panel will be required to include information on trans fatty acid content of foods.

Low-fat Dairy Products

The major source of calcium in the American diet is dairy foods. Lowfat and fat free dairy products are excellent sources of protein, calcium, riboflavin and other nutrients. Lowfat milk, yogurt, and cheese were a part of the Dietary Approaches to Stop Hypertension (D.A.S.H.) diet, which was effective in lowering high blood pressure (Sacks 2001).

Milk is a good beverage to accompany many snacks, and yogurt and cheese make healthful and convenient snacks along with a grain food and/or a piece of fruit or vegetable. Persons trying to limit fat and calories can select fat free or lowfat dairy products. Those with lactose intolerance often can tolerate small servings of milk, and since yogurt and cheese are low in lactose they are usually not a problem.

Leftovers

Some of the best snacks may be small servings of leftover lunch or dinner. These can be consumed at home or in the office, especially when a microwave oven is available. A small bowl of soup, a snack-sized portion of a casserole or stir-fry, or leftover salad may just hit the spot at your morning or afternoon break. Combining a healthful snack with a brisk five or ten minute walk can turn a coffee break into a health break.



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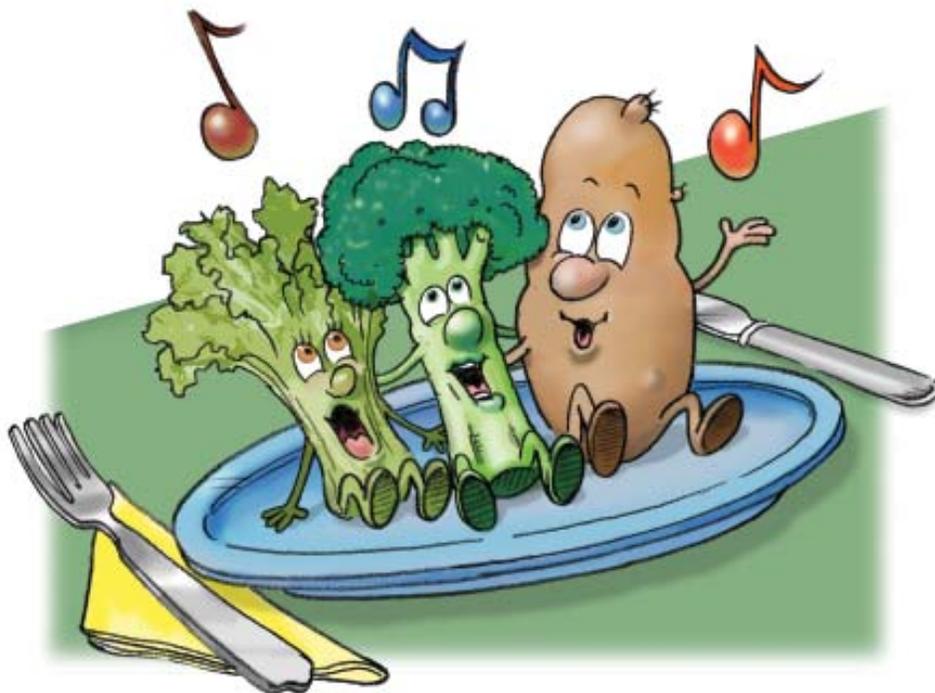
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The Benefits of Physical Activity

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Introduction

Snack Smart, Move More is a multi-agency, multi-faceted campaign¹ that is designed to encourage individuals to incorporate healthy nutrition and physical activity into their daily lives. This paper provides the research base for the *Snack Smart, Move More* campaign and includes information on:

- physical activity and chronic disease,
- the importance of physical activity throughout the lifecycle, and
- trends in physical inactivity.

Daily physical activity plays an important role in preventing many of the chronic diseases faced today. Regular physical activity reduces an individual's risk for heart disease, high blood pressure, several types of cancer, and diabetes. The Centers for Disease Control and Prevention (CDC)² defines "inactivity" as less than 10 minutes total per week of moderate or vigorous-intensity lifestyle activities (i.e., household, transportation, or leisure-time activity), but less than the recommended level of activity. Recommended physical activity is reported to be a moderate, intense activity for greater than or equal to 30 minutes per day, greater than or equal to 5 days a week.

Studies have reported that on average, physically active individuals outlive those who are inactive.³ Today the general public is exposed to numerous messages on the benefits of physical activity; yet 30% of American adults get little or no physical activity, 73% are not active enough, and 25% of adults are not active at all in their leisure time.⁴ Many of our modern day conveniences have, in fact, assisted us in developing physically inactive lifestyles resulting in higher overweight and obesity rates among adults and children.

In 1996, the former *Surgeon General's Call to Action* referenced the rights of individuals in dealing with issues of overweight and obesity and a community's responsibility to have accessible places for children to play, adults to walk, jog or ride a bike.⁵ Physical activity goals are outlined in the Healthy People 2010 objectives. These goals encourage individuals and communities to participate in

regular physical activity to improve their overall health.⁶ Physical activity is a critical component in chronic disease prevention and management.

The Importance of Physical Activity Throughout the Lifecycle

- ❖ Parents can help their children maintain a physically active lifestyle by providing opportunities for physically active play. Families can plan events that encourage everyone in the family to be active: hiking, biking, playing ball, or simply walking.
- ❖ Teenagers can develop and improve muscular strength, build lean muscle, and decrease body fat. Physical activity can build stronger bones reducing the risk of osteoporosis and many other chronic diseases.
- ❖ There are no age limits to physical activity. Evidence indicates that muscle-strengthening activities can reduce the risk of falling and fracturing bones, and can dramatically improve the ability of older persons to live independently.
- ❖ Individuals with physical disabilities, including arthritis or other related debilitating conditions, can participate in daily physical activities that will improve their muscle strength, psychological well-being, and quality of life.
- ❖ Individuals trying to manage their weight or high blood pressure can benefit from daily physical activity. Regular activity can help to burn calories and help lower blood pressure.
- ❖ Individuals experiencing stress or depression can benefit from regular physical activity since it can improve one's mood, helping to relieve minor depression and increasing feelings of overall wellbeing.

Trends in Physical Inactivity

A study evaluating regional inactivity reported that adults in the northeastern and southern states tend to be less active than adults in north-central and

western states.⁷ Data from the 2002 Behavior Risk Factor Surveillance System (BRFSS)⁸ reported 27.9% of Florida adults were physically inactive. (See figure 1.)

In 2001, the former Secretary of the Florida Department of Health mandated a weight screening initiative for public school children. All full service schools directed the school nurses to measure height and weight of their students. Of all the 47 full services schools, 127 children in kindergarten and grades 3, 6, and 9 were screened.⁹

- ❖ 18.3% of children screened were overweight
- ❖ 15.5% were at risk to become overweight

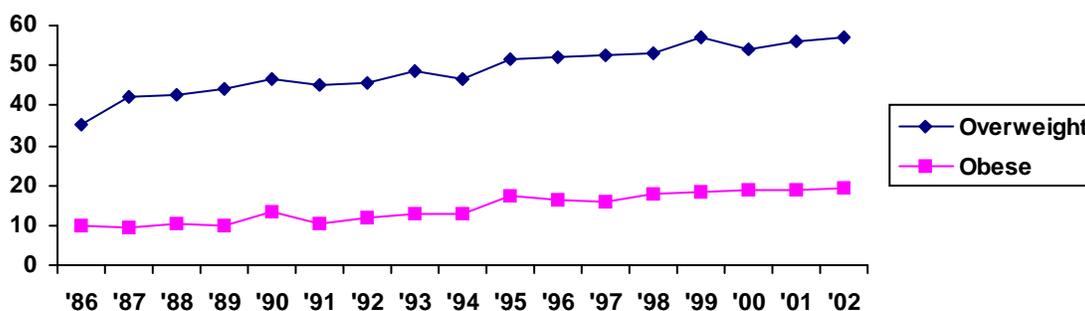
Data from the 2002 Youth Risk Behavior Surveillance System (YRBS) indicated that of Florida high school students, less than 50% attended physical education classes on one or more days during an average week. The most recent data from the 2003 YRBS (see figure 2) show that based on self-reported height and weight, 14% of high school students are at risk to become overweight (BMI percentile $\geq 85^{\text{th}}$ and $< 95^{\text{th}}$ percentile) and an additional 12.4% are overweight (BMI percentile $\geq 95^{\text{th}}$ percentile).¹⁰

Freedman et al. indicated that approximately 50% of children and adolescents who are obese would become obese adults, increasing their risk factor for many of the major diseases: heart disease, high blood pressure, and cancers of the colon, kidney, gallbladder, and postmenopausal breast cancer.¹¹ Many of these chronic diseases are preventable.

In a study examining obesity-related diseases in youth and their associated economic costs, data revealed that hospitalizations among children and adolescents (6-17 years of age) for diseases associated with obesity increased dramatically between 1979 and 1999. In the Wang et al. study, the discharges of diabetes nearly doubled (from 1.43% to 2.36%), obesity and gallbladder diseases tripled (0.36% to 1.07% and 0.18% to 0.59%, respectively), and sleep apnea increased fivefold (0.14% to 0.75%). Ninety-six percent of discharges, with a diagnosis of obesity, listed obesity as a secondary diagnosis. Hospital costs (based on 2001 constant US dollars) more than tripled, from \$35 million to \$127 million.¹²

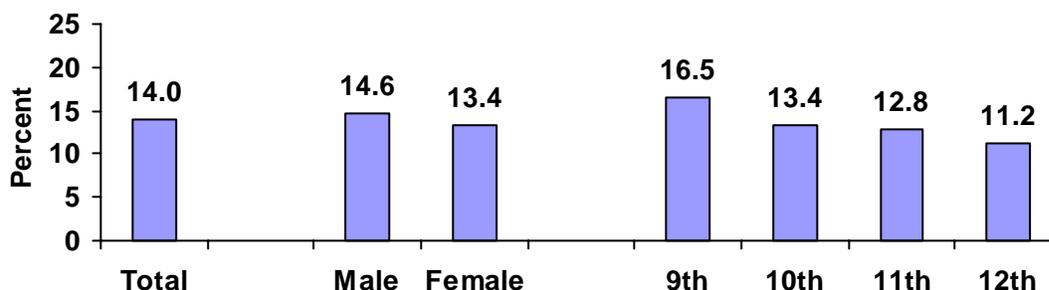
The most recently released report lists state-level

Figure 1: Percent of Florida adults who are overweight and obese, by year, Florida BRFSS 1986-2002



Source: Florida 2002 Behavior Risk Factor Surveillance System

Figure 2: Percent of public high school students at-risk for overweight, Florida YRBS, 2003



Source: CDC 2003 Florida Youth Risk Behavior Surveillance System

estimates of annual medical expenditures attributed to obesity. These researchers developed an econometric model that would predict medical expenditures. The model, along with state representative data, was used to estimate obesity-attributable medical expenditures. The results indicated that annual U.S. obesity-attributable medical expenditures are estimated at \$75 billion in 2003 dollars.¹³

In a study conducted at the University of Northern Iowa, researchers attempted to identify factors associated with physical activity in young children. Two hundred fourteen children (aged 3-5 years) enrolled in ten child care centers were monitored for physical activity with an accelerometer during two continuous days (48 hours). This model included data on sex, history of birth, the child care center, and the father's BMI. The highest total daily counts were taken between 9 a.m. and 5 p.m. at the child care center. Child care was the highest individual predictor of their activity. Results indicated boys were more active than girls in all activity measures except counts between 9 a.m. and 5 p.m. This researcher contended in this study that the influence of a child's physical activity was associated with the father's BMI.¹⁴

Researchers are also evaluating television viewing as it relates to physical inactivity. Researchers are questioning whether television and the computer have replaced the physical activity most children performed after school and on weekends.

A study at the Columbia University College evaluated whether increased television viewing along with inactivity promotes obesity in children. A 12-week pilot study monitored the effects of television viewing contingent on the physical activity of ten obese children. Television viewing was contingent on pedaling a stationary cycle ergometer for experimental participants. Television viewing was not contingent on pedaling for control participants. During the study, the experimental group pedaled 64.4 minutes per week on average, compared with 8.3 minutes by controls. The experimental group watched 1.6 hours of TV per week on average, compared with 21.0 hours per week on average by controls during the 12-week period. Analyses indicated that the experimental group showed significantly greater reductions in total body fat. Total pedaling time during intervention correlated with greater reductions in percent body fat. The conclusion reached in this study indicated that contingencies in the home environment can be arranged to modify physical activity. They also conclude that TV viewing accompanied by physical

activity ("contingent TV") may have a role in preventing childhood overweight.¹⁵

As with any area of study, controversial conclusions or methods are seen. An international study at the National Institute of Public Health in Mexico attempted to evaluate the association of physical activity, television program viewing, and other forms of video use [video cassette recorders (VCRs) and video games] with the prevalence of obesity among school children.¹⁶ Participants consisted of 712 children (9-16 year olds) from a low- and a middle-income town in the Mexico City area. Children completed a self-administered questionnaire to assess diet and time spent in physical activity and television viewing. Height, weight, and triceps skinfolds were measured. Of the 761 participants, 461 returned completed questionnaires. Twenty-four percent of the participants with completed questionnaires were classified as obese. Children reported an average of 4.1 +/- 2.2 hours per day (h/d) watching television:

- ❖ 2.4 +/- 1.5 h/d for TV programs,
- ❖ 1.7 +/- 1.5 h/d for VCR or videogame use, and
- ❖ 1.8 +/- 1.3 h/d in moderate and vigorous physical activities.

The study indicated that physical inactivity and television viewing, but not VCR/videogame use, were related to obesity prevalence in Mexican children 9-16 year olds.

In Grund et al. researchers chose to study whether TV viewing is an index of physical activity and fitness in overweight children.¹⁷ Researchers evaluated the relationship between TV viewing and body composition, energy expenditure, physical activity fitness, and nutrition habits of prepubertal children. Participants received questionnaires requesting information on TV viewing time, socioeconomic status, and nutrition habits. Anthropometrics and bioelectrical impedance analysis and resting expenditure by indirect calorimetry were assessed for each child. Children were divided into two groups according to their reported daily television viewing time. Group I reported ≤ 1 hour of daily TV viewing. Group II reported $>$ than 1 hour of daily TV viewing. The results compared groups and indicated that children of group II had higher body weight, body mass index, and prevalence of overweight. Researchers concluded that there is a positive relationship between TV viewing and overweight.

Another area of study addresses the effects of physical activity and work performance. In Pronk et al. researchers conducted a study to evaluate the association between modifiable health risks (physical activity, cardiorespiratory fitness and obesity) and work performance.¹⁸ Information was collected from 683 workers. Variables in this study included number of loss workdays, quantity and quality of the work performed, and overall job performance and interpersonal relationships. Results indicated that employees with higher levels of physical activity had higher cardiorespiratory fitness and better overall job performance. Researchers contended that obesity related to more difficulty in getting along with coworkers; severe obesity related to a higher number of lost workdays. This study indicates that lifestyle-related health risk factors significantly impact employee work performance. Based on studies like this, progressive-thinking employers see the many benefits of offering a healthful environment, encouraging employees to participate in physical activity, and in some cases providing health insurance incentives.

Safety is a repeated concern in addressing the issue of inactivity. In a recent article in the *American Journal of Health Promotion*, the author suggests the use of social marketing to promote increased physical activity by changing the behaviors of consumers, developers, and policy makers.¹⁹ The author references how a social marketing approach can help to create active living communities that can include safe sidewalks and bike paths. The author suggests that one of many approaches is to mobilize communities to use their available resources in a way that maximizes the odds of creating active living communities. This would include understanding the competition in their communities, understanding target markets, creating mutually beneficial exchanges, segmenting markets and targeting them based on anticipated returns. Although many researchers may come to similar conclusions, this is a complex issue. Individuals and communities are being called upon to improve their health through lifestyle behaviors that include behavior changes that incorporate daily physical activity and healthful nutrition.

There are many factors concerning physical inactivity and the potential effects to one's health. The problem may be complex; however the first step may require us to address it through personal responsibility combined with environmental and policy development interventions.

*“As a society, we can no longer afford to make poor health choices such as being physically inactive and eating an unhealthy diet; these choices have led to a tremendous obesity epidemic. As policy makers and health professionals, we must embrace small steps toward coordinated policy and environmental changes that will help Americans live longer, better, healthier lives.”*²⁰



Endnotes

1. FIFNC-Florida Interagency Food and Nutrition Committee—a nutrition committee of governmental agencies.
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5. The Surgeon General's Call to Action To Prevent and Decrease Overweight and Obesity, 1996. Available at: www.surgeongeneral.gov.
6. Healthy People 2010, Physical Activity and Fitness. Available at: www.healthypeople.gov.
7. Pratt, Macera, & Blanton, 1999; United States Department of Health and Human Services, 2000, 1996.
8. Centers for Disease Control and Prevention, 2002 Behavioral Risk Factor Surveillance System.
9. Florida Department of Health Obesity Prevention Program Fact Sheet. Available at: <http://www.doh.state.fl.us/family/obesity/factsheet.html>.
10. Centers for Disease Control and Prevention, 2003 Florida Youth Risk Behavior Survey.
11. Feedman DS et al. The relationship of overweight to cardiovascular risk factors among children and adolescents; Bogalus heart study. *Pediatr.* 1999; 103 (6): 1175-82.
12. Wang et al. Economic burden of obesity in

youths aged 6 to 17 years; 1979-1999. *Pediatr.* 2002;109(5):e81-89 2002.

13. Finkelstein et al. State-Level Estimates of Annual Medical Expenditures Attributable to Obesity; *Obesity Research* 12:18-24, 2004.

14. Finn et al. Factors associated with physical activity in preschool children. *J Pediatr.* 2002 Jan; 140(1):8.

15. Faith et al. Effects of contingent television on physical activity and television viewing in obese children *Pediatrics.* 2001 May;107(5):1043-8.

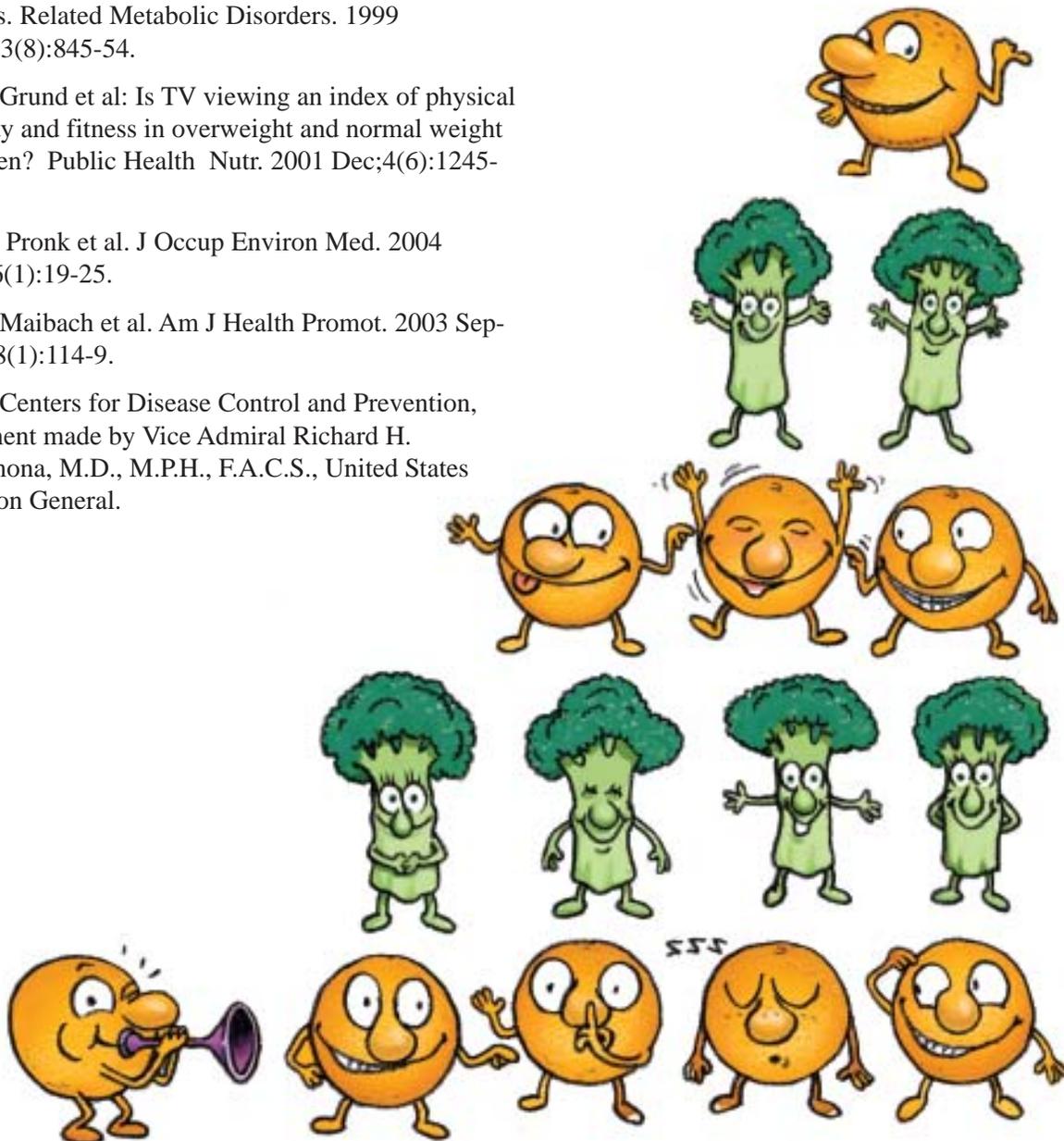
16. Hernandez et al. Association of obesity with physical activity, television programs and other forms of video viewing among children in Mexico City. *Int J Obes. Related Metabolic Disorders.* 1999 Aug;23(8):845-54.

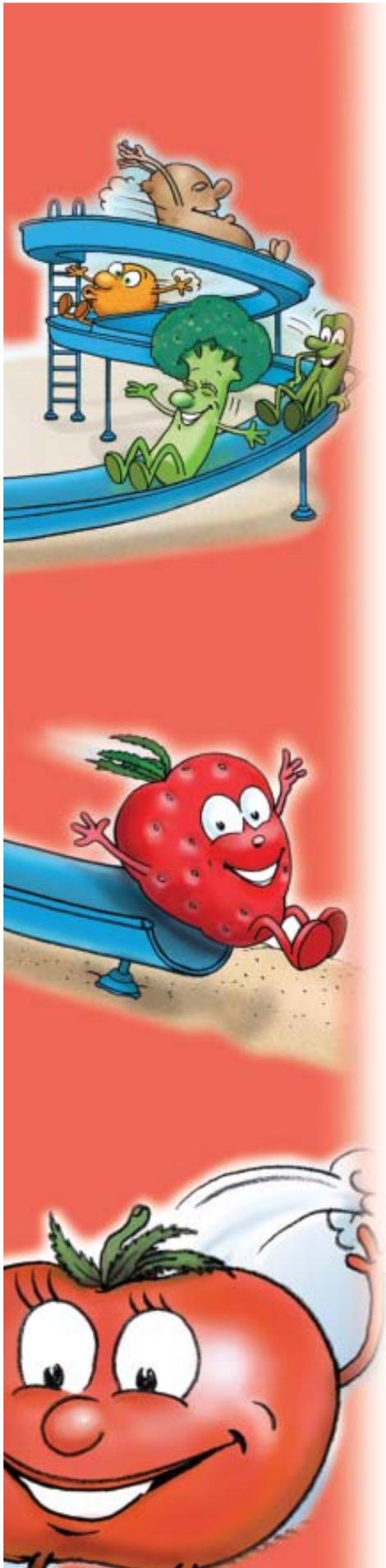
17. Grund et al: Is TV viewing an index of physical activity and fitness in overweight and normal weight children? *Public Health Nutr.* 2001 Dec;4(6):1245-51.

18. Pronk et al. *J Occup Environ Med.* 2004 Jan;46(1):19-25.

19. Maibach et al. *Am J Health Promot.* 2003 Sep-Oct;18(1):114-9.

20. Centers for Disease Control and Prevention, statement made by Vice Admiral Richard H. Caromona, M.D., M.P.H., F.A.C.S., United States Surgeon General.





Smart Snacking Ideas



- ❖ Orange or tangerine sections
- ❖ Chunks of banana, pineapple, melons, or strawberries
- ❖ Frozen fruit bars
- ❖ Wheat crackers topped with cheese slices
- ❖ Toast with peanut butter
- ❖ Ready to eat cereal – with or without lowfat milk
- ❖ Mini pizzas made with English muffins, cheese, and tomato sauce
- ❖ Vegetable sticks
- ❖ Steamed broccoli, green beans, or baby carrots with lowfat dip
- ❖ Vegetable juice
- ❖ Bean dip with whole wheat crackers
- ❖ Lowfat ice cream, ice milk, or yogurt.

And Remember. . .

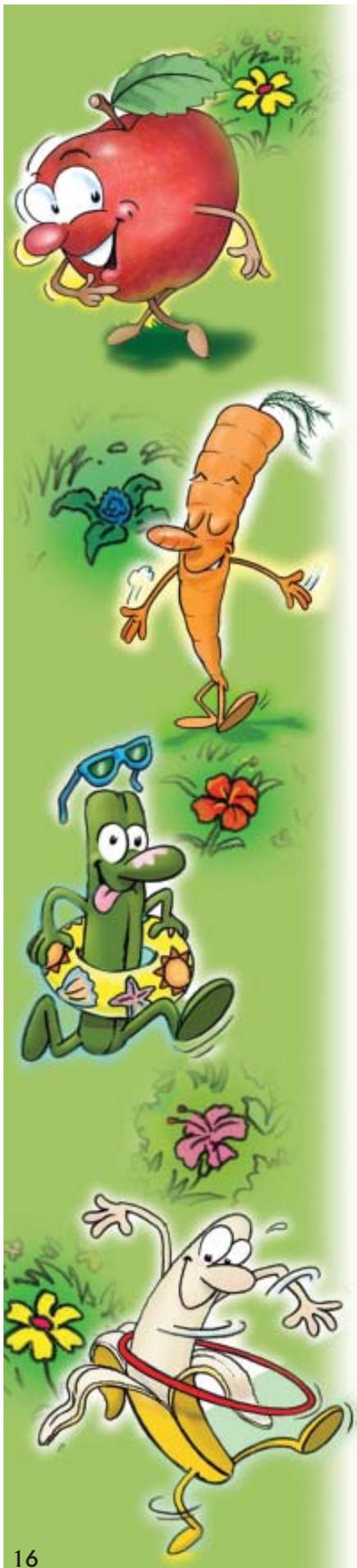


Limit TV watching so that your child is not exposed to too many “junk food” commercials.



Keep portion sizes “snack” size, not meal size.

Reminder: In order to prevent food-related choking in young children, parents/caregivers should make foods as safe as possible for young children. Prevention is the best approach. Parents should modify the shapes and textures of the foods most likely to cause choking. Children under 2 years of age should not be given peanut butter.



Move with Your Family



- ❖ Go for a walk outside.
- ❖ Go to a park or playground.
- ❖ Run through a sprinkler.
- ❖ Have everyone help with chores: sweeping, raking, vacuuming, picking up toys.
- ❖ Play music and dance, stretch, jump, skip, and march.
- ❖ Work in a garden.
- ❖ Wash the car, wash the bikes.
- ❖ Have your children play with toys that help them move: balls, bikes, push toys.
- ❖ Play active games such as jump rope, races, dodge ball, tag, musical chairs.
- ❖ Make your own toys:
 - Balls: roll up socks, crumpled paper, old aluminum foil, yarn.
 - Racquets: pull the bottom of wire coat hangers down into a diamond or circular shape. Cover with old pantyhose legs, nylon knee-highs, or large socks, securing the ends with a rubber band or masking tape. Bend the hook of the hangers in and cover any sharp edges with masking tape to make a handle.
 - “Tunnels”: open up a large box at both ends and cover with a large sheet or blanket. Let your child crawl through the “tunnel” and explore.
- ❖ Park the car near the end of a parking lot and walk.
- ❖ Get off the bus early and go the rest of the way on foot.
- ❖ Take the stairs instead of the elevator.
- ❖ Turn off the TV and video games.

And Remember . . .



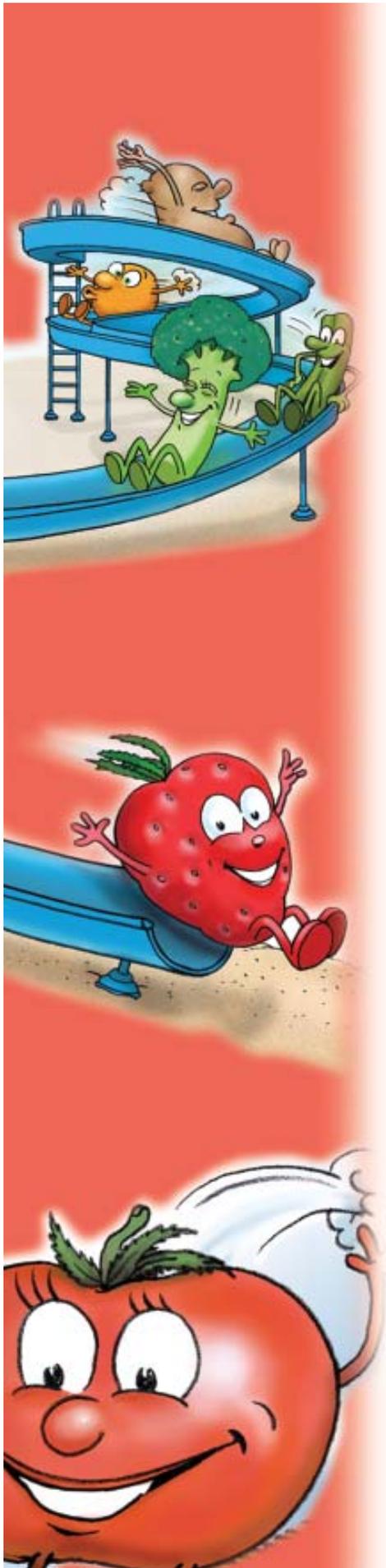
Adults need to be active at least 30 minutes a day.



Children need at least 60 minutes a day of active play.



TV and video games should be limited to no more than 2 hours a day.



Things to Remember When Teaching Young Children



Below are tips and ideas to remember when teaching young children in the classroom or at home.

You are the ROLE MODEL

1. Ask yourself, “How do *I* snack?” and “What is it that *I* do for physical activity?” As adults, we need to make sure we are practicing the same habits we ask our students and our own children to practice.
2. Children copy the way their parents and teachers act, think, and talk.
 - ❖ Children are much less likely to smoke, for example, if their parents do not smoke.
 - ❖ Adults can easily forget how their actions affect children.
3. As parents and teachers, we need to remember to “practice what we preach” by being good examples for children.

Children Love to REPEAT Things

Repeating new words and ideas is one of the best ways children from birth to 6 years old remember and learn.

- ❖ Repetition helps them learn how to pronounce words correctly. This is why children like to read the same book over and over again even if it is boring for us adults!
- ❖ Repetition is incorporated throughout this lesson plan.

Emphasize POSITIVE WAYS of Talking and Acting

1. Parents and teachers should try to tell children what they **want** them to do, rather than what they **don't want** them to do.
 - ❖ When a child is talking too loudly, the teacher can say, “Please talk quietly” rather than, “Do not talk so loud.”
 - ◆ From “Do not talk so loud,” children mainly hear the word, “loud.”
 - ◆ From “Please talk quietly,” children mainly hear the word, “quietly.”
 - ❖ Very young children rarely pay attention to words like “not” or “but.”

2. Teaching children positive ways of eating and moving is also a better approach than focusing on the negative.

For example: We don't want them to think it is wrong to eat a piece of cake or a cookie once in a while or to be still (not active) at different times during the day.

Listening, Seeing, and Doing Things

1. Increase children's chances of learning by having them listen to the teacher while the teacher shows them pictures of the subject being taught.

- ❖ This is the same thing as children doing "show and tell" at school.
- ❖ Children remember better what they are taught when we show and tell them what they are learning.

Examples: Say the new word and spell it aloud and write the word on the board for the children to see what it looks like. Show photos or drawings of fruit while describing each fruit and what it tastes like.

2. Expand the "show and tell" idea by having the children take part in activities related to the new subject being taught.

For example: Talk about an apple, show the children what an apple looks like, and provide apples for the children to snack on. Have the children draw or color a picture of an apple.

Teaching Children New Things with What They Already Know

Easier and possibly faster ways to have children learn is by introducing new ideas along with those they already know.

- For example: Fruit, a new subject for young children, can be taught through "food," a word and idea they already know. Ask children about their favorite foods and tell them that a specific group of food is fruit. Once children are familiar with the idea of fruit, specific kinds of fruit, such as apples or oranges, can be introduced to them.

Gradually Introducing New Words

1. When teaching children new words, choose words that are within the children's level of understanding. Words that are too difficult to understand can frustrate children and make them feel disappointed in themselves.

For example: "Kiwi" may be a new and difficult word for children to understand.

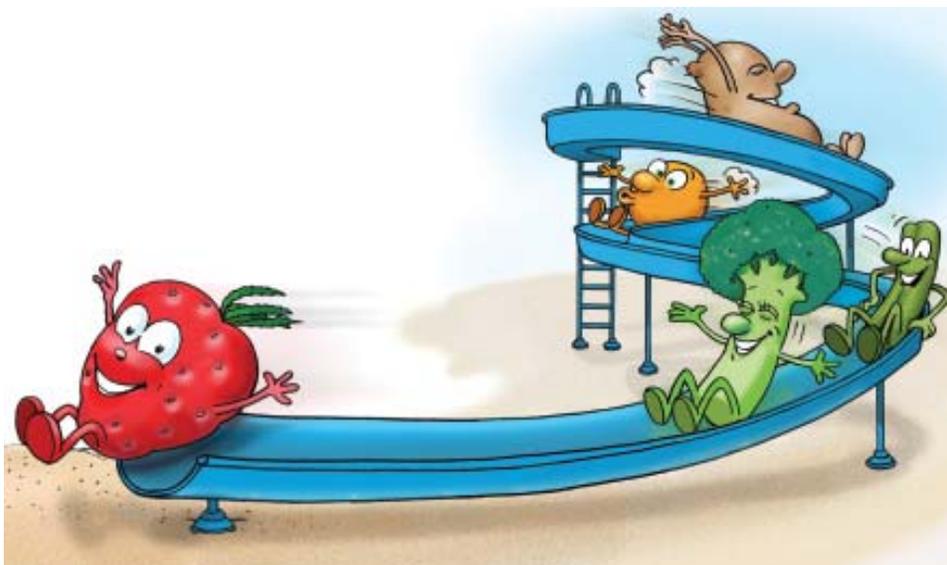
2. New words need to be slowly introduced to children through repetition, listening, seeing, and doing. Words taught too quickly makes learning more difficult, which can cause frustration and disappointment.

Self-Esteem and Pride

1. An important way to help children build self-esteem is by encouraging them to be proud of themselves and what they do. Young children build personal pride when parents and teachers encourage them to congratulate themselves by clapping their hands or hugging themselves.
2. By repeating activities in these lesson plans a few times a week, children are more likely to successfully learn and remember long term. Through their successes, they develop their self-esteem.

Resources

1. South Dakota Public Broadcasting. (1999). How Children Learn. Retrieved December 22, 2003 from: http://www.sdpb.org/www/learning/RTL/ready_how.htm
2. Kaufman, N., Castrucci, B., Mowery, P. (2002 June). Predictors of change on the smoking uptake continuum among adolescents. *Archives of Pediatrics and Adolescents Medicine* (156).





Lessons and Activities

—Preschool—



Concept

Teach children and their parents how to snack healthy and move more at school and home.

Sunshine State Standards and Selected Components Addressed

1. Health Literacy

Standard 1: The student comprehends concepts related to health promotion and disease prevention. (HE.A.1.1) The student:

- understands positive health behaviors that enhance wellness;
- classifies food and food combinations according to the Food Guide Pyramid; and
- identifies common health problems of children and possible ways to prevent these problems.

2. Physical Education Literacy

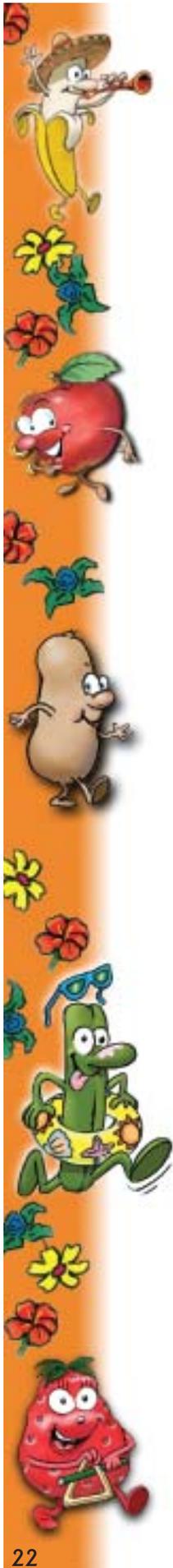
Standard 1: The student demonstrates competency in many movement forms and proficiency in a few forms of physical activity. (PE.A.1.1) The student:

Demonstrates basic locomotor skills (e.g., hop, walk, run, jump, leap, gallop, skip, and slide).

Goals

- Children understand and identify healthy snacks and movement.
- Children are encouraged to ask for and eat healthy snacks.
- Children choose more activities that are movement oriented.

Five years olds normally have a higher level of understanding than 3 or 4 year olds. For that reason, there are different objectives for five year olds and for children ages 3 and 4. The following objectives and activities need to be practiced by the teacher and child care staff in a way that best suits the children's level of understanding.



Introducing 3 & 4 year olds to “Snack Smart”

1. Have children sit in a circle with the teacher.
2. Read the book, *Give Me 5 A Day!*, copy included in this kit.
 - ❖ Read the book with great animation to keep the children’s attention.
 - ❖ Encourage the children to jump and turn around as the fruits and vegetables do in the book.
 - ❖ Have the children practice counting from 1 to 5 as done in the book. Show them how to use their fingers to count 1, 2, 3, 4, and 5.
3. After reading the book, show the children a series of drawings or photos of different fruits and vegetables.
4. While showing a picture of a food, say for example:

This is a strawberry. Can you say ‘strawberry’?

After the children say strawberry, say:

The strawberry is bright red. It tastes so good and is good for our tummies! [Rub your tummy with a big smile.]
5. When possible, serve children some of the same fruits and vegetables at snack time or at mealtime.
6. Add a new fruit or vegetable each week. Review them by showing pictures of each vegetable and fruit being added, along with the ones that have already been introduced.

Introducing 3 & 4 year olds to “Move More”

1. Have children stand in a circle together with the teacher, preferably outside on soft ground or inside in a safe area.
2. Review the different movements as shown in *Give Me 5 A Day!* while playing music in the background (e.g., jump, turn around, etc.).
3. Just as new fruits and vegetables are added each week, new movements should be added as well.
4. Review these movements with the children as many days of the week as possible, so they get used to doing them. Children will also have fun repeating the movements.
5. Demonstrate the movements by showing children how to do them with a lot of energy and excitement. The more fun the teacher makes this, the more fun the children will have, and the more they will want to do it again

Introducing 5 year olds to “Snack Smart”

1. Have children sit in a circle with the teacher.

2. Say to the children:

Today we are talking about eating. Let's go around the circle and have each of us say one thing we like to eat.

3. Then say:

*It's important to eat because food gives us energy. We need energy so we can move our arms and legs, read a book with our mummies and daddies, take a walk with our dog, or play ball in the yard. Some foods give us more energy than others. We eat more of them so we can have more energy. Let's read this book, **Give Me 5 A Day!** to learn about some of these good foods we can eat.*

4. Read the book and encourage the children to participate by having them do the activities in the book like jumping and turning around. Point out and identify the different vegetables and fruits in the book.

5. After reading the book, explain:

Fruits and vegetables are some of the best foods we can eat because they give us lots of energy so our bodies are strong! So our eyes see better! So we can run, skip, jump, and play!

6. As you open your eyes wide, say: *Show me your eyes!*

7. As you flex your arm muscle, say: *Show me your strong arms!*

8. Return to the book and review each different vegetable and fruit in the book.

❖ For example: Point to the strawberry in the book and say:

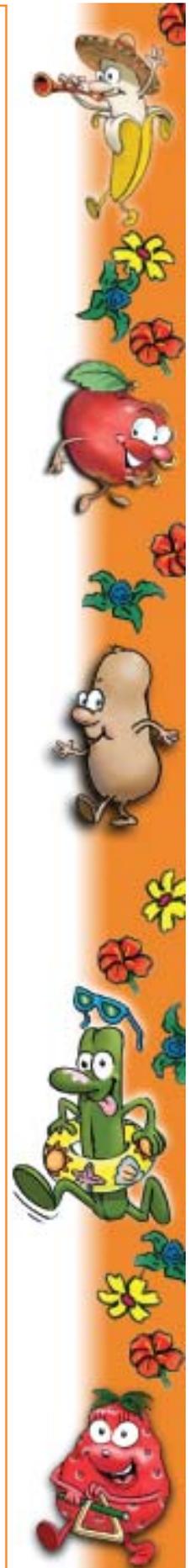
This is a strawberry! Strawberries are bright red. When you bite them, they taste sweet on your tongue. They are one of my favorite things to eat at lunchtime or after I go for a walk outside. Would you like to try a strawberry for snack or lunch?

❖ Provide strawberries for the children to snack on.

❖ Review other foods that are healthy for the children to snack on, such as cheese, yogurt, or different types of raw vegetables.

❖ Introduce a new healthy food item each week. Provide samples for the children to snack on. At least a couple of times each week, review the different foods the children have tasted and learned about.

9. To encourage children to eat healthy foods for snacks, involve the children in selecting which foods they want to snack on each week. By letting children help in selecting their own snacks, they will feel in control and will be more likely to eat the healthy food.





Introducing 5 year olds to “Move More”

1. Have the children sit in a circle with the teacher.
2. Say:

Today we are going to talk about moving. What is your favorite way to move? Do you like to silly dance? Do you like to run, skip, or jump?

Encourage the children to talk about their favorite way(s) to move.

3. Have the children imitate the teacher. Say the following and demonstrate the movements:

Not only is eating healthy food important, so is moving and being active! The more you move, the stronger your legs and arms get. Can you show me how strong your arms and legs are? [Flex your arm and straighten and bend your leg.]

The stronger your heart gets – Da -dum, Da-dum...!” [Tap on your chest.]

The stronger our lungs get! [Inhale deeply and big for the children to see.]

4. Create a list of different movements to do with the children inside or outside in a safe area.
 - ❖ Play music while doing some different movements with the children to trigger them to want to move. For example, march in place, march in a small circle, and gradually march in a larger circle.
 - ❖ Reviewing these movements as many days during the week as possible is best so that the children learn the movements and are used to doing them several times a week.
 - ❖ Add at least one new movement each week for the children to learn.
 - ❖ Encourage the children to make-up different movements as well.

Additional activities for either age group

1. Make *Snack Smart, Move More* a year round lesson.
 - ❖ Each month introduce a new vegetable and fruit and have it be the focus of a snack or meal once each week of that month.
 - ❖ Hang pictures of the fruit and vegetable in the classroom so children get to know exactly what they look like.
 - ❖ Have the children wear an item of clothing that matches the color of the fruit or vegetable that is the focus of that month.
2. Have the children color pictures of the different fruits and vegetables that have been discussed in class (see pages 26–28).
3. Prepare a recipe with children in class (see pages 31 and 92).
 - ❖ Find simple recipes that children can fix and eat in class.
 - ❖ Have parents contribute to the “healthy snack” recipe collection.

4. Take a field trip to a local grocery store to teach the children how to select the healthy snack foods that have been discussed in class.
 - ❖ If the field trip is not possible, create a treasure hunt list of different healthy foods the children can find when they go grocery shopping with their parents.
 - ❖ Assign each child or group of children a different food and have them bring it to class for a “healthy snack” show and tell.

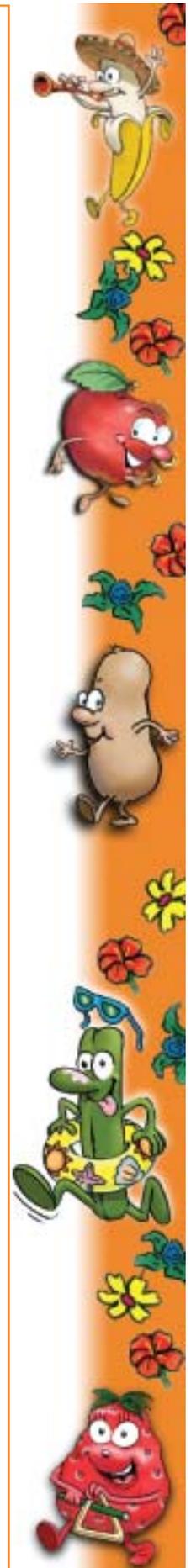
Supplies

1. Coloring pages of fruits and vegetables (pages 26–28)
2. Two-page Parent Newsletter (pages 29–30 and pages 90–91)
3. Simple recipes using fruits and vegetables (pages 31 and 92)
4. Pictures of fruits and vegetables
5. Crayons

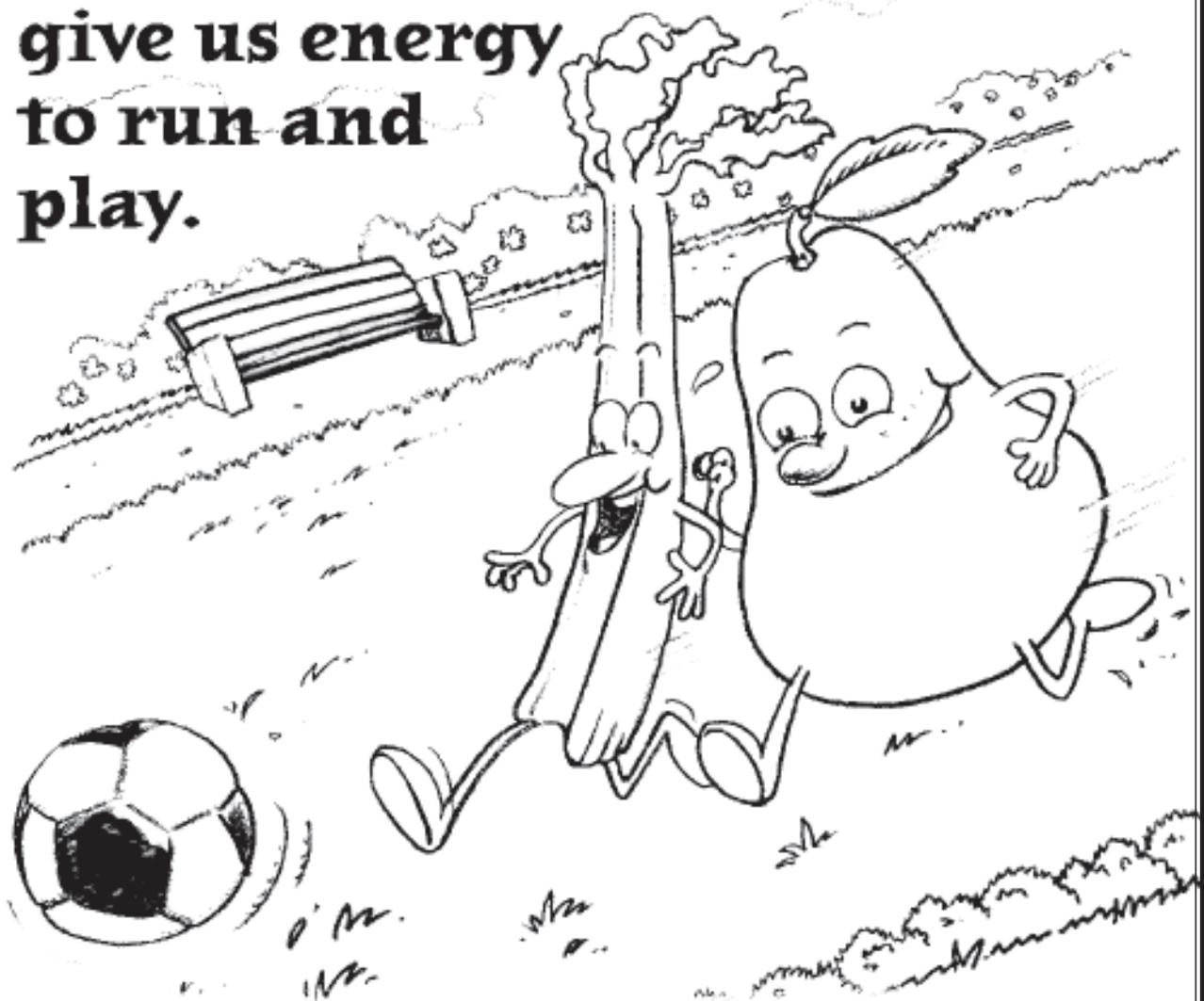
Resources

1. *Give Me 5 A Day!*, 2003 Florida Department of Health at www.doh.state.fl.us/ccfp.
2. *Mealtime Memo for Child Care*, National Food Service Management Institute at: www.nfsmi.org.
3. *Nibbles for Health*, USDA TEAM Nutrition at: www.fns.usda.gov/tn.
4. *Nutrition Education Activities for Young Children*, Bureau of Child Nutrition Programs, Florida Department of Health at www.doh.state.fl.us/ccfp.

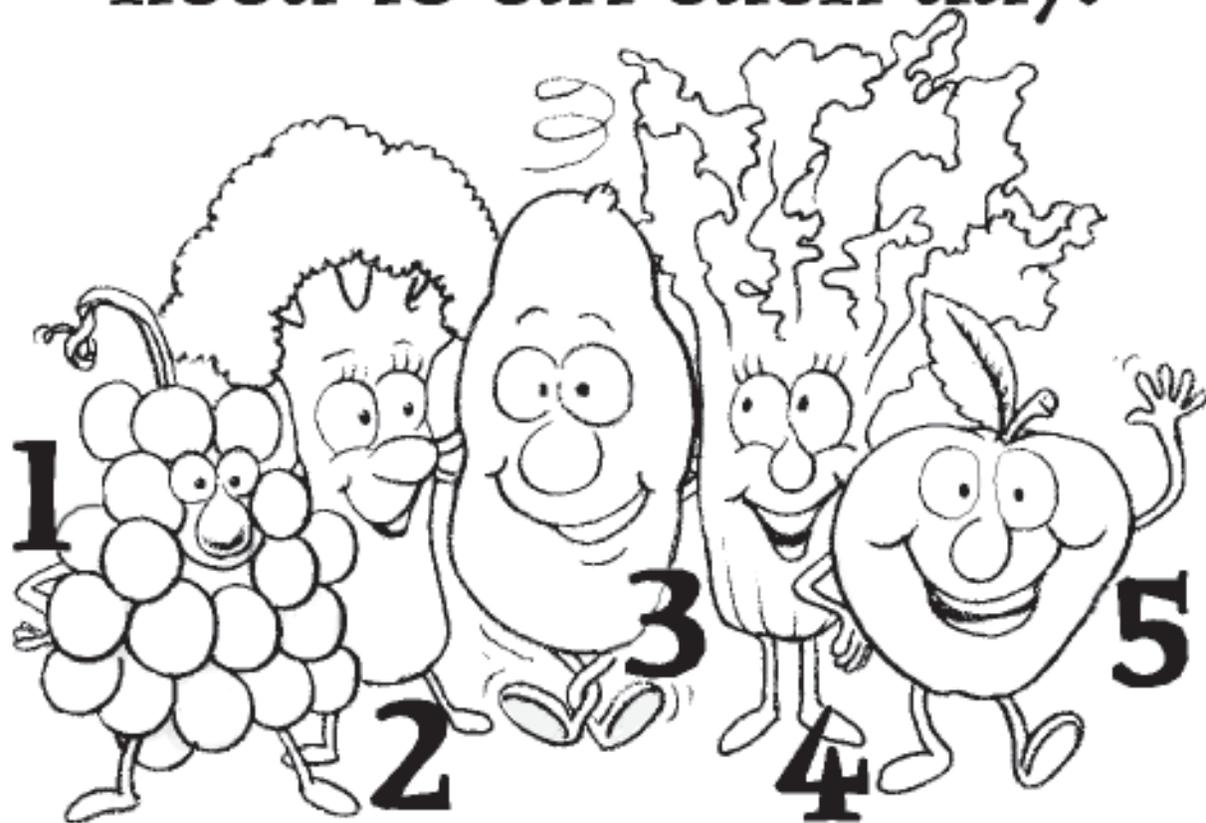
Beginning on page 87, black and white camera-ready copies of handouts found throughout the kit are available for your use.



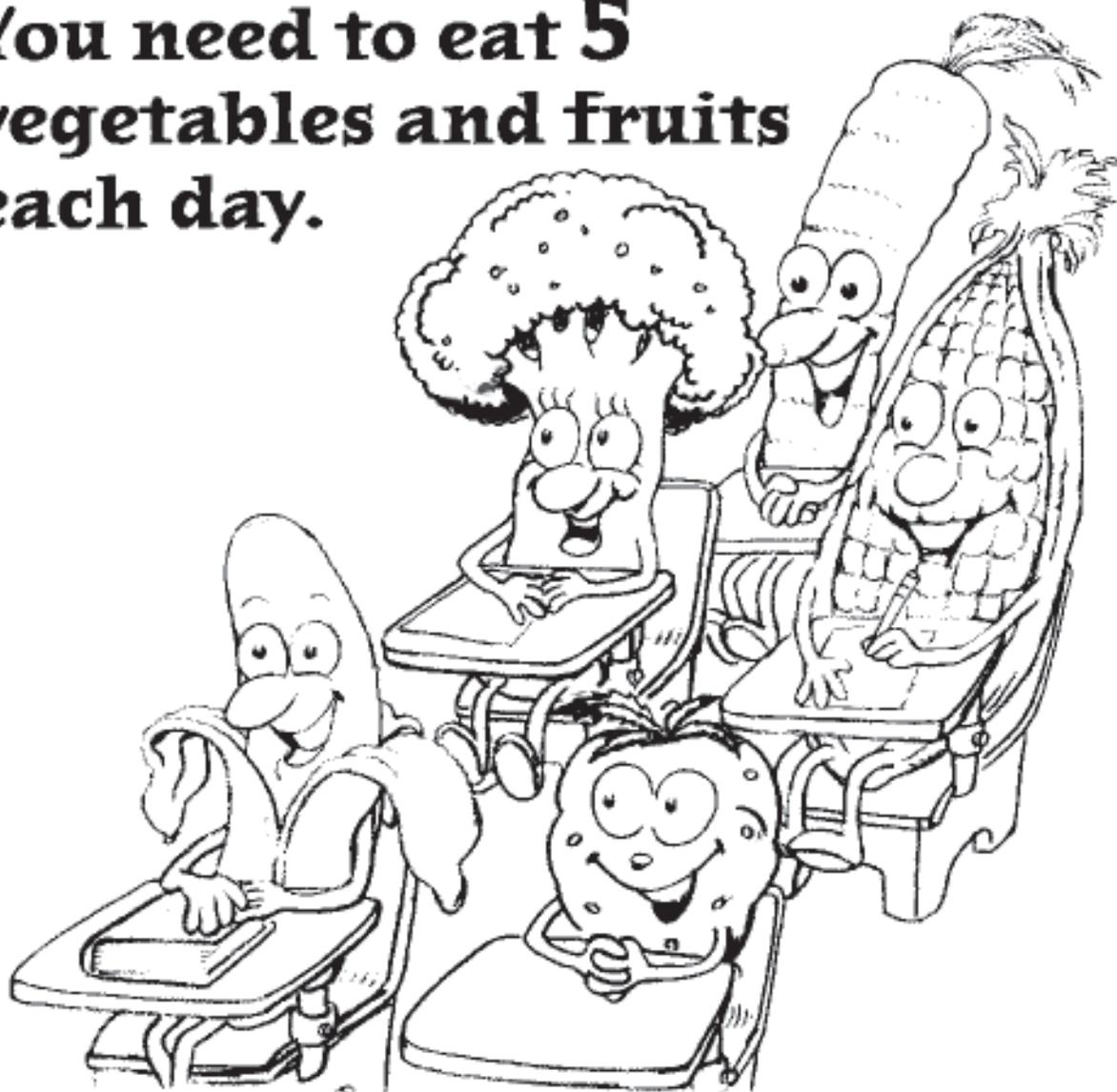
**Vegetables and fruits
give us energy
to run and
play.**

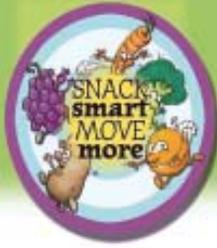


5...5...5...
That's how many
vegetables and fruits you
need to eat each day.



**You need to eat 5
vegetables and fruits
each day.**





Dear Parents,

Your child has been learning about eating healthy snacks and being active from our lesson, *Snack Smart, Move More*. We have been focusing on eating fruits and vegetables for snacks and how these and other foods, along with physical activity, are important for our bodies. Below are some things we have been learning:

“Snack Smart”

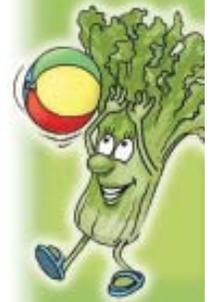
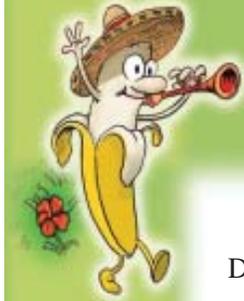
- ❖ We read the book *Give Me 5 A Day!* It is about fruits and vegetables and why we need to eat at least three servings of vegetables and two servings of fruit every day. We also practiced our counting while reading this book.
- ❖ We have been trying different fruits and vegetables for snacks, like strawberries, broccoli and carrots. Share your favorite fruit and vegetable with your child.
- ❖ We learned that fruits and vegetables are some of the best foods we can eat because they give us lots of energy and help our bodies be strong.

“Move More”

- ❖ While reading the *Give Me 5 A Day!* book, we got to move (jump up and down and turn around).
- ❖ We talked about our favorite ways to move and be active. Share your favorite way to be active with your child.
- ❖ We stretched and flexed our arms and legs to show how strong they are and then felt our hearts beat stronger because we were moving.
- ❖ We also made-up different movements like marching in place to music.

Ask your child what their favorite movement is and if they have a “new” snack they would like to try at home. Encourage your child to help in selecting healthy snacks for home. They will more likely eat the healthy food you want them to eat if they play a part in picking it out.

Sincerely,



Snack Smart

Preschool children have small stomachs and probably eat smaller amounts at mealtime than you do. Children **do** get hungry between meals, especially when going through a growth spurt. Actually, most young children do better if they eat four to six times during the day.

Snacking smart between meals can help provide important vitamins and minerals young bodies need to grow and be healthy. Children that develop healthy snacking habits early will more likely keep them through their lifetime. Here are some ideas to help you encourage healthy snacking in your family:

- ❖ Show children how to snack smart by snacking smart yourself. Keep a bowl of fruit on the kitchen counter or table.
- ❖ Keep snack portion sizes small, not super-sized.
- ❖ Keep pre-measured baggies of healthy snacks on a low shelf in the pantry or refrigerator in reach of little ones.
- ❖ Offer snacks two to three hours before a meal to satisfy hunger, not for use as a reward.
- ❖ With your child's help, choose healthy snacks when you shop. Select a variety of foods from each of the five major food groups. For example:
 - ♦ **Fruits:** apples, bananas, cantaloupe, strawberries, grapefruit, 100% fruit juices.
 - ♦ **Vegetables:** green and red pepper strips, cucumber slices, carrot and celery sticks, broccoli and cauliflower bites.
 - ♦ **Breads:** animal and graham crackers, bagels, English muffins, low sugar cereals (10 grams of sugar or less as stated on the Nutrition Facts label), tortillas – chips or soft, whole wheat crackers, pita bread.
 - ♦ **Dairy:** lowfat or fat free milk for children age 2 and older, string cheese, yogurt - plain, flavored or sweetened, low-fat cottage cheese, cheese cubes.
 - ♦ **Meats:** eggs—hard cooked, bean dip (with tortillas), peanut butter (with crackers), lean meats—rolled or cubed like ham and turkey.

Move More

Good nutrition and physical activity work together for healthier families. Children should be physically active for at least 60 minutes a day and adults for at least 30 minutes a day. This does not have to be all at one time.

Children see those around them as role models, especially their family members. Here are some ideas to help you encourage physical activity in your family:

- ❖ Take a walk around the block or to a friend's house.
- ❖ Take the stairs when you can.
- ❖ Wash the car or the dog.
- ❖ Rake leaves.
- ❖ Ride a bicycle.
- ❖ Swim.
- ❖ Jog.
- ❖ Play basketball or soccer.
- ❖ Play frisbee with a friend (canine or human).
- ❖ Plant some healthy vegetables in your yard or in pots.
- ❖ Dance. "Silly" dancing is especially fun for younger children—just make up dance steps as you go along.



Getting your family moving can be fun, and it can provide an opportunity for your family to spend more time together. Being active doesn't necessarily mean joining a club or gym, but it does require turning off the TV, getting up, and moving. The important thing is to be active regularly and enjoy what you do.



Snack Smart Recipes



❖ Wrap-Ups

Makes 1 wrap-up

4-5" tortilla

1 tsp. low-fat mayonnaise

1 tsp. low-fat sour cream

¼ cup chopped or grated vegetables (tomato, red pepper, cucumber, carrot, onion, zucchini) or cooked dried beans

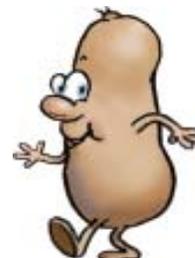
2 Tbsp. shredded cheese

1. Mix mayonnaise and sour cream. Spread on one side of tortilla. Give each child one tortilla.
2. Give each child ¼ cup chopped vegetables and 2 Tbsp. shredded cheese. Show the children how to put their vegetables and cheese in the tortilla.
3. Next, show the children how to fold the tortilla in half or gently roll it up; they may need help with this step.

Options instead of mayonnaise and sour cream:

2 tsp. of mashed avocado

2 tsp. of mashed beans



1 Wrap-Up meets the Child Care Food Program snack meal pattern requirement for children ages 3-5.

One wrap provides: 1 serving grain/bread, ¼ cup vegetable/fruit, and ½ ounce of meat alternate.



❖ Graham Cracker Smacker

Makes 1 Graham Cracker Smacker

2 graham cracker squares

1 Tbsp. peanut butter

¼ cup soft fruit slices (banana, peaches, pears, etc.)



1 Graham Cracker Smacker meets the Child Care Food Program snack meal pattern requirement for children ages 3-5.

One "smacker" provides: 1 serving grain/bread, ¼ cup vegetable/fruit, and 1 Tbsp. of meat alternate.

1. Spread 2 graham cracker squares with thin layer of peanut butter.
2. Give each child ¼ cup soft fruit such as: slices of banana, peach, pear, or other soft fruit. Let children place fruit on top of one cracker with peanut butter.
3. Show children how to place the other graham cracker square spread with peanut butter (facing inside) on top of fruit.

Adapted from: *Physical activities and healthy snacks for young children*. (2001). [Des Moines, IA]: Iowa Department of Education Bureau of Food and Nutrition, Iowa Team Nutrition.



Lessons and Activities

—Elementary—



Concept

Teach children how to choose healthy snacks and encourage physical activity.

Goals

K-2nd Grade

1. Students will be able to recognize the different food groups of the Food Guide Pyramid and classify foods accordingly.
2. Students will recognize many different foods.
3. Students will recognize the general effects of diet on health.
4. Students will understand the benefits of regular participation in physical activity.

3-5th Grade

1. Students will understand that diet and exercise influence individual well-being.
2. Students will understand the nutritional values of different foods.
3. Students will learn how to read a Nutrition Facts Label.
4. Students will understand health enhancing behaviors and how to reduce health risks.



Objectives and Activities

K-2nd Grade

1. Discuss the Food Guide Pyramid with students. Talk about the different foods found in each group and how much they need each day. A copy of the Food Guide Pyramid can be found on pages 65 and 106 in this kit. You may also order free posters from the Department of Education. The standard USDA Food Guide Pyramid and a special Food Guide Pyramid featuring children are available. To order, call 1-800-504-6609 and ask for the Resource Center.
2. Talk about how eating healthy makes you feel. Which foods would be healthy? Emphasize the consumption of fruits, vegetables, and lowfat dairy.
3. What else makes you feel healthy? Exercise. Go around the room and ask students what kind of exercise they like to do. If possible have children act out the exercises as you talk about them. For example run in place, move your arms like you are swimming, swinging a baseball bat, shooting a basketball, etc.

3-5th Grade

1. Teach students how to read a Nutrition Facts Label. Information on how to read, understand, and use a label can be found at the U.S. Food and Drug Administration website, <http://vm.cfsan.fda.gov/~dms/foodlab.html>.
2. Talk about different snacks which tend to be lower in calories and fat, and higher in vitamins. Emphasize fruits, vegetables, and lowfat dairy. A few examples of smart snack options include cheese and crackers, cottage cheese, 1 cup of skim or 1% milk, any fruits or vegetables with 2 tablespoons of dip, celery and peanut butter, raisins, etc.

Discuss how vitamins and minerals found in foods are important for growth and learning. Also discuss how eating too many calories and too much fat can lead to weight gain, feeling tired and sluggish, and making it harder to perform well in school.

3. Teach the importance of being active and the need to balance diet and activity. Exercise is not limited to aerobics and running. It also includes playing active sports games, playing on the playground, bike riding, walking your dog, etc. Being active is important for proper growth, weight control, and strong bones. Talk about different activities that the students enjoy.

❖ Activity 1: Interactive Bingo

Create two Bingo “cards” on the floor by placing two identical sets of 25 food pictures on the floor in two grids, with 25 pictures in each (five rows by five columns). Make sure each set has the same food pictures but are in different, random order. Paste nutrition facts on the back of each picture.

Using the facts, develop nutrition statements for each of the 25 pictures. (Example: “This food is high in Vitamin C.” Answer: oranges or orange juice.) Write each fact on a slip of paper and place all the slips in a box.

Divide your class into two even teams, each one assigned to a different Bingo “card” on the floor. Draw a fact from the box and read it aloud. Both teams will then choose the picture that illustrates the answer. If correct, the team gets to either stand

on the food, place a piece of paper over it, or turn it over to mark the spot for a chance to win Bingo. If a team chooses a food incorrectly, they do not get to mark a food that turn. The first team to get five in a row wins Bingo.

To simplify for younger children, have children recognize the fruit or vegetable and play Bingo. Or simplify by having them recognize facts: e.g., This food is red. This fruit has a peel.

Materials Needed

- ◆ Two identical sets of 25 food pictures, fifty food pictures in all. To find food pictures, go to Microsoft Word and search for clipart pictures. If you are unable to use Microsoft programs, you can also visit a search engine, like Google, and perform a search under the “Image” category for the specific food you would like.
- ◆ Nutrition facts. To find nutrient information on a variety of foods, visit the USDA National Nutrient Database website at http://www.nal.usda.gov/fnic/cgi-bin/nut_search.pl

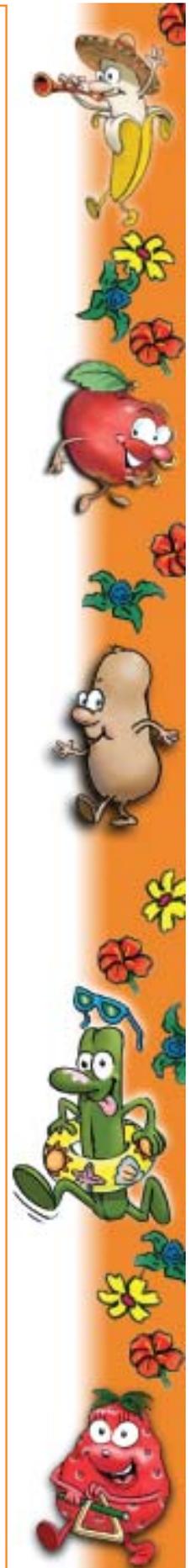
❖ Activity 2: Food Memory Game

Use the same cards as described in the Bingo game above. There should be two sets of 25 food pictures. Place one set of pictures with the nutrition facts side up, the other set with the picture side up. This means that students will try to match the nutrition facts with the picture of the food. If it is a match, students get to keep the card. If not, they must turn the card back to its original position. The team with the most cards at the end wins.

Simplify as suggested in the Bingo Game. For kindergarteners, food recognition may be challenging enough. For older kids use food facts relating to information taught in the lesson.

Additional activities for either age group

1. Provide samples of different fruits and vegetables. Try to include some the students may not have tried. You can group fruits or vegetables with similar characteristics together and then point out the differences: e.g., where they are grown, color, and nutrients.
2. Activity Contest: Have a contest to see who can get the most activity in after school. Keep a chart showing progress, either individual or boys against girls. Give a non-food prize to the winning team or individual, such as stickers or pencils. Even easier, let them go to recess early or give them free reading time.
3. Sponsor a Sport: Coordinate with the physical education department for students to play a sport during school time. This can be used as a reward for healthy behaviors.





Sunshine State Standards

	Bingo	Memory Game	Snack Time	Activity Contest
Grades K-2				
Language Arts	LA.C.1.1 LA.C.2.1	LA.C.2.1		
Mathematics	MA.A.1.1 MA.A.2.1	MA.A.1.1 MA.A.2.1		
Science	SC.A.1.1	SC.A.1.1		
Health and PE	HE.A.1.1	HE.A.1.1	HE.A.1.1 HE.B.1.1 HE.C.1.1	HE.A.1.1 HE.B.1.1 HE.C.1.1 PE.A.1.1 PE.A.3.1 PE.B.1.1 PE.C.2.1
Grades 3-5				
Language Arts	LA.C.1.2 LA.C.2.2	LA.C.2.2		
Mathematics	MA.A.1.2 MA.E.1.2	MA.A.1.2 MA.E.1.2		
Science	SC.A.1.2	SC.A.1.2		
Health and PE	HE.A.1.2	HE.A.1.2	HE.A.1.2 HE.B.1.2	HE.B.1.2 PE.A.3.2 PE.B.1.2 PE.C.2.2



Lessons and Activities



—Teens—

Concept

Enable pre-teenagers and teenagers to identify healthy snacks and understand the benefits of consuming nutritious snacks as well as participating in a regular regiment of physical activity.

Sunshine State Standards and Selected Components Addressed Grades 6-8

1. Health Literacy

Standard 1: The student comprehends concepts related to health promotion and disease prevention. (HE.A. 1.3) The student:

- a. understands the relationship between positive health behaviors and the prevention of injury, illness, disease, and other health problems;
- b. knows ways in which to reduce risks related to health problems of adolescents; and
- c. knows various methods of health promotion and disease prevention.

2. Physical Education Literacy

Standard 3: The student analyzes the benefits of regular participation in physical activity (PE.A.3.3). The student knows the potential fitness benefits of various activities.

Sunshine State Standards and Selected Components Addressed Grades 9-12

1. Health Literacy

Standard 1: The student comprehends concepts related to health promotion and disease prevention. (HE.A.1.4) The student:

- a. understands the impact of personal health behaviors on body systems; and
- b. understands how nutrient and energy needs vary in relation to gender, activity level, and stage of life.



2. Physical Education Literacy

Standard 3: The student analyzes the benefits of regular participation in physical activity. (PE.A. 3.4) The student:

- a. knows that physical activity reduces certain health risk factors;
- b. knows how regular physical activity can relieve the stress of everyday life;
- c. knows the role of physical activity in the prevention of disease and the reduction of health care costs; and
- d. understands the importance of making a commitment to physical activity as an important part of one's life.

Goal

Encourage pre-teenagers and teenagers to choose nutritious snacks and be physically active daily.

Snack Smart Activities, Grades 6–8

Activity 1

Explain that smart snacking can provide important vitamins and minerals needed to grow and stay healthy, especially when they include fruits, vegetables, and lowfat milk products. Elaborate further by explaining that growing teens need more food energy and nutrients than younger children.

Activity 2

Display the Food Guide Pyramid (see pages 65 and 106) and briefly explain the different food groups. Give an example of a healthy snack from a particular food group (e.g., lowfat yogurt) and then ask the students for other examples of healthy snacks from that food group. Continue until healthy snack suggestions have been given for all five food groups.

Activity 3

Briefly describe the various parts of a Nutrition Facts Label. Explain that a label that identifies a high percentage of vitamins and minerals, and is low in fat and sodium is nutritious. Explain that a Daily Value of 5% or less is lowfat and a Daily Value of 20% or higher is high fat. Emphasize choosing low fat snacks and remind students to pay attention to the serving size. Provide Nutrition Facts Labels for a few healthy (low-fat cottage cheese, carrot sticks, apples, etc.) and unhealthy (candy bars, potato chips, soda, etc) snacks. Have volunteers explain why the snack is either healthy or unhealthy. Set up stations and pair a healthy Nutrition Facts Label with an unhealthy one. Have the students visit each station and designate which is healthy and which is unhealthy. Have students list their selections on the *Identify the Healthy Snack* sheet (see pages 42 and 93).

Move More Activities, Grades 6–8

Activity 1

Explain why being active is good for your body. Ask students to brainstorm and write ideas about why they think exercise is beneficial. After allowing a few minutes of

brainstorming, ask for volunteers to share a few of their reasons to move more. If the following are not suggested during the discussion, state them as additional benefits:

- ◆ Deal with stress
- ◆ Get over the “blues”
- ◆ Look better
- ◆ Have more energy
- ◆ Relieve boredom
- ◆ Good for heart and lungs
- ◆ Feel more relaxed
- ◆ Get stronger
- ◆ Be more flexible
- ◆ Reduces risk for health problems
- ◆ It’s fun!

Emphasize the importance of fitting activity into their daily routine by explaining that exercise is critical to staying healthy and fit. Suggest ways to fit exercise in every day. Possibilities include taking the stairs instead of the elevator, getting involved with a sport or athletic club, having your parents park farther from the door at the mall or grocery store, walking your dog, and playing outside.

Activity 2

Set up five “energy stations” and play upbeat music. Explain that each station is a fun activity to get you moving and help you identify areas in which you might want to improve. It’s not a competition! Have the students keep a record of their activities on the *Get Moving at the Energy Station* worksheet (see pages 43 and 94). Encourage them to continue to perform them daily at home and monitor their progress for 10 days.

◆ **Station One: Jumping Rope**

This evaluates balance and coordination. Count how many times in a row you can jump rope without missing or getting tired.

◆ **Station Two: Can Lifts**

These exercises evaluate arm strength. Hold one unopened soup can tightly in each hand. First, try to raise your arms over your head 50 times while holding the cans. Next, put your arms straight out in front of you palms up, and bring your hands back to your shoulders.

◆ **Station Three: Sit-Ups**

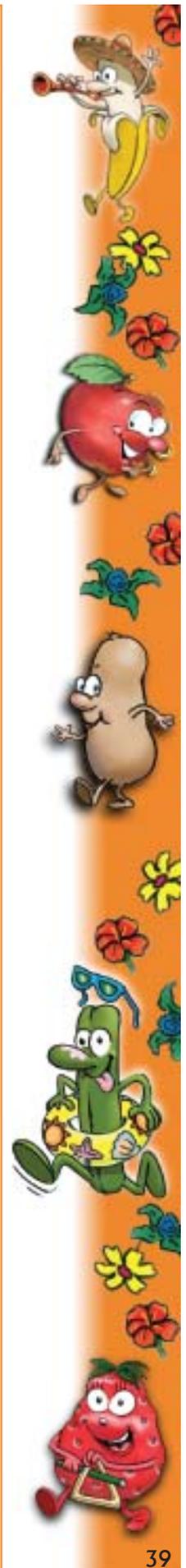
These exercises evaluate your abdominal strength. Find a partner. First, lie on your back on a carpet with your knees bent and your feet flat on the floor, about 12–15 inches from your buttocks. Cross your arms in front of you. Next, have your partner hold your feet flat while you bend to touch your knees with your elbows. How many of these can you do in 1 minute?

◆ **Station Four: Stretching**

This exercise evaluates flexibility. Take off your shoes. Face the wall, and sit on the floor with knees straight. Place your feet flat against the wall and approximately 12 inches apart. Without bouncing, reach forward with your hands and toward the wall until you feel a slight stretch. Leave your fingers there for 5 seconds. Do this three times. Can you touch the wall with your fingertips? With the palms of your hands?

◆ **Station Five: Moving Fast**

This exercise evaluates your endurance with a game of indoor tag or by turning up some fast-paced music for rigorous dancing. Have everyone do this at the same time. First, talk about the “talk-sing test” as a way to decide if they’re





getting a good workout. They should be able to talk, not sing, as they play tag or dance. If they are able to sing easily, the level of intensity is not high enough to get their heart to the desired level. If they are too breathless to talk, slow down. Prior to the activity, have the students take their pulse by placing the index and middle fingers of one hand on the wrist of the other hand where they can feel the pulse. Using a watch or second hand, count the number of beats for 6 seconds. Multiply by 10 to get the pulse for 60 seconds. At this point, the pulse will probably be less than 100 beats per minute (BPM). Warm up for 3 to 5 minutes by walking in place or around the room, gradually picking up the pace. Now play tag or dance fast! Keep it up as long as they can, up to 10 minutes if possible. Have the students check their pulse again. It will be faster:

- ♦ moderate activity (120-150 BPM)
- ♦ vigorous activity (more than 150 BPM)

Talk about the experience. Talk about how their bodies felt as they moved faster and faster, how long it took for their pulse to increase, was their face red or warm, did they sweat, what kind of shape are they in? Explain that as your activity level goes up, your body naturally changes. Your heart needs to pump more blood to the muscles you use and you breathe harder because your muscles need more oxygen. Being active increases your body temperature so your face gets warm. You sweat as a way to cool down—it's okay to sweat!

Snack Smart Activities, Grades 9–12

Activity 1

Display the Food Guide Pyramid (see pages 65 and 106). Explain that consuming foods from each component of the Pyramid is crucial for good health. Have students break into 5 groups (or more if there is a large class) and assign a food group to each group of students. Using available resources (nutrition text, internet, etc.), allow students to work together and determine the nutrients (carbohydrates, fats, proteins, vitamins, and minerals) and their significance to their assigned food group. Each group should also identify one healthy snack from their assigned food group. After research is complete, have one representative from each group report the findings.

Activity 2

Have students wash their hands. Provide whole wheat tortillas or wraps, peanut butter, plain fat-free yogurt, reduced fat cream cheese, sliced almonds, drained pineapple chunks, sliced bananas, lettuce, and shredded carrot. Allow each student to prepare his/her wrap using the provided ingredients. After the wraps are prepared, have each student select one component of their wrap and talk about the nutritional benefit of the particular food.

Move More Activities, Grades 9–12

Activity 1

Begin by asking students to state possible benefits of exercise. After students have had an opportunity to speak, hand out *The Physical Benefits of Fitness* (pages 44 and 95) and review.

Activity 2

- ◆ Distribute *The 3 Elements of Exercise* worksheet (see pages 45 and 96) and discuss it with students. Have the students add their favorite aerobic exercises on the sheet.
- ◆ Hand out *Test Your Understanding* (see pages 46 and 97) and give the students sufficient time to complete. Go over the answers with the class.
- ◆ Next, hand out the *Setting Fitness Goals* worksheet (see pages 47 and 98) and allow time for students to determine and write down their goals.
- ◆ Hand out the *Exercise Journal* (see pages 48 and 99) and instruct the students to keep a record of their physical activity for one week. Encourage students to continue regular physical activity and document their progress on the *Moving Toward My Goals* sheet (see pages 49 and 100) as they get closer to achieving their long-term and short-term goals.

Supplies

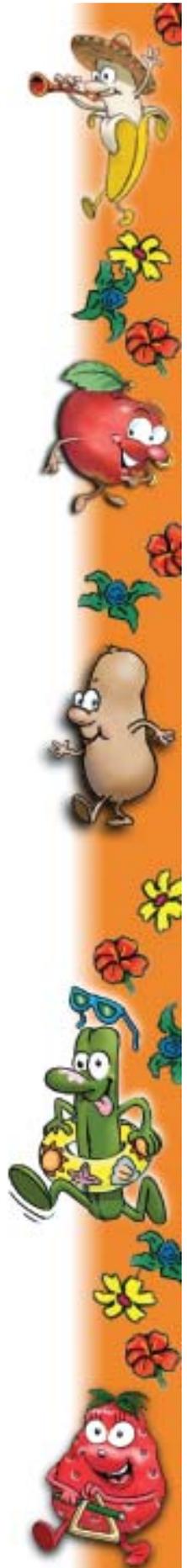
- ◆ *Food Guide Pyramid* (see pages 65 and 106)
- ◆ *Identify the Healthy Snack* (pages 42 and 93)
- ◆ *Get Moving at the Energy Station* (pages 43 and 94)
- ◆ *Physical Benefits of Fitness* (pages 44 and 95)
- ◆ *Three Elements of Exercise* (pages 45 and 96)
- ◆ *Test Your Understanding* (page 46 and 97)
- ◆ *Setting Fitness Goals* (pages 47 and 98)
- ◆ *Exercise Journal* (pages 48 and 99)
- ◆ *Moving Toward My Goals* (pages 49 and 100)
- ◆ Whole wheat tortillas or wraps, peanut butter, plain fat-free yogurt, reduced fat cream cheese, sliced almonds, drained pineapple chunks, sliced bananas, lettuce, and shredded carrot for snacks

Resources

The Nutrition Diner, Florida Department of Education-Food and Nutrition Management.

The Power of Choice, USDA Food and Nutrition Services and US Department of Health and Human Services.

Beginning on page 87, black and white camera-ready copies of handouts found throughout the kit are available for your use.





Identify the Healthy Snack

At each station, study the pair of Nutrition Facts Labels and determine which of the two snacks is the healthier. Write your answer in the space provided.



Station Number	Healthy Snack	Unhealthy Snack
Station 1		
Station 2		
Station 3		
Station 4		
Station 5		



Get Moving at the Energy Station



After completing the specified activity at each station, record the requested information for “Today.” Continue to perform these activities for 10 days and see how you improve!

	Station 1 Jumping Rope How many times did you jump the rope?	Station 2 Can Lifting How many times were you able to lift the cans?	Station 3 Sitting Up How many sit-ups did you do in 1 minute?	Station 4 Stretching Were you able to perform this task? With your fingertips? With your palms?	Station 5 Moving Fast What was your heart rate after moving fast?
Today					___ BPM
Day 1					___ BPM
Day 2					___ BPM
Day 3					___ BPM
Day 4					___ BPM
Day 5					___ BPM
Day 6					___ BPM
Day 7					___ BPM
Day 8					___ BPM
Day 9					___ BPM
Day 10					___ BPM



Physical Benefits of Fitness

Lung capacity is increased, keeping you from becoming breathless when you climb stairs, run to catch a bus, or participate in sports.

Your blood pressure stays within the normal range.

The heart and lungs work efficiently to supply your body cells with plenty of oxygen.

You burn calories efficiently, helping your body maintain an appropriate body weight.

The heart increases in strength, reducing the work load. Cholesterol levels can be lowered. The risk of heart disease is reduced.

The flow of energy in the body is increased.

A conditioned body is mobile. Muscles are strong and flexible and less likely to stiffen and eventually to cause pain and injury.

Bones can absorb minerals more easily, reducing the risk of the bone disease osteoporosis.



The 3 Elements of Exercise



1. Aerobic Exercise

Aerobic means “using oxygen.” Aerobic exercise is any exercise that causes you to breathe harder and your heart to beat faster in order to supply your muscles with enough oxygen to cover the extra demand. Aerobics directly exercises your heart muscle, strengthening your cardiovascular system and improving your body’s endurance. Aerobics lowers cholesterol and blood pressure, and burns calories for weight loss. Aerobics should include at least 20 minutes of exercise at least three times a week. Popular aerobic exercises include:

- ❖ Brisk walking
- ❖ Running
- ❖ Swimming
- ❖ Aerobic dancing

Add your own favorites:



2. Strength Training

Any exercise that forces your muscles to work against increasing amounts of resistance can be considered strength training. The most common methods of building muscle strength are lifting weights and using specially designed resistance machines. Push-ups are an example of a strength training exercise that requires no special equipment. Strength training increases the number of muscle fibers doing the work and improves the endurance of your muscles. It helps your muscles perform better at daily tasks. Increasing the size of your muscles also helps the body burn more calories when at rest, a benefit for those who want to manage their weight. Strength training also improves bone density and helps combat osteoporosis. Strength training should be done two or three times a week.

3. Stretching for Flexibility

Flexibility measures a muscle’s ability to move over a wide range without stiffness or resistance. Flexible muscles are less likely to “tear” or strain than tight, inflexible ones. Stretches should be done slowly without bouncing and held for 10 to 20 seconds.

Warm Up/Cool Down

In addition to the three basic elements, every exercise session should include warm-up and cool-down periods. To prevent injury, warm up by starting out slowly for the first five minutes. Cool down for five to 10 minutes by gradually slowing down, walking around for a few minutes or doing some light stretches.



Test Your Understanding

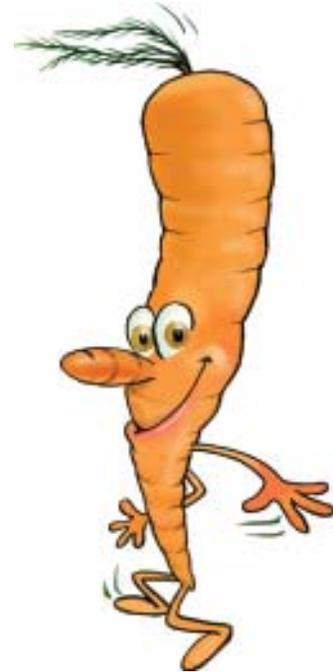
Test your understanding. Put the number of the fitness category next to each exercise. Some may fit into more than one category.

1. Aerobic

2. Strength

3. Flexibility

- _____ 1. Also called “cardiovascular conditioning,” because it strengthens the heart
- _____ 2. Arm stretches
- _____ 3. Brisk walking
- _____ 4. Calf stretches
- _____ 5. Cross-country skiing
- _____ 6. Helps prevent injuries
- _____ 7. Helps prevent stiffness
- _____ 8. Important for back strength
- _____ 9. Improves joint mobility
- _____ 10. Increases bone density
- _____ 11. Increases your stamina
- _____ 12. Is good for your cholesterol count
- _____ 13. Makes your heart beat fast
- _____ 14. Makes your heart work more efficiently
- _____ 15. Push-ups
- _____ 16. Quadriceps stretch
- _____ 17. Rowing
- _____ 18. Running
- _____ 19. Shoulder roll
- _____ 20. Sit-ups
- _____ 21. Strengthens bones
- _____ 22. Strengthens muscles
- _____ 23. Swimming
- _____ 24. Weight lifting



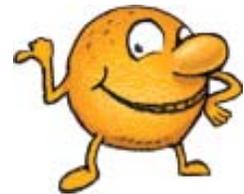
Answers:
1. Aerobics: 1, 3, 5, 11, 12, 13, 14, 17, 18, 23
2. Strength: 6, 8, 10, 11, 15, 20, 21, 22, 24
3. Flexibility: 2, 4, 6, 7, 9, 16, 19

Setting Fitness Goals



What are your long-range fitness goals? Be specific and tell how these goals will improve your life.

- improve endurance
- improve strength
- combat osteoporosis
- decrease risk for heart disease
- improve specific skills (your bicycling, swimming, or golf game, for instance)
- _____
- _____
- _____



What are your short-range fitness goals? If your long-range goal is to run a 5-mile race in 35 minutes, set short-range goals first. Taking small steps will help you reach your long-range goal. Specify what, when, and how often you will do an activity that helps you move toward your final goals.

- _____
- _____
- _____

Remember that an effective exercise program means at least three vigorous sessions a week. On the back of this sheet, write each of the following fitness categories and list the activities that you plan to participate in each week.

- ❖ **My Aerobic Activities**
- ❖ **My Strength Training Activities**
- ❖ **My Stretching Exercises**

Finally, keep an Exercise Journal to chart your progress in attaining your goals. We all work better when we have a record of our accomplishments to keep us motivated.



Exercise Journal



Date	Type of Activity	Time/Distance
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

A sensible, **balanced diet** is just half of good weight management. **Exercise** is also important. In addition to **burning calories**, regular exercise promotes **muscle fitness**, **joint flexibility**, and an **efficient heart and lungs**. It can also **promote a healthy appetite**, **reduce stress**, help you **sleep better**, and **improve your mood**.

Staying with an exercise program depends on your **staying interested**, so choose activities that you enjoy. Also, try to make exercise convenient. Many activities—such as swimming, walking, and cycling—are easy to do alone.

Remember the “FIT” principles of exercise: **Frequency, Intensity, and Time**.

- ❖ Frequency—Exercising at least three days a week is good, but aim for every day of the week.
- ❖ Intensity—Although you may have to start slowly, you should eventually exercise at 50-75% of your maximum heart rate. To determine this “target heart rate,” subtract your age from 220 and multiply the difference by 0.7. This equals the number of times per minute your heart should beat during exercise for optimum aerobic benefit.
- ❖ Time—Even 30 minutes of activity during the day can improve your health. However, sustained exercise for 30–60 minutes provides more benefits. Set goals so that you can gradually work up to longer sessions.

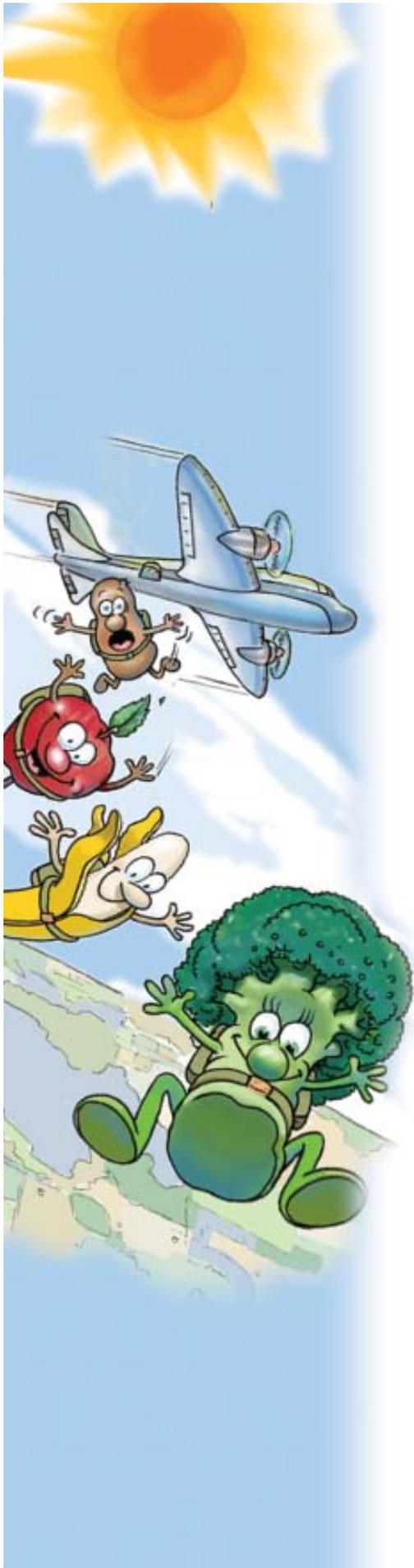
Source: The Nutrition Diner, Florida Department of Education, 2002



Moving Toward My Goals



	Short-Term Goals (e.g., distance covered, time to complete an activity, etc.)	Long-Term Goals (e.g., distance covered, time to complete an activity, etc.)
Week One		
Week Two		
Week Three		
Week Four		
Month Two		
Month Three		



Lessons and Activities



—Adults—

Goal

The overall goal of this lesson is to encourage adults to choose healthy snack foods and participate in regular physical activity to reduce the incidence of overweight and obesity.

Concept

Making healthy food choices and regularly enjoying physical activities influence overall health status. Choosing healthy foods and being active regularly can help lower the risk of chronic diseases associated with being overweight or obese, such as heart disease, certain cancers, diabetes mellitus, stroke, osteoporosis, arthritis, high blood pressure, high blood cholesterol levels, breathing problems, reproductive complications, gall bladder disease, increased surgical risk and depression.

Learning Objectives

After completing this lesson, participants will know:

- ❖ Healthy eating/snacking guidelines.
- ❖ Healthy snack ideas that are quick and easy.
- ❖ Health risks of making unhealthy snack choices.
- ❖ Health benefits of regular physical activity.
- ❖ How physical activity can be a part of daily routines.

Behavioral Objectives

After completing this lesson, participants will:

- ❖ Choose healthy snacks.
- ❖ Include physical activity in daily routines.

Target Audience

Adults



Activities

❖ Activity 1: Snack Smart Word Search

Make copies of the *Snack Smart Word Search* worksheet (pages 60 and 101). For added fun, time the participants and have a small prize for the first one finished.

Materials Needed

- ◆ Pencil for each participant
- ◆ Word search handout for each participant
- ◆ Prize (if desired)

❖ Activity 2: Let's Make Lowfat Ice Cream

Make copies of the *Let's Make Lowfat Ice Cream* worksheet (pages 61 and 102).

Materials Needed

- ◆ Large re-sealable plastic bag (1 for each participant)
- ◆ Small re-sealable sandwich bag (1 for each participant)
- ◆ Lowfat chocolate milk (1/2 C for each participant)
- ◆ Salt (4 T for each participant)
- ◆ Crushed ice (enough to fill a large plastic re-sealable bag for each participant)
- ◆ Serving bowl for each participant
- ◆ Plastic spoon for each participant
- ◆ Lowfat Ice Cream In a Bag worksheet (see page 61)

❖ Activity 3: Let's Move!

If appropriate for your setting, do the activities on the *Let's Move* handout (pages 62 and 103).

Disclaimer: Read the following two items to your participants:

- ◆ *Always check with your health care provider before beginning any regular activity program.*
- ◆ *Do these activities at your own risk.*

Also, be sure to check with your employer (health department, facility, school, etc.) before leading or participating in these exercises to ensure that you are conforming with your employer's/facility's policies. If your employer or the facility does not permit on-site, group exercises, you could demonstrate these exercises to your participants, and then provide them with a copy of these exercises so they can do them at home.

Materials Needed

- ◆ Seats for each participant
- ◆ Music (optional)

❖ Lesson Evaluation

Make copies of the *Lesson Evaluation* (pages 63 and 104). Read the following message to the participants:

Thank you for being a part of this lesson. We hope you enjoyed yourself! Please help us do a better job of serving you by completing this short evaluation. You can see that there is no place for you to write your name on this form; that's

because we want to guarantee that your opinions will be kept private. We will use this information solely to learn how valuable our program is to all of you, and to help improve it based on your comments. You do not have to answer any question you do not wish to answer and you can stop at any time. It should take less than five minutes to fill out the evaluation form.

Please summarize all results and share with your representative to the Florida Interagency Food and Nutrition Committee.

Thank you for helping us evaluate the *Snack Smart, Move More* Adult Lesson Plan.

Other Materials Needed [Optional]

- ❖ Overhead projector
- ❖ Transparencies for each concept reviewed in the *Talking Points* (page 54–56) and the *Interactive Discussion* (page 57–58), if desired.

Handouts

- ❖ *Dietary Guidelines for Americans* (pages 64 and 105)
- ❖ *Food Guide Pyramid* (pages 65 and 106)
- ❖ *Physical Activity Pyramid* (pages 66 and 107)

Note: The discussions and activities presented in this lesson plan can be done in any order, as appropriate or as time permits. Just pick and choose to fit the needs of your audience.

Beginning on page 87, black and white camera-ready copies of handouts found throughout the kit are available for your use.



Talking Points For Snack Smart, Move More

Note: See The Dietary Guidelines for Americans, the Food Guide Pyramid, and the Physical Activity Pyramid handouts at the end of this lesson.

Healthy Eating

Most adults would say that they want to improve their well-being and provide a healthy environment for their families. They need the knowledge, opportunity, and commitment to make healthy food choices and to choose to be physically active on a regular basis. By choosing to SNACK SMART, MOVE MORE, individuals and families can decrease their risk for overweight and obesity.

The Dietary Guidelines for Americans were created to help individuals practice healthy eating behaviors and active lifestyles. The three main themes of the **Dietary Guidelines** are:

Aim for Fitness

- Aim for a healthy weight
- Be physically active each day

Build a Healthy Base

- Let the Food Guide Pyramid guide your food choices
- Choose a variety of grains daily, especially whole grains
- Choose a variety of fruits and vegetables daily
- Keep food safe to eat

Choose Sensibly

- Choose a diet that is low in saturated fat and cholesterol and moderate in total fat
- Choose beverages and foods that limit the intake of sugars
- Choose and prepare foods with less salt

The **Food Guide Pyramid** shows the recommended daily servings from each of the food groups.

These food groups include:

- Bread, cereal, rice, and pasta group
- Vegetable group
- Fruit group
- Milk, yogurt and cheese group
- Meat, poultry, fish, dry beans, eggs, and nuts group
- Fats, oils and sweets

Most of the daily servings of food should be selected from the food groups closest to the base of the pyramid (grains, fruits, and vegetables); eat moderate amounts from the milk and meat and beans group. Foods at the top of the pyramid provide few nutrients and are high in fat and sugars—these should be eaten only in limited amounts.

The basic principles of a healthy diet include:

- Variety

Because no single food group supplies all nutrients, a healthy diet needs to include a variety of foods from the Food Guide Pyramid's five major foods groups.

- Balance

A balanced diet incorporates appropriate amounts of foods from the five major food groups each day. The number of servings needed to maintain a well-balanced diet will depend on an individual's age, sex, and physical activity level.

- Moderation

You can enjoy all foods as part of a healthy diet as long as you don't overdo it on fat, sugar, and salt. **Eat sensible portion sizes, even of healthy foods.**



Healthy Snacks

Snacking has become a way of life for us all. Studies report that over 95 percent of the women and children in the United States have at least one snack each day.

It's okay to snack if we do it in moderation and choose healthy foods. Plan snacks as a part of a day's food plan. Offer snacks in the middle of the morning and/or the afternoon; try to have snacks 1½ to 2 hours before the next meal. Snacks too close to mealtime can interfere with mealtime appetites.

Physical Activity

The Surgeon General recommends adults to be physically active at least 30 minutes daily. Physical activity is any movement that uses energy. There are two types of physical activity:

- Aerobic activity—these are activities that speed the heart rate and breathing. They help with cardiovascular fitness.
- Activities for strength and flexibility—these activities may help build and maintain bones.

This 30 minutes of physical activity daily can be achieved in long sessions of moderately intense activities, or in short sessions of more intense activities. To help people understand physical activity recommendations, the Physical Activity Pyramid was developed to illustrate a “balanced diet” of weekly physical activity and various forms of traditional exercise.

Individuals should choose activities that they enjoy and that they can do regularly. Some people prefer activities that fit into their daily routine, like gardening or taking extra trips up and down stairs. Others prefer a regular exercise program, such as a physical activity program at their worksite. Some do both. The most important thing is that individuals are physically active every day.

Some of the health benefits of being active daily include:

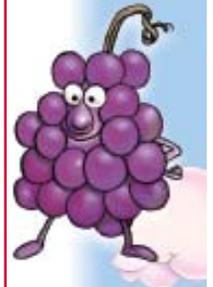
- increases physical fitness
- helps build and maintain healthy bones, muscles, and joints
- builds endurance and muscular strength
- promotes psychological well-being and self-esteem
- reduces feelings of depression and anxiety
- helps prevent heart disease
- helps control cholesterol levels and diabetes
- slows bone loss associated with advancing age, and
- helps to prevent and treat overweight and obesity, and helps to maintain weight loss, especially when combined with healthy eating.

Overweight and obesity result from an energy imbalance over a long period of time. Studies have shown a dramatic increase in the prevalence of overweight and obesity in the past two decades. Because overweight and obesity are difficult to treat, efforts should focus on prevention. Genetics and the environment may increase the risk of weight gain. The choices a person makes in eating and physical activity also contribute to overweight and obesity. Important strategies for preventing overweight and obesity are healthy eating/snacking behaviors and regular physical activity.

Being overweight or obese increases the chances of:

Premature Death

An estimated 300,000 deaths per year may be attributed to poor diets and physical inactivity that are associated with obesity. Individuals who are obese have a 50 to 100% increased risk of premature death from all causes, compared to individuals with a healthy weight.





Heart Disease

The incidence of heart disease is increased in persons who are overweight or obese. High blood pressure is twice as common in adults who are obese than in those who are at a healthy weight.

Diabetes

A weight gain of 11–18 pounds over a person's ideal weight increases the risk of developing Type 2 diabetes to twice that of individuals who have not gained weight. Over 80% of people who have diabetes are overweight or obese.

Cancer

Overweight and obesity are associated with an increased risk of some types of cancer including endometrial, colon, gall bladder, prostate, kidney, and postmenopausal breast cancer. Women gaining more than 20 pounds from age 18 to midlife double their risk of postmenopausal breast cancer, compared to women whose weight remains stable.

Breathing Problems

Sleep apnea (interrupted breathing while sleeping) is more common in obese persons. Obesity is associated with a higher prevalence of asthma.

Arthritis

For every 2-pound increase in weight, the risk of developing arthritis is increased by 9 to 13%. Symptoms of arthritis can improve with weight loss.

Reproductive Complications

- Obesity during pregnancy is associated with increased risk of death in both the baby and the mother and increases the risk of maternal high blood pressure by tenfold.
- Women who are obese during pregnancy are at greater risk for gestational diabetes and problems with labor and delivery.
- Infants born to women who are obese during pregnancy are more likely to be high birth weight and, therefore, may face a higher rate of Cesarean section delivery and low blood sugar (which can be associated with brain damage and seizures).
- Obesity during pregnancy is associated with an increased risk of birth defects, particularly neural tube defects, such as spina bifida.
- Obesity in premenopausal women is associated with irregular menstrual cycles and infertility.

Interactive Discussion

Who Should Snack, What To Snack, And When To Snack

Discussion Questions

Select your questions from the following suggestions. Depending on the size of your group, you might plan to ask 2–3 questions to engage the group members and encourage discussion.

What do YOU think of when you hear the word “snack”?

- ❖ According to the Merriam Webster Dictionary a snack is a light meal: food eaten between regular meals. <http://www.m-w.com/cgi-bin>
- ❖ Well-planned snacks can help most people satisfy their hunger and stay within their calorie balance. Picking snacks to complement meals is the key to snacking.

WHO should eat snacks?

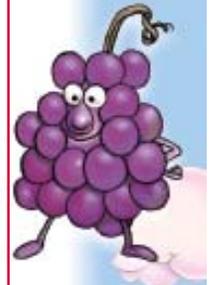
- ❖ Infants and toddlers need to snack because they have such high energy demands and small stomachs.
- ❖ Teenagers who are rapidly growing and developing also need to snack because they require more calories and nutrients to sustain their growth spurts.
- ❖ Athletes involved in sports or endurance training need to snack to meet their increased energy demands. Carbohydrates (stored as a substance called glycogen in the liver and muscles) are used up during exercise and must be replenished.
- ❖ Laborers and construction workers may have very high energy demands that cannot be met in three meals per day so they may need to snack.
- ❖ People who may not have time to sit down for a meal should snack so they don't have an energy letdown in the late afternoon.

- ❖ People who don't eat breakfast should carry a snack with them so they will have fuel flowing to their brains when they need to focus on their work.

If you don't fit into one of the above categories, it is still all right to snack on healthy foods.

WHAT are some ideas for healthy snacks?

- ❖ Snack foods should be chosen from one of the five food groups:
 1. whole grains
 2. fruits
 3. vegetables
 4. lowfat milk, cheese, yogurt
 5. lean meat, poultry, fish, dried beans, peanut butter, eggs
- ❖ Select snack foods to complement foods eaten at mealtime. For example, if all you had for breakfast was a bowl of cereal and skim milk and you became hungry around 10:00 a.m., pick a snack from the food groups that you missed. Because you had only two of the five food groups for breakfast, you might pick a snack from one or more of the other three, like fruits or fruit juice; vegetables; or peanut butter on celery or apples.
- ❖ Other snacks that can be eaten daily include:
 1. Fat free or lowfat yogurt
 2. Baby carrots
 3. Fresh fruits (banana, apple, pear, orange, kiwi)





4. Bagels
5. Cold cereals
6. Graham crackers
7. Rice cakes
8. Pretzels
9. Fat free milk smoothie with fruit

What are some foods/drinks that should be offered only occasionally?

Foods high in sugar, salt, and/or fat such as chips, soda, sweetened drinks, cakes, pies, cookies, donuts, etc. should be offered only occasionally.

Why should foods high in sugar, salt and/or fat be eaten only occasionally?

- ❖ Eating these foods *once in a while* can still fit into a healthy diet.
- ❖ People who deny themselves all sweets and high-fat foods can begin to crave sweets and fatty foods, which can lead to overeating.
- ❖ If you want to enjoy this kind of snack more often, prepare for the extra calories and fat by decreasing serving sizes of food at dinner or by being active a little longer.
- ❖ You **can** have your cake and eat it (occasionally), too, as long as you maintain a regular and consistent physical activity program.

WHEN to snack?

Plan snacks as a part of a day's food plan. Limit the amount of low-nutrient, high-fat, high-sugar, and high-salt snacks that you have in your house. To avoid choosing only snacks from a vending machine, snack bar, or fast food restaurant, take healthy snacks to work, when you travel for appointments, or when you run errands.



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West Virginia WIC's "*Learning for Health Project*", West Virginia Bureau of Public Health Special Supplemental Nutrition Program for Women, Infants and Children.





Activity 1



Snack Smart Word Search

Have fun with this word search!

R	K	U	I	L	O	C	C	O	R	B
E	C	L	W	E	L	P	P	A	I	A
T	A	O	M	U	F	F	I	N	C	G
T	R	T	K	M	O	S	B	C	E	E
U	R	R	T	O	M	A	T	O	C	L
B	O	U	X	A	I	R	P	R	A	R
T	T	G	A	N	A	N	A	B	K	R
U	K	O	E	E	Y	R	E	L	E	C
N	E	Y	P	O	P	C	O	R	N	L
A	P	R	I	C	O	T	E	G	G	A
E	G	N	A	R	O	T	I	U	R	F
P	E	I	H	T	O	O	M	S	O	C

Hint: Below are the words to look for in the above grid. For an added challenge, cut here and see how many words can be found without using the list below!

Apple

Apricot

Bagel

Banana

Broccoli

Carrot

Celery

Egg

Fruit

Muffin

Orange

Peanut Butter

Pear

Popcorn

Rice Cake

Smoothie

Tomato

Yogurt





Activity 2

Let's Make Lowfat Ice Cream

Lowfat Ice Cream In A Bag

Ingredients

½ cup lowfat chocolate milk

4 tablespoons salt

2–3 cup(s) crushed ice

Directions

Fill a large re-sealable plastic bag with crushed ice (one bag of ice for each serving)

Add the salt.

Seal and shake to mix.

In a small re-sealable plastic bag:

Pour ½ cup of lowfat chocolate milk

Seal the bag

Place the lowfat chocolate milk bag inside the ice bag and seal again carefully.

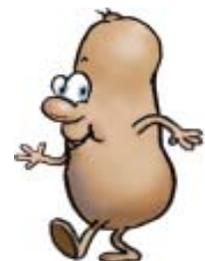
Shake until the mixture turns into ice cream, about 5 minutes.

Take the small bag of ice cream out of the larger ice bag. Make sure the bag is sealed tightly! Wipe off the salt water.

Open carefully, put into serving dish and enjoy!

Variations

Use lowfat white milk and add your favorite fresh fruit pieces (blueberries or strawberries) after the ice cream is finished. Mix together.





Activity 3

Let's Move!



The following are exercises to perform while sitting:

Arm Curls

While seated, with one arm extended toward the floor, make a fist. Slowly bring the extended arm to the shoulder by squeezing the muscles in the front of the upper arm. Slowly lower it straight down. Repeat 10 times on each side.



Knee Ups

While sitting in a chair, alternate lifting your knees into your chest. All movement should be performed very slowly. Repeat 15 lifts on each leg.



Leg Extensions

Sit straight in a chair. Extend your feet straight out in front of you with your toes pointed up. Hold your legs in the up position while you squeeze your thigh muscles. Slowly lower legs back to floor. Repeat 15 times.

Seated Rowing

Sitting straight, reach your arms straight out in front of your body, palms down. Pull elbows back forming a 90-degree angle at elbow and pull elbows toward back by squeezing shoulder blades together. Slowly return to start position. Repeat 10 times.



Disclaimer

- Always check with your health care provider before beginning any regular activity program.
- Do these activities at your own risk.



The following are exercises to perform while standing:

Calf Raises

Standing, raise yourself up onto your toes. Hold, and slowly lower back to start position. Repeat 10 times.

Triceps Kicks

March in place, feet shoulder-width apart. Bend knees slightly, keeping back straight. Bend at about 45-degree angle from waist. Keep arms close to body, with upper arms level with floor/ground. Thrust forearms back, straightening arms, keeping upper arms still. Repeat 10 times.

Step Along

Bend knees slightly, keeping back straight, feet shoulder-width apart. Step so that right foot touches the floor behind left foot and returns to original position. Repeat with left foot. Lift both arms forward away from the body until they are extended above head with elbows straight. Repeat 12 times.

The Hulk

Bend knees slightly, keeping back straight. Step about 2-3 feet to right side with right foot. Step with left foot until feet are again side-by-side. With hands in loose fist and arms spread straight out in front of you, bend arms simultaneously to a 90° angle, ending with fist at high level. Repeat 10 times.

Shoulder Press

March in place, feet shoulder-width apart. Bend knees slightly, keeping back straight. Touch thumbs to shoulders, palms facing out. Make fist and push arms upward toward ceiling/sky, straightening arms. Repeat 12 times.

Adapted from *Everyday Exercises for BUSY People*. Department of Health Services Public Health Division of Chronic Disease Prevention and Health Promotion, County of Los Angeles, California



Adult Lesson Evaluation

1. How much did you learn from this lesson? Please check only one:

- Very little
- Some
- A lot

2. Do you plan on making any changes in the snacks you eat or drink as a result of participating in this lesson?

- Yes
- No

3. Do you plan on making any changes in your physical activity level as a result of participating in this lesson?

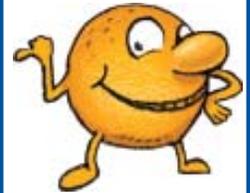
- Yes
- No

4. If you answered “yes” to either of these questions, please tell us what you plan to do. Check all that apply!

- Choose snacks from the “bottom” of the food guide pyramid.
- Choose more fruits and vegetables as snacks.
- I plan to be active at least 3 days a week.
- I plan to be active for at least 30 minutes daily.
- Other _____

5. Comments:

Thank you for completing this evaluation.



Dietary Guidelines for Americans 2000



Aim for Fitness. . .

- ◆ Aim for a healthy weight.
- ◆ Be physically active each day.



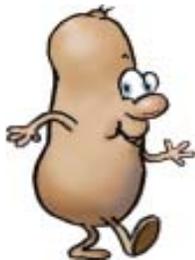
Build a Healthy Base. . .

- Let the Pyramid guide your food choices.
- Choose a variety of grains daily, especially whole grains.
- Choose a variety of fruits and vegetables daily.
- Keep foods safe to eat.



Choose Sensibly. . .

- ❖ Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.
- ❖ Choose beverages and foods to moderate your intake of sugars.
- ❖ Choose and prepare foods with less salt.
- ❖ If you drink alcoholic beverages, do so in moderation.



. . . for good health

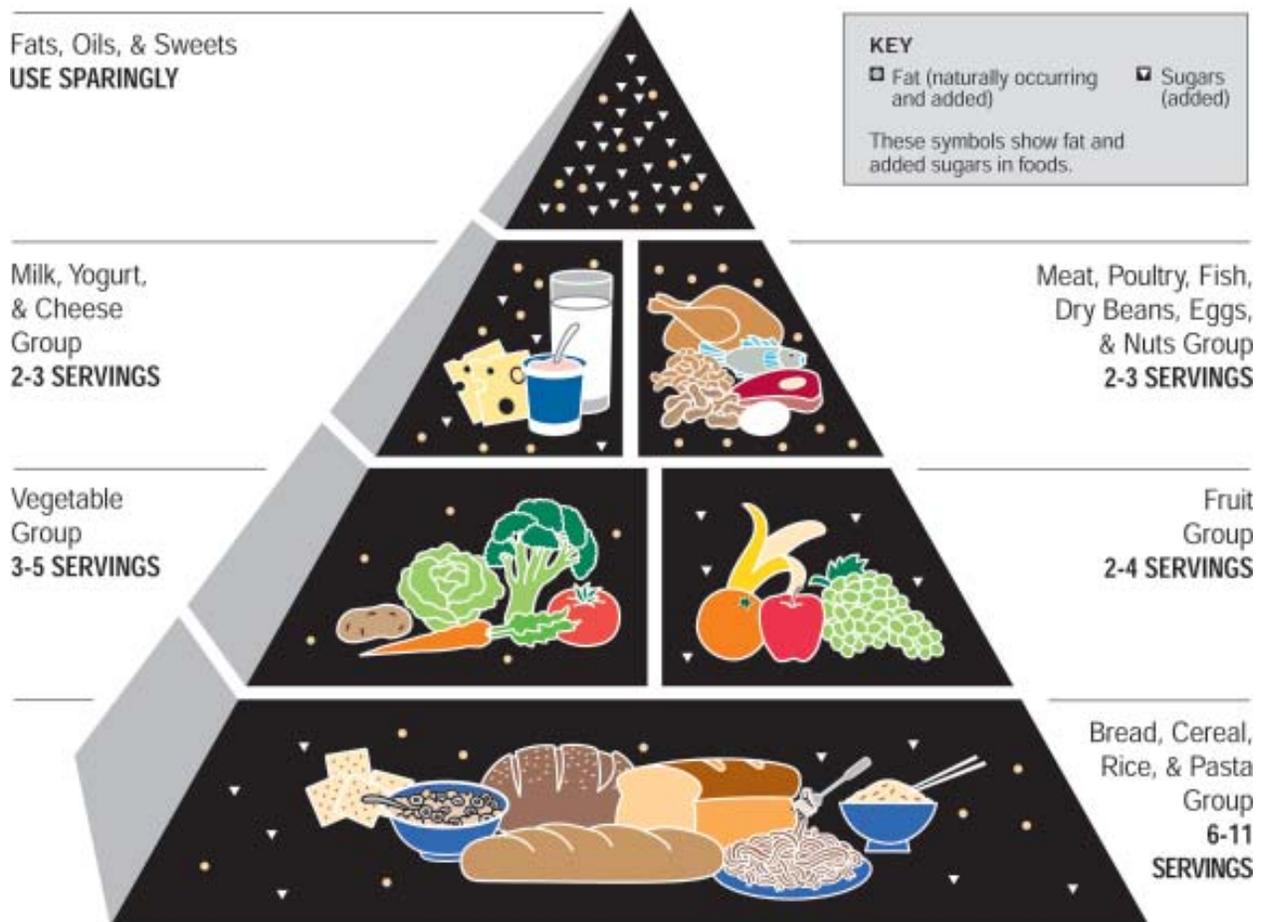


Food Guide Pyramid

A Guide to Daily Food Choices



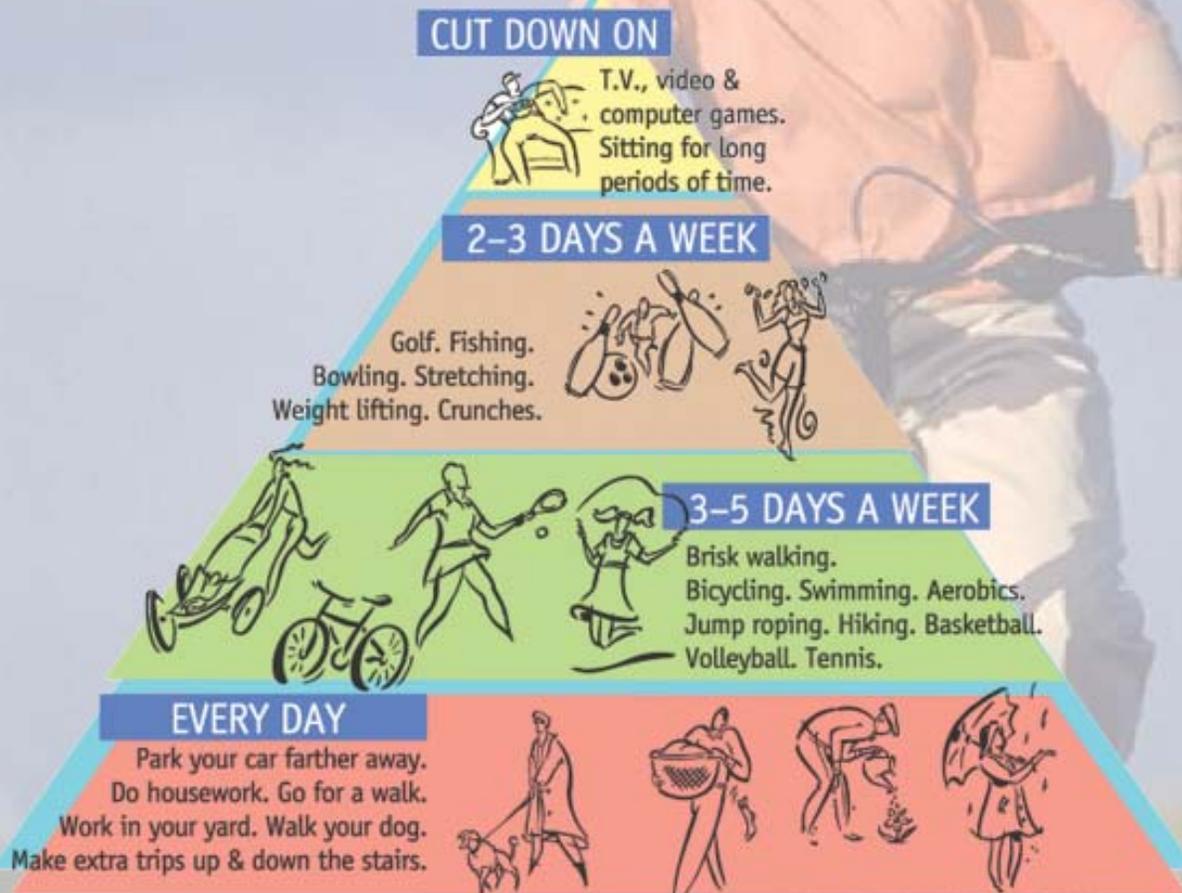
- ❖ The Food Guide Pyramid can be used to help a person eat better every day.
- ❖ Each of the food groups provides some, but not all, of the nutrients a person needs.
- ❖ Foods in one group can't replace those in another.
- ❖ No one food group is more important than another—for good health, all are needed.
- ❖ The Food Guide Pyramid is a general outline of what a person should eat each day. It is not a rigid prescription, but presents general recommendations for choosing a healthy diet.



Source: U.S. Department of Agriculture/U.S. Department of Health and Human Services

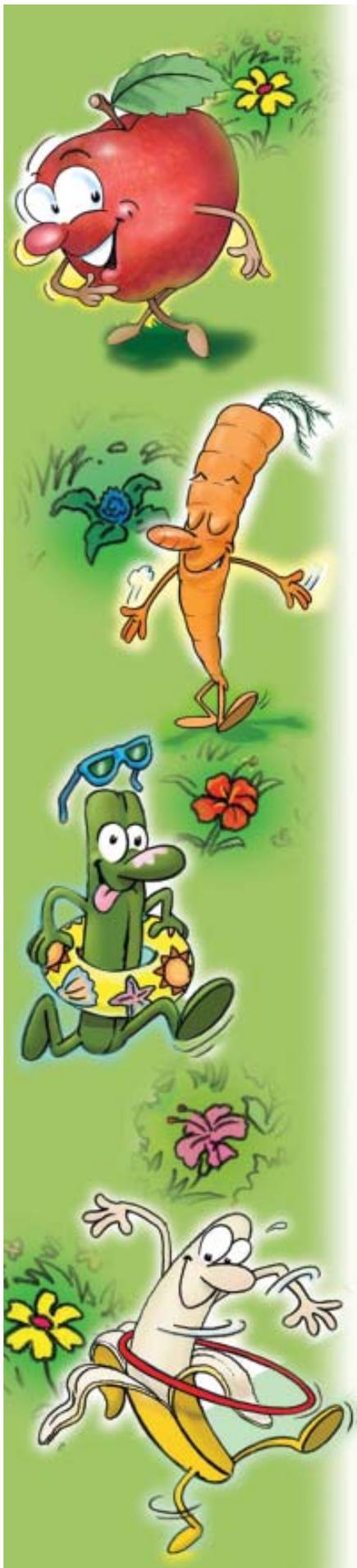


Physical Activity Pyramid



- ❖ Adults need to be active at least 30 minutes a day.
- ❖ Children need at least 60 minutes a day of active play.
- ❖ TV and video games should be limited to no more than 2 hours a day.

Source of Activity Pyramid: Department of Health, Bureau of Chronic Disease Prevention and Health Promotion.



Lessons and Activities



—Elders—

Goal

To help older persons select healthful and appealing snacks.

Objectives

Older persons who participate in this lesson will:

- ❖ know that snacking can help provide needed nutrients,
- ❖ be motivated to select more healthful snacks, and
- ❖ share information learned with friends and/or family members.

Concept

Snacking is common among most Americans, including older persons. Snacking can be nutritionally positive or negative, depending on the snacks chosen. High-fat, high-calorie snacks can contribute to excessive calorie intake and unwanted weight gain. On the other hand, nutrient-dense, low- to moderate-calorie snacks can provide critical nutrients, particularly for persons who have small appetites and rely on between meal snacks to get the calories they need.

Some older persons may believe that snacking is a bad habit that adds too many calories to the diet or that spoils the appetite for meals. This lesson will help older persons see the value of smart snacking and help them identify healthful snacks that they will enjoy.

Background information

See the *Snack Smart Literature Reviews* (pages 3–13) provided in the packet.

Activities

❖ Activity 1: Snacking: Pros and Cons

We're going to be talking about snacking today. Let's start out by hearing what you think is good about snacking and what you think is bad about snacking. I'll put your ideas on this overhead (or flip chart) under *Pros* and *Cons* (see pages 76 and 113).

Have the group share their ideas about the pros and cons of snacking. Write them on the overhead or flip chart in two columns: Pros and Cons. Here are some ideas to get them started if necessary:

Pros

- Keeps you from getting hungry between meals.
- Get extra nutrients.
- Snacks taste good.
- Nice break from the routine.
- Stay hydrated with fluid snacks.
- Helps in getting enough fruit each day.
- Can help you eat less at meals.

Cons

- May eat too much.
- Junk food snacks have too many calories.
- Easy to eat too much fat.
- Can spoil appetite for meals.
- Many convenient snacks are not healthy.

After a few minutes, go over the list and talk about the Pros.

Which ones do they agree with? Which had they thought of before? Are there others? You can mention some of the ones listed in the lesson.

Then talk about the Cons.

Do these make them not want to snack? How can they change the Cons into Pros? (For example, instead of eating high-fat snacks, choose low-fat snacks that provide one or more critical nutrients for older people ... calcium, folate, vitamin B₁₂, etc.).

❖ Activity 2: Snacking Smart

Ask: *Which of the following is a snack food?*

Pizza

Cheese and crackers

Soup

Answer: *All of these are snack foods!*

Any food that we eat between meals is a snack. We've already seen some of the reasons for eating snacks, now let's see what kinds of tasty and healthful snacks can provide you with important nutrients.

Show the overheads: *Critical Nutrients for Mature Adults* (pages 71–73 and 108–110).



Mention a major function of each nutrient and why it is important in the older years:

Calcium: helps to keep bones and teeth from becoming weak, decreasing risk of osteoporosis and falls.

Folate: promotes heart health and keeps blood healthy (NOTE: the form of the vitamin in supplements and fortified foods is better absorbed than the form found naturally in foods).

Vitamin D: needed for calcium absorption; requirement gets higher as we age (because we don't produce as much in our skin as when we were younger).

Vitamin B₁₂: promotes heart health (NOTE: the form of vitamin B₁₂ found in fortified foods or supplements is better absorbed (by most older persons) than naturally-occurring B₁₂).

Vitamin B₆: allows body to use protein; helps keep immune system healthy; promotes heart health; requirement gets higher as we age (due to changes in metabolism).

Zinc: needed for normal appetite and sense of taste; intake often low in older persons.

Ask the group to mention snack foods that would help them meet their need for the various nutrients. Fill in on the overheads.

Here are some food sources:

Calcium: Milk, chocolate milk, yogurt, enriched soy milk, cheese cubes, canned salmon or sardines (with bones), fortified orange juice, fortified bread or crackers, almonds, lowfat ice cream

Folate: Orange, orange juice, fortified cereal, fortified bread, greens, sunflower seeds, grits (enriched), tomato juice, dried beans, bean soup

Vitamin D: Fortified milk, fortified cereal, fortified bread

Vitamin B₁₂: Fortified cereal, fortified bread, lowfat milk, meat

Vitamin B₆: Turkey, fortified cereal, fortified soy meat substitutes, banana, watermelon, sunflower seeds, carrots

Zinc: Meat, fish, or poultry, fortified cereal, sunflower seeds, yogurt

Which of these foods is nutrient-dense? Are there any that are high in calories or fat that could be modified for those who want to limit their calorie intake? Discuss as interest and time allow.





❖ Activity 3: Snacks from Around the World

Preparation

Prepare two or more snacks representative of different ethnic groups or countries. Have them in bite size pieces for the taste test. Be sure to keep the snacks at a safe temperature (e.g., cold foods in the refrigerator or a cooler, and hot foods over 140 degrees).

A few examples of ethnic snack foods you can prepare (*see recipes on pages 74 and 111):

Hummus* served with pita bread pieces or cut up veggies

Flour tortilla (preferably whole wheat) with melted Cheddar cheese (quesadilla)

Bagel pizza*

Bagel (preferably whole wheat) with light cream cheese or tub margarine

Italian bread with tub margarine or peanut butter

Guacamole* served with cut up celery, tortilla chips (baked preferred), or corn tortilla wedges (soft)

Sliced mango or guava

What types of foods do you usually eat as snacks? (Give participants a minute to name specific foods or types of foods.) If no one mentions any ethnic foods, ask if they ever eat snacks that include ethnic foods or ingredients, and what those are. Tell them that now they will have a chance to taste some snacks that have ethnic origins.

Taste test

1. Depending on the location of the class, either hand out samples of the snacks to everyone, or set up stations where they can go and pick up samples of each snack.
2. Either give everyone a copy of the *Ethnic Snack Taste Test* evaluation sheet (see pages 75 and 112), have them work in groups, or do it as a class all together on an overhead.
3. Discuss the different snacks, what ethnic group they represent, and which were the most popular. Which ones would they like to have as snacks at home? Do they have other ideas for ethnic snacks?

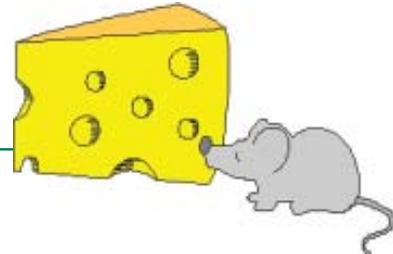
Evaluation

Ask participants to complete the *Lesson Evaluation* form (see pages 77 and 114). Please summarize all results and share with your representative to the Florida Interagency Food and Nutrition Committee. Thank you for helping us to evaluate the *Snack Smart, Move More* Elder Lesson Plan!

Critical Nutrients for Mature Adults



Calcium



A large empty rectangular box with a green border, intended for notes or information related to Calcium.

Folate



A large empty rectangular box with a green border, intended for notes or information related to Folate.



Critical Nutrients for Mature Adults

Vitamin D



Empty rectangular box for notes related to Vitamin D.

Vitamin B₁₂



Empty rectangular box for notes related to Vitamin B₁₂.

Critical Nutrients for Mature Adults



Vitamin B₆



A large empty rectangular box with a green border, intended for notes or information related to Vitamin B₆.

Zinc



A large empty rectangular box with a green border, intended for notes or information related to Zinc.

Recipes

❖ Hummus

- 1 can garbanzo beans, drained in colander, and rinsed with water
- 3 Tbsp lemon juice
- 1 tsp chopped garlic
- ¼ tsp paprika
- 3 Tbsp sesame tahini (available in most supermarkets, and in health food stores)
- water as needed
- ¼ tsp ground cumin (optional)
- ½ tsp ground coriander (optional)
- dash cayenne powder (optional)

1/10th of the recipe provides:

- ◆ 60 calories
- ◆ 3 grams protein
- ◆ 7 grams carbohydrate
- ◆ 3 grams fat
- ◆ 2 grams dietary fiber
- ◆ 20 milligrams calcium

Combine ingredients in a food processor and process until smooth. Consistency should be fairly thick; add water as needed for processing. Makes about 2 cups. Spread on small pieces of pita bread, or dip carrot and celery pieces into the hummus, for the taste test.



Cayenne powder adds a little "zip" to hummus!

❖ Bagel Pizza

- 4 three-inch plain bagels, sliced in half crosswise
- 1 cup pizza sauce (or tomato-basil pasta sauce)
- 8 ounces shredded mozzarella cheese, part-skim
- Dried oregano leaves, crushed (optional)

1 pizza (½ bagel) provides:

- ◆ 170 calories
- ◆ 9.5 grams protein
- ◆ 18 grams carbohydrate
- ◆ 5.5 grams fat
- ◆ 2 grams dietary fiber
- ◆ 220 milligrams calcium

Put bagel slices on a baking dish. Spoon sauce onto the bagel, and sprinkle with cheese. If desired, sprinkle with crushed oregano. Bake at 400 degrees until cheese is melted (about 10 minutes). Cut into small pieces for taste test.

For best taste, never mash avocado for guacamole!

1/8th of the recipe provides:

- ◆ 90 calories
- ◆ 1.5 grams protein
- ◆ 8 grams carbohydrate
- ◆ 7 grams fat
- ◆ 4 grams dietary fiber
- ◆ 45 micrograms folate

Use part-skim mozzarella cheese to limit fat in your pizzas.



❖ Guacamole

- 2 medium ripe Florida avocados
- 2 tsp lime juice
- 1 medium tomato, chopped
- 3 Tbsp finely chopped sweet onion
- 1 clove garlic, finely minced
- ½ jalapeño, finely chopped (or more, to taste)
- 2 Tbsp fresh cilantro leaves, coarsely chopped
- ¼ tsp salt (or to taste)

Cut avocados into small pieces with two knives (don't mash). Add lime juice, tomato, onion, garlic, jalapeño, cilantro, and salt to taste. Mix gently and let stand a few minutes before serving. Spread on tortilla chips or dip celery pieces in the guacamole for the taste test.



Ethnic Snack Taste Test



Food	Ethnic Origin	Taste
		1 2 3 4 5
		1 2 3 4 5
		1 2 3 4 5
		1 2 3 4 5
		1 2 3 4 5

*For each food, circle one:

- 1 = Poor
- 2 = Fair
- 3 = Good
- 4 = Very Good
- 5 = Excellent



Snacking Smart



Pros

Cons

--	--



Elder Lesson Evaluation

We hope you enjoyed the lessons and activities for elders. Please help us by completing this brief evaluation form. Thank you!

1. How much did you learn from this lesson?

- Little
- Some
- Much

2. Do you plan to make any changes in your snacking habits as a result of this lesson?

- Yes
- No
- Not sure

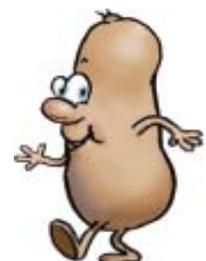
If you answered Yes, please let us know what you plan to change (circle all that apply):

- a. Plan to eat lower fat snacks.
- b. Plan to eat more ethnic snacks.
- c. Plan to eat healthier snacks.
- d. Other: _____
- e. Other: _____

3. Will you share information from this lesson with family or friends?

- Yes
- No
- Not sure

Thank you for filling out this form. Please return it to the instructor!



Healthy Snacks and Physical Activity Websites*

Evaluating Health Information on the Web

1. http://cis.nci.nih.gov/fact/2_10.htm

Twelve practical tips help consumers interpret the value and meaning of articles reviewed on the World Wide Web. Guidelines help individuals recognize potential conflicts of interest and misinformation.

2. <http://www.ftc.gov/bcp/online/edcams/cureall>

Operation Cure-All is a law enforcement and consumer education campaign of the Federal Trade Commission (FTC) that identifies and deals with fraudulently marketed health products and health claims on the Internet. This site has information to help consumers evaluate the claims of health products, and it provides marketing guidelines for those who distribute health and medical products.

Healthy Eating, Snacking, and Activity Sites

1. <http://www.intelihealth.com/IH/ihtIH/EMIHC000/408/21839.html>

Aetna IntelliHealth features *Consumer Health Information*, a publication of Harvard University's Medical School faculty. "Health Commentaries" address a "Focus on Fitness," "A Parent's Life," and "Food for Thought." The site invites a review of Interactive Tools illustrating a variety of body systems, shares a range of health assessments and tools, and enables access to a number of nutrition and fitness quizzes. Readers are invited to submit their health questions to experts at Harvard's Medical School and the University of Pennsylvania's Dental School. They are also invited to review the transcripts of health-related computer-based chats and message boards on file. The site gives access to the leading health-related stories in the news as well as numerous tips about healthy eating, snacking, and exercise.

—Laura K. Guyer, PhD, RD
Associate Director

Suwannee River Area Health Education Center (AHEC),
a member of the Florida AHEC Network



2. <http://www.cincinnatichildrens.org/health/info/nutrition/eat/food.htm>

As an international leader in pediatric health care, research, and education, Cincinnati Children's Hospital Medical Center's site on healthy eating offers nutrition advice for infants, toddlers, and adolescents. "Healthy Food and Snacking" is a one-page article describing the nutrient needs from childhood to adolescence. It explains the contributions of different foods and food groups to optimal health and well being, offers suggestions about appropriate snack food choices, and describes how snacks contribute to normal growth and development.

3. <http://primusweb.com/fitnesspartner/library/nutrition/snacking.htm>

This one-page article, "Balancing Snacking With Physical Activity for a Healthy Lifestyle," was written by The American Dietetic Association's National Center for Nutrition and Dietetics. Using the USDA's *Food Guide Pyramid* as the template for making good snacking choices, the article encourages individuals to eat nutritious meals, incorporate a variety of healthful snacks, and participate in regular physical activity for optimal health. To obtain answers to food and nutrition questions and/or a referral to a registered dietitian in your area, call the Consumer Nutrition Hot Line at 1-800-366-1655.

4. <http://www.eatright.org>

The American Dietetic Association (ADA) offers resources for health professionals and educational materials for consumers.

Position Paper: "Total Diet Approach to Communicating Food and Nutrition Information."

Nutrition Fact Sheets:

- "Healthy Habits for Healthy Kids: A Nutrition and Activity Guide for Parents"
- "Healthy Weight, Healthy You"

Client education publications:

- "Snack Attacks are OK"
- "Take a Fresh Look at Nutrition"
- "Right From the Start: ABCs of Good Nutrition for Young Children"

5. http://www.fda.gov/fdac/features/396_snck.html

"Healthful Snacks for the Chip and Dip Crowd" is a Food and Drug Administration (FDA) Fact Sheet offering useful information about serving sizes, problem nutrients in common snack foods, and teaching consumers how to make dietary trade-offs and substitutions using information on food labels.

6. <http://www.5aday.gov/index-quick.shtml>

This National Cancer Institute (NCI) website offers fourteen "Quick, Easy Tips to 5-A-Day" that include ideas for healthy snacks. It provides information about serving sizes and tips on meals, budgets, and school lunches. See new product information from 5-A-Day, the United States Department of Agriculture (USDA), and NCI as well as links to "Partner Sites" such as the Produce for Better Health Association, American Cancer Society (ACS), and National Alliance for Nutrition and Activity (NANA).

7. <http://www.niddk.nih.gov/health/nutrit/pubs/winteen/index.htm>

"Take Charge of Your Health: A Teenager's Guide to Better Health" by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) explores the teen topics "Family Matters," "So, Where Do I Start?" "Physical Activity - It Doesn't Have To Be A Chore!" "Get Moving," "You Are What You Eat!" "The Food Guide Pyramid," "What Counts as a Serving?" "Let's Talk About Health," and "Staying Healthy and Happy." Teens are encouraged to take charge of their health by developing good eating and exercise habits. They are reminded that even small changes can make a difference. The site

lists additional reading, resources, and organizations to help teens answer health-related questions and learn to manage health.

8. <http://www.ific.org/publications/brochures/tentipskidsbroch.cfm>

Published by the International Food Information Council Foundation (IFIC) and co-sponsored by the American Dietetic Association's National Center for Nutrition and Dietetics and the President's Council on Physical Fitness and Sports, "10 Tips to Healthy Eating and Physical Activity for You" is a five-page brochure with tips about healthy nutrition, snacking, and exercise. This site gives information about the IFIC and provides links to IFIC's reviews, fact sheets, educational brochures, and other materials.

9. <http://www.os.dhhs.gov>

The United States Department of Health and Human Services (USDHHS) is responsible for promoting the health, safety, and well being of Americans. Access the guidelines and recommendations from press releases, fact sheets, newsletters, speeches, testimonies, and news from the USDHHS in addition to a complete list of national safety and wellness initiatives, guidelines, and reports. See these publications: "Diet, Nutrition, and Eating Right" and "Exercise and Fitness."

10. <http://www.dole.com>

This site provides a wealth of nutrition information including an "Encyclopedia of Foods" of the most up-to-date and comprehensive information on food and nutrition recipes for healthy living and a colorful "fun for kids" page which includes entertainment and nutrition education for kids of all ages

11. <http://schoolmeals.nal.usda.gov>

The Healthy School Meals Resource System provides information to persons working in USDA's Child Nutrition Programs. It is a comprehensive site that contains valuable information about nutrition resources, training opportunities, food safety issues, as well as access to an e-mail discussion group intended as a communication tool to link school health professionals, child nutrition educators, principals, teachers, parents, and community members who are interested in creating a healthy school nutrition environment.

12. <http://www.nal.usda.gov/wicworks>

The WIC Works Resource System provides nutrition service tools for health and nutrition professionals. This site includes a vast amount of helpful and useful nutrition information, including state-developed materials from the Fit WIC initiative, which is the USDA-funded childhood obesity prevention initiative; an educational materials database; WIC reports and studies; and state-developed materials related to breastfeeding topics, nutrition education, immunizations, etc.

13. <http://www.fns.usda.gov/tn>

This site provides training and technical assistance to Child Nutrition food service professionals to enable them to prepare and serve nutritious meals that appeal to students. It promotes nutrition curriculum and education in schools through multiple communication channels to reinforce positive nutrition messages and encourages students to make healthy food and physical activity choices as part of a healthy lifestyle. The site provides valuable links to many useful resources and materials, and it supports a school database featuring activities conducted in states throughout the nation.

14. <http://www.cdc.gov/nccdphp/dnpa/sitemap.htm>

The United States Department of Health and Human Services Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion lists fact sheets on selected nutrition and physical activity topics on the "Nutrition and Physical Activity Site Map." See the following:

- "Healthy Eating Tips"
- "Components of Physical Fitness"
- "Promoting Active Lifestyles Among Older Adults"
- "What are Some Tips for Being More Active?"
- "Preventing Obesity and Chronic Diseases Through Good Nutrition and Physical Activity"
- "The Importance of Physical Activity"

15. <http://www.nia.nih.gov/exercisebook/index.htm>

Physicians and scientists at the National Institutes of Health (NIH) National Institute on Aging (NIA) have cooperated to write the book entitled *Exercise: A Guide from the National Institute on Aging*. This resource explains the role of nutrition and exercise in maintaining good health throughout the aging process. It offers tips to older adults for developing and maintaining regular exercise programs and lists nonprofit organizations that give support and information about exercise and exercise programs.

16. <http://www.deliciousdecisions.org/contents.html>

The American Heart Association (AHA) offers snacking strategies while inviting Americans to meet the snackable food groups. The wise use of calorie dense snacks contributes meaningfully to a healthful diet so it is important to learn how to make substitutions for high calorie, nutrient-limited snack foods.

17. <http://www.americanheart.org/presenter.jhtml?identifier=2155>

A one-page fact sheet, "Physical Activity in Your Daily Life" by the American Heart Association, offers practical suggestions for increasing activity at home, in the office, and at play.

18. <http://www.aahperd.org/naspe/template.cfm?template=press.html>

The National Association for Sport and Physical Education (NASPE) is a nonprofit professional organization that studies human movement and supports quality physical activity programs to promote healthy behaviors and individual well being through sport and physical activity programs. Read these selected press releases related to sport and physical activity topics:

- "Physical Activity Guidelines for Infants & Toddlers"
- "99 Tips for Family Fitness Fun"
- "Physical Activity Tips for Locked In Students"
- "New Study Supports Physically Fit Kids Perform Better Academically"
- "NASPE Urges Parents to Monitor Physical Activity Levels of Their Children"
- "Children Need Greater Amounts of Physical Activity in 2004"

19. <http://www.sportforall.net>

Co-sponsored by the National Association for Sport and Physical Education (NASPE), Human Kinetics, and Sportime, "Sport For All" is a program of carefully sequenced skills that helps children develop movement skills as it promotes the development of age appropriate sport skills. The goal is to provide positive experiences with physical activity, hopefully leading to a lifetime of regular physical activity. Programs exist at three different levels:

- "SportFun" helps 3 to 5 year-old children develop basic movement skills.

- “SportPlay” provides games and physical activities to enable 5 to 7 year-olds develop the basic movement skills that serve as precursors for sport specific skills.
- “SportSkill Basic” consists of games and physical activities that help 8 to 10 year-old children further develop and refine those basic movement skills that serve as precursors for sport specific skills.

20. <http://www.acsm.org/>

The mission of the American College of Sports Medicine (ACSM) is to “advance and integrate scientific research to provide educational and practical applications of exercise science and sports medicine.” The ASCM is a recognized leader in fitness and sports, offering professional credentialing to persons who meet education and training requirements followed by successful completion of ASCM’s national examination. A series of one- to three-page articles on a variety of topics called “Current Comments” is available for review and reprint by following ACSM’s guidelines for presentation and award of credit to authors. See the “Current Comments” on these topics below:

- “Energy Expenditure in Different Modes of Exercise”
- “Exercise and the Older Adult”
- “Resistance Training in the Older Adult”
- “Strength Training in Children and Adolescents”

21. <http://www.pamf.org/teen/healthinfo>

The Palo Alto Medical Group is a member of the Sutter Health Network, one of the nation’s leading not-for-profit health care organizations serving more than twenty Northern California counties. Physicians and other health professionals in the Network have contributed one-page fact sheets for teens on selected topics of interest:

- <http://www.pamf.org/teen/health/nutrition>

The fact sheet entitled “Nutrition and Fitness” provides information about nutrition, exercise and sports, and how to get started and be successful.

- <http://www.pamf.org/teen/health/nutrition/nutrition.html>

“Why Eat Smart?” offers simple, easy to follow guidelines.

- <http://www.pamf.org/teen/health/nutrition/snack-healthy.html>

Provides a list of healthy snack food and food combinations.

*This listing of websites is for information only and does not represent an endorsement by the Florida Interagency Food and Nutrition Committee.

Florida Department of Education Food and Nutrition Resource Center

The Florida Department of Education's Food and Nutrition Resource Center is your lending library of nutrition education materials. The collection includes videos, lesson plans, posters, kits, models, games, curriculum guides, puppets, reproducibles, and USDA materials—everything the educator/trainer needs. While the customer focus is on teachers and nutrition professionals, these materials are also available to interested parents and child care providers.

Over 2000 items cover a wide range of nutrition education topics like healthy eating and snacking, physical activity, vitamins and minerals, eating disorders, nutrition-related diseases and disorders, ethnic foods, fast foods, diet programs and weight management, food safety, sports nutrition, and many other topics suitable for learners of all ages.

The Resource Center also has the latest publications and resources distributed by USDA, Team Nutrition, NFSMI, and other organizations both public and private.

All services of the lending library are entirely free. Requested materials are sent through the mail and a return postage sticker is provided for the free return of the materials. The loan period is for five weeks.

Call or email the Resource Center to receive a free catalog.

Phone: 1-800-504-6609

Email: FNRC@fldoe.org

You may also view the catalog at:

<http://www.firn.edu/databases/fnrc/food.html>

just ask!



**Food and Nutrition
Resource Center**

Campaign Evaluation

Agency Name: _____

Your Name: _____

1. Check the box of the resource manual materials that you found to be the most effective.

- Press Release
- Literature Review for Professionals about Healthful Snacking
- Literature Review for Professionals about Exercise
- Lesson Plan and Activities for Preschool
- Lesson Plan and Activities for Elementary Age Children
- Lesson Plan and Activities for Teens
- Lesson Plan for Adults
- Lesson Plan for Elders
- Consumer Handout/Newsletter
- PowerPoint Presentation
- Annotated Web Sites

2. Check the box of the resource manual materials that you found to be the least effective.

- Press Release
- Literature Review for Professionals about Healthful Snacking
- Literature Review for Professionals about Exercise
- Lesson Plan and Activities for Preschool
- Lesson Plan and Activities for Elementary Age Children
- Lesson Plan and Activities for Teens
- Lesson Plan for Adults
- Lesson Plan for Elders
- Consumer Handout/Newsletter
- PowerPoint Presentation
- Annotated Web Sites

more. . .



3. List both positive and negative comments that you have heard about this campaign from health professionals, clients, staff, teachers, children, and others.

Positive

Negative

<hr/>	<hr/>

4. Describe other materials that would have been helpful in promoting the campaign's message.

5. Additional comments.

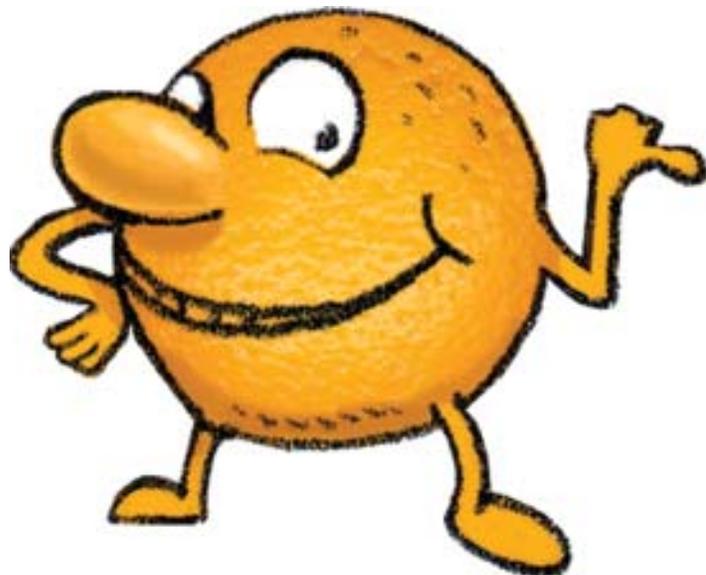
Please share the results with your representative to the Florida Interagency Food and Nutrition Committee. Thank you for helping us to evaluate the *Snack Smart, Move More Resource Manual*.



Camera-Ready Handouts

The following pages are duplicates of the color handouts found throughout the manual. These black and white camera-ready pages are made available here for your use.

You may also download these materials. Log on to www.fldoe.org/nutrition.



Smart Snacking Ideas



- ❖ Orange or tangerine sections
- ❖ Chunks of banana, pineapple, melons, or strawberries
- ❖ Frozen fruit bars
- ❖ Wheat crackers topped with cheese slices
- ❖ Toast with peanut butter
- ❖ Ready to eat cereal – with or without lowfat milk
- ❖ Mini pizzas made with English muffins, cheese, and tomato sauce
- ❖ Vegetable sticks
- ❖ Steamed broccoli, green beans, or baby carrots with lowfat dip
- ❖ Vegetable juice
- ❖ Bean dip with whole wheat crackers
- ❖ Lowfat ice cream, ice milk, or yogurt.

And Remember. . .



Limit TV watching so that your child is not exposed to too many “junk food” commercials.



Keep portion sizes “snack” size, not meal size.

Reminder: In order to prevent food-related choking in young children, parents/caregivers should make foods as safe as possible for young children. Prevention is the best approach. Parents should modify the shapes and textures of the foods most likely to cause choking. Children under 2 years of age should not be given peanut butter.





Move with Your Family



- ❖ Go for a walk outside.
- ❖ Go to a park or playground.
- ❖ Run through a sprinkler.
- ❖ Have everyone help with chores: sweeping, raking, vacuuming, picking up toys.
- ❖ Play music and dance, stretch, jump, skip, and march.
- ❖ Work in a garden.
- ❖ Wash the car, wash the bikes.
- ❖ Have your children play with toys that help them move: balls, bikes, push toys.
- ❖ Play active games such as jump rope, races, dodge ball, tag, musical chairs.
- ❖ Make your own toys:
 - Balls: roll up socks, crumpled paper, old aluminum foil, yarn.
 - Racquets: pull the bottom of wire coat hangers down into a diamond or circular shape. Cover with old pantyhose legs, nylon knee-highs, or large socks, securing the ends with a rubber band or masking tape. Bend the hook of the hangers in and cover any sharp edges with masking tape to make a handle.
 - “Tunnels”: open up a large box at both ends and cover with a large sheet or blanket. Let your child crawl through the “tunnel” and explore.
- ❖ Park the car near the end of a parking lot and walk.
- ❖ Get off the bus early and go the rest of the way on foot.
- ❖ Take the stairs instead of the elevator.
- ❖ Turn off the TV and video games.

And Remember. . .



Adults need to be active at least 30 minutes a day.



Children need at least 60 minutes a day of active play.



TV and video games should be limited to no more than 2 hours a day.



Dear Parents,

Your child has been learning about eating healthy snacks and being active from our lesson, *Snack Smart, Move More*. We have been focusing on eating fruits and vegetables for snacks and how these and other foods, along with physical activity, are important for our bodies. Below are some things we have been learning:

“Snack Smart”

- ❖ We read the book *Give Me 5 A Day!* It is about fruits and vegetables and why we need to eat at least three servings of vegetables and two servings of fruit every day. We also practiced our counting while reading this book.
- ❖ We have been trying different fruits and vegetables for snacks, like strawberries, broccoli and carrots. Share your favorite fruit and vegetable with your child.
- ❖ We learned that fruits and vegetables are some of the best foods we can eat because they give us lots of energy and help our bodies be strong.

“Move More”

- ❖ While reading the *Give Me 5 A Day!* book, we got to move (jump up and down and turn around).
- ❖ We talked about our favorite ways to move and be active. Share your favorite way to be active with your child.
- ❖ We stretched and flexed our arms and legs to show how strong they are and then felt our hearts beat stronger because we were moving.
- ❖ We also made-up different movements like marching in place to music.

Ask your child what their favorite movement is and if they have a “new” snack they would like to try at home. Encourage your child to help in selecting healthy snacks for home. They will more likely eat the healthy food you want them to eat if they play a part in picking it out.

Sincerely,



Snack Smart

Preschool children have small stomachs and probably eat smaller amounts at mealtime than you do. Children **do** get hungry between meals, especially when going through a growth spurt. Actually, most young children do better if they eat four to six times during the day.

Snacking smart between meals can help provide important vitamins and minerals young bodies need to grow and be healthy. Children that develop healthy snacking habits early will more likely keep them through their lifetime. Here are some ideas to help you encourage healthy snacking in your family:

- ❖ Show children how to snack smart by snacking smart yourself. Keep a bowl of fruit on the kitchen counter or table.
- ❖ Keep snack portion sizes small, not super-sized.
- ❖ Keep pre-measured baggies of healthy snacks on a low shelf in the pantry or refrigerator in reach for little ones.
- ❖ Offer snacks two to three hours before a meal to satisfy hunger, not for use as a reward.
- ❖ With your child's help, choose healthy snacks when you shop. Select a variety of foods from each of the five major food groups. For example:
 - ♦ **Fruits:** apples, bananas, cantaloupe, strawberries, grapefruit, 100% fruit juices.
 - ♦ **Vegetables:** green and red pepper strips, cucumber slices, carrot and celery sticks, broccoli and cauliflower bites.
 - ♦ **Breads:** animal and graham crackers, bagels, English muffins, low sugar cereals (10 grams of sugar or less as stated on the Nutrition Facts label), tortillas – chips or soft, whole wheat crackers, pita bread.
 - ♦ **Dairy:** lowfat or fat free milk for children age 2 and older, string cheese, yogurt - plain, flavored or sweetened, low-fat cottage cheese, cheese cubes.
 - ♦ **Meats:** eggs—hard cooked, bean dip (with tortillas), peanut butter (with crackers), lean meats—rolled or cubed like ham and turkey.

Move More

Good nutrition and physical activity work together for healthier families. Children should be physically active for at least 60 minutes a day and adults for at least 30 minutes a day. This does not have to be all at one time.

Children see those around them as role models, especially their family members. Here are some ideas to help you encourage physical activity in your family:

- ❖ Take a walk around the block or to a friend's house.
- ❖ Take the stairs when you can.
- ❖ Wash the car or the dog.
- ❖ Rake leaves.
- ❖ Ride a bicycle.
- ❖ Swim.
- ❖ Jog.
- ❖ Play basketball or soccer.
- ❖ Play frisbee with a friend (canine or human).
- ❖ Plant some healthy vegetables in your yard or in pots.
- ❖ Dance. "Silly" dancing is especially fun for younger children—just make up dance steps as you go along.



Getting your family moving can be fun, and it can provide an opportunity for your family to spend more time together. Being active doesn't necessarily mean joining a club or gym, but it does require turning off the TV, getting up, and moving. The important thing is to be active regularly and enjoy what you do.



Snack Smart Recipes



❖ Wrap-Ups

Makes 1 wrap-up

4-5" tortilla

1 tsp. low-fat mayonnaise

1 tsp. low-fat sour cream

¼ cup chopped or grated vegetables (tomato, red pepper, cucumber, carrot, onion, zucchini) or cooked dried beans

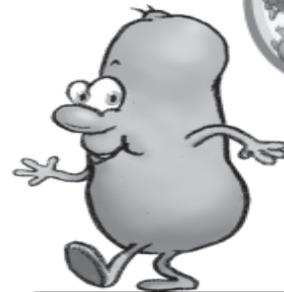
2 Tbsp. shredded cheese

1. Mix mayonnaise and sour cream. Spread on one side of tortilla. Give each child one tortilla.
2. Give each child ¼ cup chopped vegetables and 2 Tbsp. shredded cheese. Show the children how to put their vegetables and cheese in the tortilla.
3. Next, show the children how to fold the tortilla in half or gently roll it up; they may need help with this step.

Options instead of mayonnaise and sour cream:

2 tsp. of mashed avocado

2 tsp. of mashed beans



1 Wrap-Up meets the Child Care Food Program snack meal pattern requirement for children ages 3-5.

One wrap provides: 1 serving grain/bread, ¼ cup vegetable/fruit, and ½ ounce of meat alternate.



❖ Graham Cracker Smacker

Makes 1 Graham Cracker Smacker

2 graham cracker squares

1 Tbsp. peanut butter

¼ cup soft fruit slices (banana, peaches, pears, etc.)

1. Spread 2 graham cracker squares with thin layer of peanut butter.
2. Give each child ¼ cup soft fruit such as: slices of banana, peach, pear, or other soft fruit. Let children place fruit on top of one cracker with peanut butter.
3. Show children how to place the other graham cracker square spread with peanut butter (facing inside) on top of fruit.



1 Graham Cracker Smacker meets the Child Care Food Program snack meal pattern requirement for children ages 3-5.

One "smacker" provides: 1 serving grain/bread, ¼ cup vegetable/fruit, and 1 Tbsp. of meat alternate.

Adapted from: *Physical activities and healthy snacks for young children*. (2001). [Des Moines, IA]: Iowa Department of Education Bureau of Food and Nutrition, Iowa Team Nutrition.



Identify the Healthy Snack

At each station, study the pair of Nutrition Facts Labels and determine which of the two snacks is healthier. Write your answer in the space provided.



Station Number	Healthy Snack	Unhealthy Snack
Station 1		
Station 2		
Station 3		
Station 4		
Station 5		





Get Moving at the Energy Station

After completing the specified activity at each station, record the requested information for “Today.” Continue to perform these activities for 10 days and see how you improve!

	Station 1 Jumping Rope How many times did you jump the rope?	Station 2 Can Lifting How many times were you able to lift the cans?	Station 3 Sitting Up How many sit-ups did you do in 1 minute?	Station 4 Stretching Were you able to perform this task? With your fingertips? With your palms?	Station 5 Moving Fast What was your heart rate after moving fast?
Today					____ BPM
Day 1					____ BPM
Day 2					____ BPM
Day 3					____ BPM
Day 4					____ BPM
Day 5					____ BPM
Day 6					____ BPM
Day 7					____ BPM
Day 8					____ BPM
Day 9					____ BPM
Day 10					____ BPM



Physical Benefits of Fitness

Lung capacity is increased, keeping you from becoming breathless when you climb stairs, run to catch a bus, or participate in sports.

Your blood pressure stays within the normal range.

The heart and lungs work efficiently to supply your body cells with plenty of oxygen.

You burn calories efficiently, helping your body maintain an appropriate body weight.

The heart increases in strength, reducing the work load. Cholesterol levels can be lowered. The risk of heart disease is reduced.

The flow of energy in the body is increased.

A conditioned body is mobile. Muscles are strong and flexible and less likely to stiffen and eventually to cause pain and injury.

Bones can absorb minerals more easily, reducing the risk of the bone disease osteoporosis.





The 3 Elements of Exercise

1. Aerobic Exercise

Aerobic means “using oxygen.” Aerobic exercise is any exercise that causes you to breathe harder and your heart to beat faster in order to supply your muscles with enough oxygen to cover the extra demand. Aerobics directly exercises your heart muscle, strengthening your cardiovascular system and improving your body’s endurance. Aerobics lowers cholesterol and blood pressure, and burns calories for weight loss. Aerobics should include at least 20 minutes of exercise at least three times a week. Popular aerobic exercises include:

- ❖ Brisk walking
- ❖ Running
- ❖ Swimming
- ❖ Aerobic dancing

Add your own favorites:



2. Strength Training

Any exercise that forces your muscles to work against increasing amounts of resistance can be considered strength training. The most common methods of building muscle strength are lifting weights and using specially designed resistance machines. Push-ups are an example of a strength training exercise that requires no special equipment. Strength training increases the number of muscle fibers doing the work and improves the endurance of your muscles. It helps your muscles perform better at daily tasks. Increasing the size of your muscles also helps the body burn more calories when at rest, a benefit for those who want to manage their weight. Strength training also improves bone density and helps combat osteoporosis. Strength training should be done two or three times a week.

3. Stretching for Flexibility

Flexibility measures a muscle’s ability to move over a wide range without stiffness or resistance. Flexible muscles are less likely to “tear” or strain than tight, inflexible ones. Stretches should be done slowly without bouncing and held for 10 to 20 seconds.

Warm Up/Cool Down

In addition to the three basic elements, every exercise session should include warm-up and cool-down periods. To prevent injury, warm up by starting out slowly for the first five minutes. Cool down for five to 10 minutes by gradually slowing down, walking around for a few minutes or doing some light stretches.

Source: The Nutrition Diner, Florida Department of Education, 2002



Test Your Understanding

Test your understanding. Put the number of the fitness category next to each exercise. Some may fit into more than one category.

1. Aerobic

2. Strength

3. Flexibility

- _____ 1. Also called “cardiovascular conditioning,” because it strengthens the heart
- _____ 2. Arm stretches
- _____ 3. Brisk walking
- _____ 4. Calf stretches
- _____ 5. Cross-country skiing
- _____ 6. Helps prevent injuries
- _____ 7. Helps prevent stiffness
- _____ 8. Important for back strength
- _____ 9. Improves joint mobility
- _____ 10. Increases bone density
- _____ 11. Increases your stamina
- _____ 12. Is good for your cholesterol count
- _____ 13. Makes your heart beat fast
- _____ 14. Makes your heart work more efficiently
- _____ 15. Push-ups
- _____ 16. Quadriceps stretch
- _____ 17. Rowing
- _____ 18. Running
- _____ 19. Shoulder roll
- _____ 20. Sit-ups
- _____ 21. Strengthens bones
- _____ 22. Strengthens muscles
- _____ 23. Swimming
- _____ 24. Weight lifting



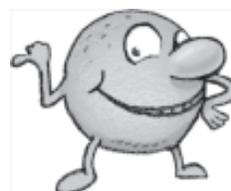
Answers:
1. Aerobic: 1, 3, 5, 11, 12, 13, 14, 17, 18, 23
2. Strength: 6, 8, 10, 11, 15, 20, 21, 22, 24
3. Flexibility: 2, 4, 6, 7, 9, 16, 19

Setting Fitness Goals



What are your long-range fitness goals? Be specific and tell how these goals will improve your life.

- improve endurance
- improve strength
- combat osteoporosis
- decrease risk for heart disease
- improve specific skills (your bicycling, swimming, or golf game, for instance)
- _____
- _____
- _____



What are your short-range fitness goals? If your long-range goal is to run a 5-mile race in 35 minutes, set short-range goals first. Taking small steps will help you reach your long-range goal. Specify what, when, and how often you will do an activity that helps you move toward your final goals.

- _____
- _____
- _____

Remember that an effective exercise program means at least three vigorous sessions a week. On the back of this sheet, write each of the following fitness categories and list the activities that you plan to participate in each week.

- ❖ **My Aerobic Activities**
- ❖ **My Strength Training Activities**
- ❖ **My Stretching Exercises**

Finally, keep an Exercise Journal to chart your progress in attaining your goals. We all work better when we have a record of our accomplishments to keep us motivated.

Source: The Nutrition Diner, Florida Department of Education, 2002



Exercise Journal



Date	Type of Activity	Time/Distance
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

A sensible, **balanced diet** is just half of good weight management. **Exercise** is also important. In addition to **burning calories**, regular exercise promotes **muscle fitness, joint flexibility**, and an **efficient heart and lungs**. It can also **promote a healthy appetite, reduce stress**, help you **sleep better**, and **improve your mood**.

Staying with an exercise program depends on your **staying interested**, so choose activities that you enjoy. Also, try to make exercise convenient. Many activities—such as swimming, walking, and cycling—are easy to do alone.

Remember the “FIT” principles of exercise: **Frequency, Intensity, and Time**.

- ❖ **Frequency**—Exercising at least three days a week is good, but aim for every day of the week.
- ❖ **Intensity**—Although you may have to start slowly, you should eventually exercise at 50-75% of your maximum heart rate. To determine this “target heart rate,” subtract your age from 220 and multiply the difference by 0.7. This equals the number of times per minute your heart should beat during exercise for optimum aerobic benefit.
- ❖ **Time**—Even 30 minutes of activity during the day can improve your health. However, sustained exercise for 30–60 minutes provides more benefits. Set goals so that you can gradually work up to longer sessions.

Source: The Nutrition Diner, Florida Department of Education, 2002



Moving Toward My Goals



	Short-Term Goals (e.g., distance covered, time to complete an activity, etc.)	Long-Term Goals (e.g., distance covered, time to complete an activity, etc.)
Week One		
Week Two		
Week Three		
Week Four		
Month Two		
Month Three		



Activity 1

Snack Smart Word Search



Have fun with this word search!

R	K	U	I	L	O	C	C	O	R	B
E	C	L	W	E	L	P	P	A	I	A
T	A	O	M	U	F	F	I	N	C	G
T	R	T	K	M	O	S	B	C	E	E
U	R	R	T	O	M	A	T	O	C	L
B	O	U	X	A	I	R	P	R	A	R
T	T	G	A	N	A	N	A	B	K	R
U	K	O	E	E	Y	R	E	L	E	C
N	E	Y	P	O	P	C	O	R	N	L
A	P	R	I	C	O	T	E	G	G	A
E	G	N	A	R	O	T	I	U	R	F
P	E	I	H	T	O	O	M	S	O	C

Hint: Below are the words to look for in the above grid. For an added challenge, cut here and see how many words can be found without using the list below!

Apple

Apricot

Bagel

Banana

Broccoli

Carrot

Celery

Egg

Fruit

Muffin

Orange

Peanut Butter

Pear

Popcorn

Rice Cake

Smoothie

Tomato

Yogurt





Activity 2 Let's Make Lowfat Ice Cream

Lowfat Ice Cream In A Bag

Ingredients

½ cup lowfat chocolate milk

4 tablespoons salt

2–3 cup(s) crushed ice

Directions

Fill a large re-sealable plastic bag with crushed ice (one bag of ice for each serving)

Add the salt.

Seal and shake to mix.

In a small re-sealable plastic bag:

Pour ½ cup of lowfat chocolate milk

Seal the bag

Place the lowfat chocolate milk bag inside the ice bag and seal again carefully.

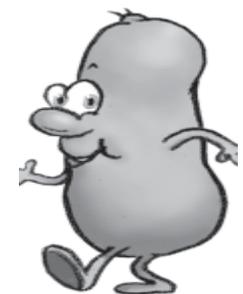
Shake until the mixture turns into ice cream, about 5 minutes.

Take the small bag of ice cream out of the larger ice bag. Make sure the bag is sealed tightly! Wipe off the salt water.

Open carefully, put into serving dish and enjoy!

Variations

Use lowfat white milk and add your favorite fresh fruit pieces (blueberries or strawberries) after the ice cream is finished
Mix together.



Activity 3 Let's Move!



The following are exercises to perform while sitting:

Arm Curls

While seated, with one arm extended toward the floor, make a fist. Slowly bring the extended arm to the shoulder by squeezing the muscles in the front of the upper arm. Slowly lower it straight down. Repeat 10 times on each side.



Knee Ups

While sitting in a chair, alternate lifting your knees into your chest. All movement should be performed very slowly. Repeat 15 lifts on each leg.



Leg Extensions

Sit straight in a chair. Extend your feet straight out in front of you with your toes pointed up. Hold your legs in the up position while you squeeze your thigh muscles. Slowly lower legs back to floor. Repeat 15 times.

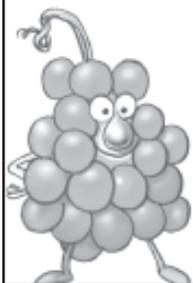
Seated Rowing

Sitting straight, reach your arms straight out in front of your body, palms down. Pull elbows back forming a 90-degree angle at elbow and pull elbows toward back by squeezing shoulder blades together. Slowly return to start position. Repeat 10 times.



Disclaimer

- Always check with your health care provider before beginning any regular activity program.
- Do these activities at your own risk.



The following are exercises to perform while standing:

Calf Raises

Standing, raise yourself up onto your toes. Hold, and slowly lower back to start position. Repeat 10 times.

Triceps Kicks

March in place, feet shoulder-width apart. Bend knees slightly, keeping back straight. Bend at about 45-degree angle from waist. Keep arms close to body, with upper arms level with floor/ground. Thrust forearms back, straightening arms, keeping upper arms still. Repeat 10 times.

Step Along

Bend knees slightly, keeping back straight, feet shoulder-width apart. Step so that right foot touches the floor behind left foot and returns to original position. Repeat with left foot. Lift both arms forward away from the body until they are extended above head with elbows straight. Repeat 12 times.

The Hulk

Bend knees slightly, keeping back straight. Step about 2-3 feet to right side with right foot. Step with left foot until feet are again side-by-side. With hands in loose fist and arms spread straight out in front of you, bend arms simultaneously to a 90° angle, ending with fist at high level. Repeat 10 times.

Shoulder Press

March in place, feet shoulder-width apart. Bend knees slightly, keeping back straight. Touch thumbs to shoulders, palms facing out. Make fist and push arms upward toward ceiling/sky, straightening arms. Repeat 12 times.

Adapted from *Everyday Exercises for BUSY People*. Department of Health Services Public Health Division of Chronic Disease Prevention and Health Promotion, County of Los Angeles, California



Adult Lesson Evaluation

1. How much did you learn from this lesson? Please check only one:

- Very little
- Some
- A lot

2. Do you plan on making any changes in the snacks you eat or drink as a result of participating in this lesson?

- Yes
- No

3. Do you plan on making any changes in your physical activity level as a result of participating in this lesson?

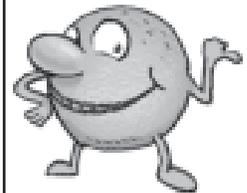
- Yes
- No

4. If you answered “yes” to either of these questions, please tell us what you plan to do. Check all that apply!

- Choose snacks from the “bottom” of the food guide pyramid.
- Choose more fruits and vegetables as snacks.
- I plan to be active at least 3 days a week.
- I plan to be active for at least 30 minutes daily.
- Other _____

5. Comments:

Thank you for completing this evaluation.



Dietary Guidelines for Americans



Aim for Fitness. . .

- ◆ Aim for a healthy weight.
- ◆ Be physically active each day.



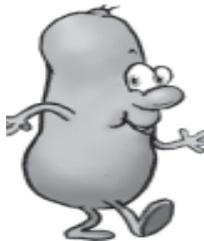
Build a Healthy Base. . .

- Let the Pyramid guide your food choices.
- Choose a variety of grains daily, especially whole grains.
- Choose a variety of fruits and vegetables daily.
- Keep foods safe to eat.



Choose Sensibly. . .

- ❖ Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.
- ❖ Choose beverages and foods to moderate your intake of sugars.
- ❖ Choose and prepare foods with less salt.
- ❖ If you drink alcoholic beverages, do so in moderation.



. . . for good health

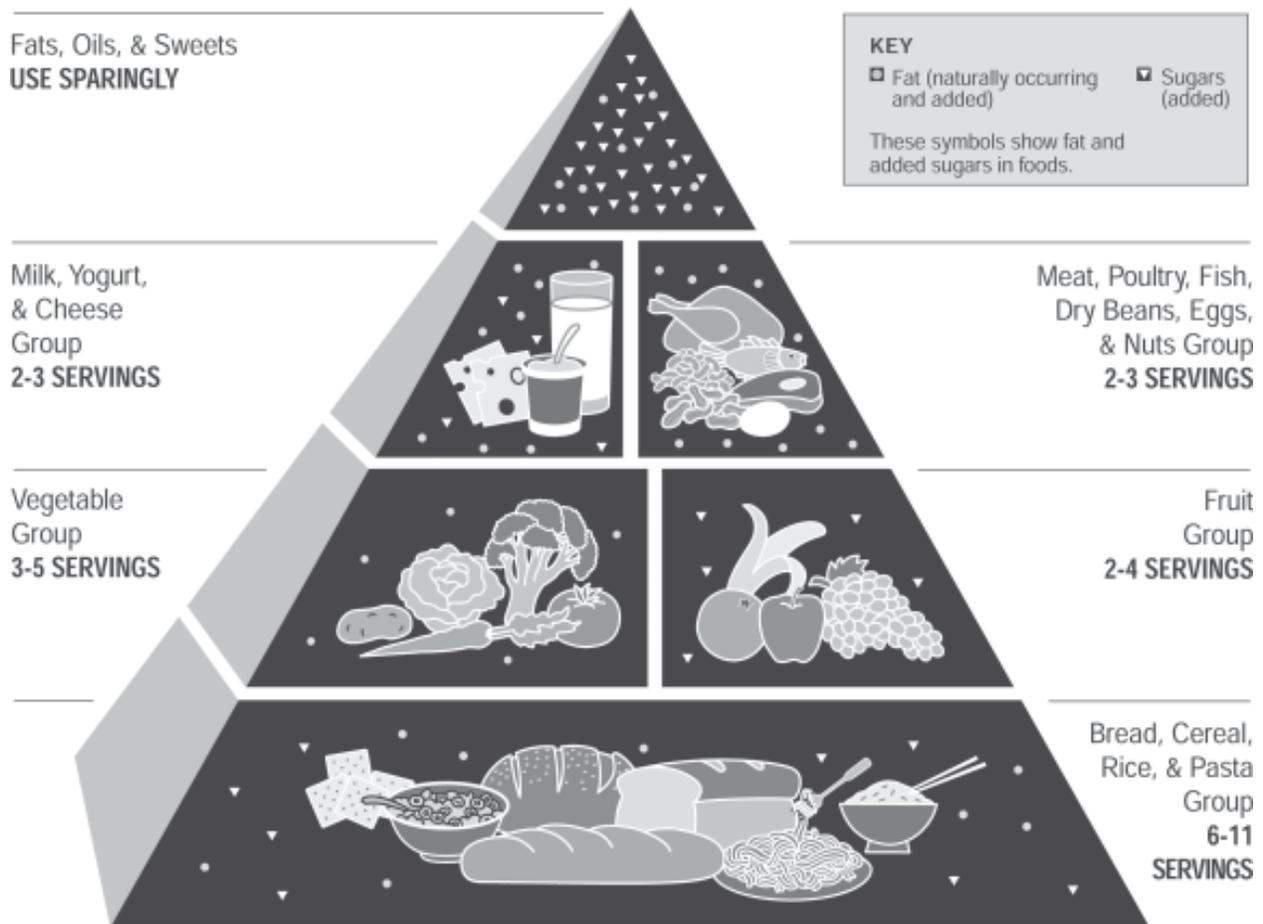




Food Guide Pyramid

A Guide to Daily Food Choices

- ❖ The Food Guide Pyramid can be used to help a person eat better every day.
- ❖ Each of the food groups provides some, but not all, of the nutrients a person needs.
- ❖ Foods in one group can't replace those in another.
- ❖ No one food group is more important than another—for good health, all are needed.
- ❖ The Food Guide Pyramid is a general outline of what a person should eat each day. It is not a rigid prescription, but presents general recommendations for choosing a healthy diet.



Source: U.S. Department of Agriculture/U.S. Department of Health and Human Services



Physical Activity Pyramid



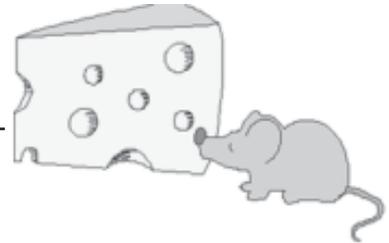
- ❖ Adults need to be active at least 30 minutes a day.
- ❖ Children need at least 60 minutes a day of active play.
- ❖ TV and video games should be limited to no more than 2 hours a day.

Source of Activity Pyramid: Department of Health, Bureau of Chronic Disease Prevention.



Critical Nutrients for Mature Adults

Calcium



A large empty rectangular box for writing notes related to Calcium.

Folate



A large empty rectangular box for writing notes related to Folate.

Critical Nutrients for Mature Adults



Vitamin D



A large empty rectangular box for notes related to Vitamin D.

Vitamin B₁₂



A large empty rectangular box for notes related to Vitamin B₁₂.



Critical Nutrients for Mature Adults

Vitamin B₆



A large empty rectangular box for notes related to Vitamin B₆.

Zinc

A large empty rectangular box for notes related to Zinc.



Recipes



❖ Hummus

- 1 can garbanzo beans, drained in colander, and rinsed with water
- 3 Tbsp lemon juice
- 1 tsp chopped garlic
- ¼ tsp paprika
- 3 Tbsp sesame tahini (available in most supermarkets, and in health food stores)
- water as needed
- ¼ tsp ground cumin (optional)
- ½ tsp ground coriander (optional)
- dash cayenne powder (optional)

1/10th of the recipe provides:

- ◆ 60 calories
- ◆ 3 grams protein
- ◆ 7 grams carbohydrate
- ◆ 3 grams fat
- ◆ 2 grams dietary fiber
- ◆ 20 milligrams calcium

Cayenne powder adds a little "zip" to hummus!

Combine ingredients in a food processor and process until smooth. Consistency should be fairly thick; add water as needed for processing. Makes about 2 cups. Spread on small pieces of pita bread, or dip carrot and celery pieces into the hummus, for the taste test.

❖ Bagel Pizza

- 4 three-inch plain bagels, sliced in half crosswise
- 1 cup pizza sauce (or tomato-basil pasta sauce)
- 8 ounces shredded mozzarella cheese, part-skim
- Dried oregano leaves, crushed (optional)

1 pizza (½ bagel) provides:

- ◆ 170 calories
- ◆ 9.5 grams protein
- ◆ 18 grams carbohydrate
- ◆ 5.5 grams fat
- ◆ 2 grams dietary fiber
- ◆ 220 milligrams calcium

Put bagel slices on a baking dish. Spoon sauce onto the bagel, and sprinkle with cheese. If desired, sprinkle with crushed oregano. Bake at 400 degrees until cheese is melted (about 10 minutes). Cut into small pieces for taste test.

Use part-skim mozzarella cheese to limit fat in your pizzas.



For best taste, never mash avocado for guacamole!

1/8th of the recipe provides:

- ◆ 90 calories
- ◆ 1.5 grams protein
- ◆ 8 grams carbohydrate
- ◆ 7 grams fat
- ◆ 4 grams dietary fiber
- ◆ 45 micrograms folate

❖ Guacamole

- 2 medium ripe Florida avocados
- 2 tsp lime juice
- 1 medium tomato, chopped
- 3 Tbsp finely chopped sweet onion
- 1 clove garlic, finely minced
- ½ jalapeño, finely chopped (or more, to taste)
- 2 Tbsp fresh cilantro leaves, coarsely chopped
- ¼ tsp salt (or to taste)

Cut avocados into small pieces with two knives (don't mash). Add lime juice, tomato, onion, garlic, jalapeño, cilantro, and salt to taste. Mix gently and let stand a few minutes before serving. Spread on tortilla chips or dip celery pieces in the guacamole for the taste test.



Ethnic Snack Taste Test



Food	Ethnic Origin	Taste
		1 2 3 4 5
		1 2 3 4 5
		1 2 3 4 5
		1 2 3 4 5
		1 2 3 4 5

*For each food, circle one:

- 1 = Poor
- 2 = Fair
- 3 = Good
- 4 = Very Good
- 5 = Excellent



Snacking Smart



Pros

Cons

--	--

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Elder Lesson Evaluation

We hope you enjoyed the lessons and activities for elders. Please help us by completing this brief evaluation form. Thank you!

1. How much did you learn from this lesson?

- Little
- Some
- Much

2. Do you plan to make any changes in your snacking habits as a result of this lesson?

- Yes
- No
- Not sure

If you answered Yes, please let us know what you plan to change (circle all that apply):

- a. Plan to eat lower fat snacks.
- b. Plan to eat more ethnic snacks.
- c. Plan to eat healthier snacks.
- d. Other: _____
- e. Other: _____

3. Will you share information from this lesson with family or friends?

- Yes
- No
- Not sure

Thank you for filling out this form. Please return it to the instructor!

