



**Q:** Is fresh produce always more nutritious than canned produce?

**A:** No. In a recent study, researchers compared the nutritional value of 14 different fruits and vegetables, including nearly 84 different varieties and commercial brands. They found that canned fruits and vegetables can provide amounts of nutrients similar to fresh produce. Because of the time it takes for fresh produce to reach local grocery stores from different areas of the U.S., as well as from other countries, nutrients and quality are gradually diminished.

This is especially true if the produce is exposed to adverse environmental conditions, such as nonrefrigerated temperatures. After purchase, the produce can remain in the refrigerator for another week or longer, where further nutrient losses occur. Produce that is truly "fresh" from the farm or garden will generally be higher in nutrients than that which is processed.

## EXTENSION CORNER

The Anne Arundel County Extension office is sponsoring two free classes on seafood, September 18 and 25, from 10 a.m.-noon. Participants will learn up-to-date information on seafood and health, as well as how to prepare soups, stews, chowders, and quick and easy seafood dishes. Tasty samples will be offered. To register, or for more information, call (410) 222-6758 or (301) 970-8250, extension 6758. "Soy Foods: A Healthy Choice" will be presented by the Frederick County Extension office, September 4, from 7:30-8:30 p.m. The program will discuss new research on the health benefits of soy foods. Discover the diversity of soy foods as you taste healthy and delicious dishes from appetizers to desserts. The cost is \$3 (to cover tasting and handout). To register, or for more information, call (301) 694-1594, extension 1599.

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# Get Physical!

*(in moderation)*

## NEW SURGEON GENERAL'S REPORT

**P**eople of all ages can substantially improve their health by including moderate amounts of endurance-based physical activity on most, if not all, days of the week, according to the first Surgeon General's report to address physical activity and health. Issued in July, 1996, the report emphasizes that to achieve health benefits, physical activity should be spread out over the day. It does not need to be strenuous or done all at once. The more activity one does, the more benefit gained. For those who already exercise regularly, additional benefits may be gained by further increases in activity level.

Examples of moderate endurance activities are a 30-minute brisk walk, 30 minutes of lawn mowing or

leaf raking, or 45 minutes of playing volleyball (see chart). The report suggests that these activities be varied from day to day, according to personal preference, which should encourage more people to make physical activity a regular part of their lives.

The hazards of being inactive are clear. Physical activity has been shown to reduce the risk of premature death in general, and of coronary heart disease, high blood pressure, colon cancer, and diabetes in particular. Regular participation in physical activity also appears to reduce depression and anxiety, improve mood, increase feelings of well-being, and enhance one's ability to perform routine tasks

throughout the lifespan. It also is important for building and maintaining healthy muscles and joints. Among teenagers, regular physical activity can build stronger bones to last a lifetime.

Some of the major conclusions of the report are:

- Physical inactivity is a serious, nationwide problem. Despite common knowledge that exercise is healthful, more than 60 percent of adults do not achieve the recommended amount of regular physical activity. In fact, 25 percent of all adults are not active at all. Inactivity increases with age and is more common among women than men and among those with lower income and less education.
- Nearly half of young people aged 12-21 years are not vigorously active

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on a regular basis, and physical activity declines dramatically during adolescence. Females are less likely than males to be physically active.

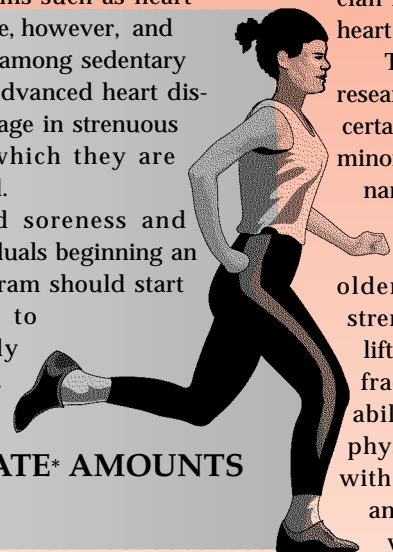
- Low levels of activity contribute to the high prevalence of obesity in the U.S. Regular physical activity burns calories and is a key component of any weight loss effort.

- School-based programs have been successful in increasing physical activity levels in the last decade. Greater effort should be made to encourage schools to require daily physical education in each grade and to promote physical activities that can be enjoyed throughout life. However, daily enrollment in physical education classes has declined among high school students, from 42 percent in 1991 to 25 percent in 1995. Parents can help their children maintain a physically active

lifestyle by providing encouragement and opportunities for physical activity.

The most common risks associated with physical activity are injuries to muscles and bones, which can occur with excessive amounts of activity or with suddenly beginning an activity for which the body is not conditioned. Serious health problems such as heart attacks are rare, however, and occur mainly among sedentary people with advanced heart disease who engage in strenuous activity to which they are unaccustomed.

To avoid soreness and injury, individuals beginning an exercise program should start out slowly to give the body time to adjust.



People with chronic health problems, such as heart disease or diabetes or who are at high risk for these problems, should first consult a physician before beginning a new physical activity program. Also, men over age 40 and women over age 50 who plan to begin a new vigorous physical activity program should consult a physician first to be sure they do not have heart disease or other health problems.

The report states that more research is required to meet the needs of certain groups, such as racial and ethnic minorities, people with low income, pregnant women, and the elderly. No one is too old to enjoy the benefits of regular physical activity. Research in older adults has shown that muscle-strengthening exercises such as weight lifting can reduce the risk of falling and fracturing bones and can improve the ability to live independently. Regular physical activity also can help people with disabilities improve their stamina and strength, as well as psychological well-being, by increasing their ability to perform routine activities. For people with arthritis, it can help control joint swelling and pain.

More research is needed on how individuals can develop and maintain healthy exercise habits. Although many people have enthusiastically begun exercise programs at one time or another, most do not continue. Also, more effort is needed to develop effective and cost-effective physical activity programs at worksites, community agencies, parks, recreational facilities, and health clubs. Ideas mentioned include opening shopping malls for walking before or after regular hours, as well as building bicycle and walking paths separated from automobile traffic.

*What are the best physical activities to do? They are the ones you enjoy doing, because it is more likely you will stick to them. ■*

# The Barbecue Dilemma

Americans love their barbecued hamburgers, steaks, and chicken, but they face a dilemma in deciding how to cook these foods. Grilling meat too well done will char it, producing compounds that are potentially carcinogenic. But not cooking meat long enough will allow dangerous bacteria, such as *E. coli 0157:H7*, *Salmonella*, and *Campylobacter* to survive.

Given these two alternatives, it is best to be sure that meat is well cooked, because the risk of disease-causing bacteria far outweighs the risk associated with charred meat. However, you can reduce charring by cooking meat at least six inches above the burning coals or lava rocks and using moderate heat. Also, avoid excessive fat on foods you plan to grill, because fat causes flames to flare up, charring the food. If possible, charred areas of meat should be trimmed off.

Most of the *E. coli 0157:H7* outbreaks have been linked to undercooked ground beef, but thorough cooking, until the center and cooked-out juices are no longer pink, kills this organism. Consumers often ask how to tell when a hamburger is "done" enough to kill disease-causing bacteria that might be present. Although the tendency is to look at meat color as the primary indicator of doneness, research has shown that measuring internal temperature using a thermometer or observing the color of the meat juices are more reliable indicators. Meat stored at too-high temperatures, kept too long before use, or exposed to too much air can turn brown and look done before it is cooked enough to be safe. To help prevent premature browning, ground beef should be tightly wrapped and either frozen or stored in a 40° F refrigerator for no more than two days.

To be on the safe side, consumers should check both meat and juice color before serving hamburgers, and test the internal temperatures of all meat and poultry products with a meat thermometer. It is best to insert the thermometer through the side of a patty to the center. The USDA advises that most cuts of meat and ground beef should be cooked to an internal temperature of 160° F, ground poultry to 165° F, and poultry to 180° F. To check doneness, consumers also should look for a firm "cooked" texture.

## Here are some more tips for summertime grilling:

- Use a covered grill, which helps retain moisture when cooking meat.
- To prevent sticking, lubricate the grill rack with a nonstick spray, or brush foods with a light coating of vegetable oil before placing them on the rack.
- If you are grilling chicken without a sauce, leave the skin on during cooking, and remove it just before serving. You can also skin the chicken before cooking and marinate it, saving some of the marinade for basting on the grill. Be careful not to reuse marinade that has touched raw meat.
- Serve all food soon after grilling, to prevent the growth of bacteria.
- Be sure to wash all utensils and plates that have come in contact with raw meat before using them with cooked foods.

For more information on safe cooking and grilling of meats, call the USDA Meat and Poultry Hotline at 1-800-535-4555 or (202) 720-3333.

[*Consumer Reports on Health*. 1996. 8(7):80; *Environmental Nutrition*. 1996. 19(7):2; USDA News Release, 4-30-96.] ■



## EXAMPLES OF MODERATE\* AMOUNTS OF ACTIVITY

Activity	Minimum Time
Washing and waxing a car	45-60 minutes
Washing windows or floors	45-60 minutes
Playing volleyball	45 minutes
Playing touch football	30-45 minutes
Gardening	30-45 minutes
Wheeling self in wheelchair	30-40 minutes
Walking 1.75 miles	35 minutes (20 min/mile)
Basketball (shooting baskets)	30 minutes
Bicycling 5 miles	30 minutes
Dancing fast (social)	30 minutes
Pushing a stroller 1.5 miles	30 minutes
Raking leaves	30 minutes
Walking 2 miles	30 minutes (15 min/mile)
Water aerobics	30 minutes
Swimming laps	30 minutes
Wheelchair basketball	20 minutes
Basketball (playing a game)	20 minutes
Bicycling 4 miles	15-20 minutes
Jumping rope	15 minutes
Running 1.5 miles	15 minutes
Shoveling snow	15 minutes (10 min/mile)
Stair walking	15 minutes
	15 minutes

\* A moderate amount of physical activity uses approximately 150 calories of energy per day, or 1,000 calories per week.



- Although foodborne illness is most often caused by improperly prepared foods at home, a telephone survey revealed that consumers are more likely to believe that restaurant food is the most likely cause of foodborne illness.
- Almost 50 million Americans—about one of every four adults—have high blood pressure. Each year, 2 million more Americans develop hypertension, which is the top risk factor for stroke and a major contributor to heart disease and kidney failure.
- Although several major studies found that beta-carotene supplements failed to reduce the risk of cancer, other dietary studies suggest that people who eat a diet rich in fruits and vegetables that contain beta-carotene and other antioxidants have a lower overall death rate than those who eat fewer fruits and vegetables.
- The average American household spends \$66.44/year on vitamin supplements. Of those surveyed, 18 percent don't buy vitamins at all.

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Address comments about this newsletter to Food, Health, and You, Department of Nutrition and Food Science, 3306 Marie Mount Hall, University of Maryland, College Park, MD 20742. Kindly direct questions on specific food and nutrition topics to your county Extension office.

If you do not receive this newsletter by mail and would like to, contact your county or Baltimore City Extension office. For information on upcoming programs on food and nutrition, or to arrange a program for your group or organization, contact your Extension home economics agent. Phone numbers of Extension offices are listed on page 4 of this issue.

