

U.S. Public Health Service

Summer 1995

Keys to Healthy Weight: Balance Food Energy and Physical Activity

The scales are not lying: too many Americans, adolescents as well as adults, are simply not at a healthy weight. Americans are not balancing food energy intakes with physical activity.

One-third of people aged 20 years and older are overweight; prevalence varies by race/ethnicity, socioeconomic status, sex, and age. Minority populations, especially minority women, are affected disproportionately—nearly onehalf of African-American, Mexican-American, and Native American adults are overweight. The prevalence of overweight adolescents aged 12–19 is 21 percent, up 6 percentage points from 1976– 1980 to 1988–1991.

Overweight Costs Are Burdensome

Excess pounds are costly to the health of individuals and to the Nation. The Food and Nutrition Board of the Institute of Medicine estimates the annual health care costs of obesity at over \$70 billion, stating the total would top \$100 billion by adding the \$33 billion spent annually on weight-reduction products. The board's estimate does not include psychosocial costs ranging from lowered selfesteem to eating disorders to depression.

Overweight Is a Weighty Risk Factor

The odds of adverse health outcomes most notably cardiovascular diseases, hypertension, noninsulin-dependent diabetes mellitus, and certain cancers weigh heavily against overweight people. Risk increases with higher relative weight. Rates of hypertension and diabetes are nearly triple for people 20 percent or more overweight.

Metabolic and functional alterations associated with overweight may lead to increased rates of gout, gallbladder disease, colorectal cancer, hip fracture, and osteoarthritis. Obese women are at increased risk of endometrial and ovarian cancer. Studies show that patients have negative attitudes about overweight and may not seek or receive necessary preventive care such as pelvic examinations; similar attitudes can keep health care providers from delivering such services.

Overweight in childhood increases morbidity and mortality in adulthood. One of the biggest risk factors for children is having an overweight parent. This influence is strongly genetic and partially environmental, for example, in modeling, the availability and preparation of food, and physical activity patterns and habits.

Americans seem to know they should maintain a healthy weight, and many undertake weight-loss efforts. Although perceptions of weight are culturally induced and may be unrelated to actual overweight, as many as 58 percent of adults report themselves overweight. More than 1 in 10 admits to being more than 20 pounds overweight. Only 1 in 10 adults believes his or her diet is as healthy as it could possibly be. Many consumers do not make the link between diet and physical activity—both are important to healthy weight. (continued on page 2)

What's Inside

Committee Actions	3
Spotlight	5
In the Literature	6
Activities 1	0
Meetings 1	0
Etcetera 1	2



(continued from page 1)

What Is Healthy Weight?

Some confusion comes from the lack of an answer to the question: what is healthy weight? The definitional problem is complex and differs for adolescents and adults. Because of changes in body composition with growth, weight is a less reliable measure of fatness for children and adolescents than for adults. Health professionals are reluctant to stigmatize youth as overweight when they already are undergoing the stress of adolescence and may, in fact, be laying down fat in preparation for a growth spurt. Indeed, some children may not be getting enough calories.

The most common measure of overweight is body mass index (weight in kilograms divided by height in meters squared). HEALTHY PEOPLE 2000 uses the 85th percentile threshold for defining overweight: 27.8 kg/m² for men and 27.3 for women. This definition does not distinguish between fat and muscle tissue or body shape although the distribution of fat affects risk. Persons having "spare tires," or large amounts of abdominal fat, are at increased risk for diabetes, hypertension, and other conditions.

Balancing the Energy Equation

What causes overweight? Fundamentally, an imbalance exists in the energy equation between what a person takes in and what he or she expends. Biological and behavioral factors affect this balance.

Recent studies of biological factors show that multiple genes affect the body's mechanism for controlling its weight and that specific genetic defects may vary from one person to another. More research is needed to understand the role of genetic defects. In the meantime, researchers stress that lifestyle and diet can make a difference for most

people, regardless of the existence of the "obesity gene." Behaviorally, Americans are simply too sedentary and need to increase their physical activity levels: 58.1 percent of adults report irregular or no leisure-time physical activity. The proportion of 9th through 12th grade students engaged in daily school physical education has declined, as has the proportion of school physical education time that students spend being physically active. Nearly two-thirds of 9th through 12th graders engage in 20 minutes of vigorous physical activity three or more times per week, while 35 percent watch television 3 or more hours every school day. Unfortunately, a sedentary lifestyle is both a cause and a consequence of overweight.

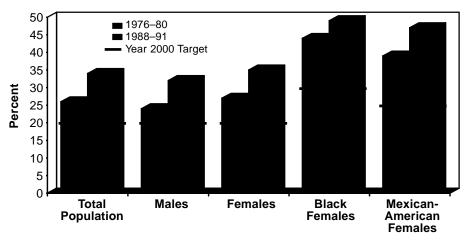
Americans consume too many calories, with too many of those calories from fat, and not enough fiber. Genetic, cultural, and environmental factors influence Americans' diets.

Solutions for Achieving Healthy Weight

Many public and private organizations are waging battles of the bulge. The Dietary Guidelines for Americans Committee from the U.S. Department of Agriculture (USDA) and U.S. Department of Health and Human Services (DHHS) has been examining consumer data on nutrition awareness, knowledge, and behavior. The committee expects to place increased emphasis on physical activity when presenting revised guidelines later this year.

The Centers for Disease Control and Prevention has established the Nutrition and Physical Activity Communications Team (NuPAC) to promote physical activity and healthy eating. NuPAC recently completed focus group discussions with men and women aged 29–54 to identify strategies and messages for effectively linking physical activity and nutrition to promote health. Later this year, NuPAC will kick off a health communications campaign and sponsor a conference to share scientific and consumer research findings among agencies.

(continued on page 4)



Overweight adults aged 20–74 years: United States, 1976–80 and 1988–91, and year 2000 targets for HEALTHY PEOPLE 2000 objective 2.3

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey.

COMMITTEE ACTIONS

National Coordinating Committee on Clinical Preventive Services

P_{UT} PREVENTION INTO PRACTICE (PPIP) was the theme of the May 1995 meeting of the National Coordinating Committee on Clinical Preventive Services (NCCCPS). The mission of the NCCCPS is to provide leadership in the implementation of clinical preventive services by examining barriers to service delivery and developing potential solutions to overcome these barriers. The NCCCPS serves as the advisory body for the Public Health Service's (PHS) initiative, PPIP, which was launched August 4, 1994 by Secretary Donna Shalala, U.S. Department of Health and Human Services.

In his opening remarks at the 15th meeting of the NCCCPS, J. Michael McGinnis, M.D., Deputy Assistant Secretary for Health (Disease Prevention and Health Promotion), conveyed the message that PPIP is the only government program that provides a systematic, comprehensive approach designed to improve the delivery of clinical preventive services by involving providers, consumers, and the delivery system. PPIP will help achieve the goal of increasing the healthy lifespan of all Americans by making preventive care a routine and standard part of medical practice.

The focus of the meeting was on the implementation, evaluation, and further development of PPIP by cooperative agreement partners. Discussion of evaluation activities included presentations by Battelle, Health Resources and Services Administration, and Dr. Donald Gemson. Battelle developed the research design and evaluation tools used to study the effectiveness of PPIP implementation. The initial study of PPIP conducted by Dr. Gemson at Harlem Hospital will be published in an upcoming issue of *Archives of Internal Medicine*. Findings demonstrated a significant increase in prevention practices and knowledge of physicians and an increase in services received by patients.

In recent months, a task force consisting of several major managed care organizations was set up by the PHS. It is their objective to develop a set of common requirements for the design, development, implementation, and evaluation of automated prevention information systems. Dr. Kevin Patrick and Dr. Linda Harris presented this group's work and showed how PPIP is the foundation upon which these requirements are based.

Other applications include the development of the PPIP home page on the Internet's World Wide Web. This site provides the information and communication necessary to strengthen PPIP activities. Interaction is based on several categories that cover interests of the provider, consumer, organization, educator, and researcher. Future announcements and materials will be disseminated through the WWW home page. To view the PPIP home page, use the following address: http://www.os.dhhs.gov:81/PPIP/

Closing presentations focused on the recent changes to the U.S. Preventive Services Task Force (USPSTF)'s *Guide to Clinical Preventive Services*, the update to Chapter 21 of the *Healthy People 2000 Midcourse Review and 1995 Revisions*, and the upcoming report from the Cost Effectiveness Panel.

MEMBERSHIP

American Academy of Family Physicians American Academy of Pediatrics American Alliance for Health, Physical Education, Recreation and Dance American Association of Colleges for Teacher Education American Association of School Administrators American Cancer Society American College Health Association American Dental Association American Federation of School Administrators American Federation of Teachers American Heart Association American Indian Health Care Association American Lung Association American Medical Association American Nurses Association American Psychological Association American Public Health Association American Public Welfare Association American School Counselor Association American School Food Service Association American School Health Association Association of Maternal and Child Health Programs Association of State and Territorial Health Officials Council of Chief State School Officers The Council of the Great City Schools National Alliance of Black School Educators National Association for Asian and Pacific American Education National Association of City and County Health Officials National Association of Community Health Centers National Association of Elementary School Principals National Association of School Nurses National Association of School Psychologists National Association of Secondary School Principals National Association of Social Workers National Association of State Boards of Education National Coalition of Hispanic Health and Human Services Organizations National Conference of State Legislators National Education Association National Governors Association National Mental Health Association National Parents/Teachers Association National School Boards Association National School Health Education Coalition Society for Nutrition Education



(continued from page 2)

The DHHS Head Start program, reaching some 740,000 children aged 3–5 and their parents, combines nutrition and physical activity in developmentally appropriate ways. Individual Head Start projects offer nutrition counseling plus nutritious breakfasts, lunches, and snacks. Preliminary results of a recent evaluation show parents consider nutrition one of the most important benefits of the program.

Head Start has launched Padres Hispanos En Ación, a special multimedia nutrition education program for Hispanic parents. One of the program's objectives is to teach parents how to prepare more nutritious meals.

By summer USDA will have regulations in place governing the nutritional contribution of breakfasts and lunches delivered by 90,000 schools to 25 million students. School meal nutrition standards will be updated and expanded to include the Dietary Guidelines for Americans with standards for fat and saturated fat as well as required nutrients.

Under a cooperative agreement, USDA has worked with *Scholastic Magazine* on four "Team Nutrition" kits for pre-kindergarten through 12th grades, with physical activity components, posters, videotapes, and other materials for teachers and food service personnel. With the goal of "empowering youth to make healthy food choices," the Team Nutrition program also features public service commercials with characters from the Disney movie "The Lion King."

Activities of the Food and Drug Administration (FDA) include food labeling, consumer research, and nutrition education. (See *Spotlight*.) Recognizing that consumers must know the nutrient content of food in order to make healthy choices, FDA has set forth definitions and limits on food claims. For example, a "low-fat" product must contain 3 or fewer grams of fat per serving; "fat free" means 0.5 gram per serving. Through the new Nutrition Facts food label and associated educational efforts, FDA is giving consumers much needed guidance.

The National Task Force on Prevention and Treatment of Obesity supports doubling the current obesity research funding of \$34 million, with particular focus on the preventative and therapeutic programs of the National Institute of Diabetes and Digestive and Kidney Diseases; the National Heart, Lung, and Blood Institute; the National Institute of Child Health and Human Development; and the National Cancer Institute. Another proposed \$10 million a year initiative would study the prevention of obesity.

The private sector is both a Federal partner and an active independent promoter of healthy eating. The President's Council on Physical Fitness and Sports, the International Food Information Council, and the Food Marketing Institute often are collaborators. The Sugar Association, Dairy Association, and the National Livestock and Meat Board are among the many trade associations providing information and materials targeted to adults and children as well as health professionals. Voluntary organizations like the American Cancer Society and the American Heart Association offer menu plans and other help. Manufacturers are involved, too. Dole Corporation has produced the Five-A-Day Adventures program, a multimedia interactive CD-ROM, for 3rd and 4th graders.

Prevention, Prevention, Prevention

There has never been a better case for prevention—to keep excess weight off; or for those overweight, to keep from gaining more; or for those who have lost weight, to maintain it. A little loss can mean a big gain in terms of health: an individual can lose merely 2 pounds, yet decrease blood cholesterol 20 points.

Prevention must start early in childhood, ideally with healthy habits ingrained by age 5. Health professionals must provide information and counseling on nutrition and physical activity, especially to parents, children, adolescents, and young adults so they learn to "eat and exercise for health." Behavior and attitude changes are essential. So is peer and family support.

New technology is supporting prevention in several ways. Support groups, long considered important in weight loss, now operate as electronic forums. Online access to information increases every minute—the International Food Information Council Foundation's World Wide Web page offers materials for children and adults. Software programs enable users to plan menus and track nutrition and physical activity. Multimedia interactive programs engage children and adults in learning about nutrition and physical activity.

Conclusion

Information about nutrition and overweight is omnipresent—on cereal boxes and other packaged products, fast food tray liners and restaurant menus, displays in bakeries and ice cream parlors. The challenge is getting consumers to use that information to change their lifestyles and get out of the fat lane. Changing behavior is indeed complex but must begin with this message: balance the energy equation and maintain a healthy weight.

Spotlight

Nutrition Information for Healthy Weight Management

Fundamental to the achievement of the HEALTHY PEOPLE 2000 nutrition objectives is a "marked improvement in accessibility of nutrition information and education for the general public." Four national nutrition information programs have taken on the challenge: Dietary Guidelines for Americans, the Five A Day program, the Food Guide Pyramid, and the new "Nutrition Facts" food label. All four provide strong information/education foundations and essential messages for helping consumers make healthy choices about nutrition.

Although the majority of Americans do not recognize these programs as sources of dietary guidance messages, they do consider the messages important-an understanding essential to "eating for health." Only 3 in 10 adults (30 percent) are aware of the Dietary Guidelines for Americans, a set of eight recommendations set forth since 1980 by the U.S. Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (DHHS). According to the Food Label Use and Nutrition Education Survey sponsored by USDA, the Food and Drug Administration (FDA), and the Office of Disease Prevention and Health Promotion, slightly more adults (33 percent) have heard of the Food Guide Pyramid, but fewer (22 percent) are aware of the Five A Day program.

Revisions of the **Dietary Guidelines for Americans** are underway, with publication set for later this year. Increased emphasis on the role of physical activity in weight management is expected. The **Five A Day** program delivers this message: for better health, eat 5 servings of fruits and vegetables every day. Current consumption averages 3.5 servings per day.

The **Food Guide Pyramid** assists consumers in making food selections for a healthy diet by emphasizing appropriate servings of five food groups plus "sparing use" of the tip of the pyramid: fats, oils, and sweets. The message is: a healthy diet includes foods from all five groups in the proper amounts.

Americans eat far more servings of fats, oils, and sweets than recommended by the Food Guide Pyramid. Some consumers have difficulty recognizing sources of "hidden fat" in their diets and adhering to serving size recommendations. Nutrition educators are tailoring messages accordingly, and the new Nutrition Facts label is helping.

Required on almost all food packages, the **Nutrition Facts** label is a nutrition information guide for planning a healthy diet. Whether they are counting total calories or calories from fat or daily intake of calcium, consumers can make better-informed decisions about food purchases for themselves and their families. Consumers are using label information: between 1990 and 1994, the number of people using the food label to make product choices increased from 30 to 52 percent. Consumers like the new label, and its use should continue to increase.

RESOURCES

Food and Drug Administration

Office of Consumer Affairs 5600 Fishers Lane (HFE-88) Rockville, MD 20857 (301)443–3170 http://vm.cfsan.fda.gov/index.html

Center for Nutrition Policy and Promotion

U.S. Department of Agriculture 1120 20th Street NW. Washington, DC 20036 (202)418–2312

Food Labeling Education Information Center NAL/FNIC

10301 Baltimore Boulevard Room 304 Beltsville, MD 20705–2351 (301)504–5719 http://www.nalusda.gov/answers/info_centers/ fnic/Label/label.html

Five A Day

National Cancer Institute Division of Cancer Prevention and Control EPN Suite 330 6130 Executive Boulevard, MSC 7346 Bethesda, MD 20892–7346 (301)496–8520 Fax (301)402–0816

President's Council on Physical Fitness and Sports Market Square East Building 701 Pennsylvania Avenue NW. Suite 250 Washington, DC 20004 (202)272–3431

National Institute of Diabetes and Digestive and Kidney Diseases 31 Center Drive, MSC 2560 Building 31 Room 9A-04 Bethesda, MD 20892–2560 (301)496–3583 http://www.niddk.nih.gov

International Food Information Council Foundation (IFIC) 1100 Connecticut Avenue NW. Suite 430 Washington, DC 20036 (202)296–6540 http://ificinfo.health.org/homepage.htm

IN THE LITERATURE

Physical Activity and Exercise

Effects of aerobic exercise and dietary carbohydrate on energy expenditure and body composition during weight reduction in obese women. S.B. Racette, D.A. Schoeller, R.F. Kushner, et al. *American Journal of Clinical Nutrition* 61 (March 1995): 486–94. A combination of aerobic exercise and a low-energy diet may be beneficial in the treatment of moderate obesity.

Researchers examined 23 nonsmoking, obese females aged 21-47. Each subject had a body fat mass of more than 35 percent of total body weight. Each woman was assigned to either aerobic exercise or no exercise, and to a low-fat or low-carbohydrate diet for 12 weeks. Body composition and metabolic rate were measured weekly. The women on the aerobic exercise program lost 8.8±2.1 kg and maintained their total daily energy expenditure (TDEE), while women who did not exercise lost 6.1±2.3 kg and did not maintain their TDEE. Women on the low-carbohydrate program lost more weight than women on the low-fat diet (10.6±2.0 kg and 8.1±3.0 kg, respectively).

Nutrition

Dietary fiber intake of children and young adults: the Bogalusa Heart Study. T.A. Nicklas, R.P. Farris, L. Myers, et al. *Journal of the American Dietetic Association* 95 (February 1995): 209–14.

Increasing consumption of dietary fiber could result in eating less dietary and saturated fat.

From 1976 to 1988 in Bogalusa, LA, researchers collected 24-hour dietary recalls from 1,254 10-year-olds (66 percent white and 51 percent female), 360

13-year-olds (58 percent white and 48 percent female), and 504 young adults 19-28 years of age (70 percent white and 58 percent female). Data for dietary fiber and dietary fat intakes were assessed. For these respondents, the mean dietary fiber intake was 12 g per day. Among all groups, males consumed more dietary fiber than females, and blacks consumed more fiber than whites. The two main contributors of dietary fiber to the participants' diets were vegetables, soups, breads, and grains. Among 13-year-olds, these foods accounted for 70 percent of their total fiber consumed; among 10year-olds, these foods contributed 53 percent of total fiber consumed. Children who consumed more fiber ate less fat. especially saturated fat, than children with low fiber intakes.

The impact of video tapes in educating grocery store shoppers about fat and cholesterol. L.A. Stenberg Nichols and M.K. Schmidt. *Journal of Nutrition Education* 27 (January/February 1995): 5–10.

Video tapes could be an important educational tool for reaching busy shoppers with nutritional messages.

Continuous replay video tapes about dietary fat and cholesterol were placed in 20 grocery stores in four communities in Idaho for 3 months. Researchers administered a pretest to 620 people from the communities and interviewed 941 different subjects following the intervention. Shoppers indicated that they learned about nutrition from viewing these tapes while grocery shopping. Those shoppers who viewed the videos and had higher educational levels and more confidence in their nutrition knowledge received the highest nutrition knowledge quiz scores on the posttest. Also, older female shoppers with higher household incomes scored higher on the nutrition knowledge quiz.

The nutritional impact of breakfast consumption on the diets of inner-city African-American elementary school children. A.E. Sampson, S. Dixit, A.F. Meyers, et al. *Journal of the National Medical Association* 87 (March 1995): 195–202.

Because not eating breakfast prevents children from getting adequate amounts of essential nutrients, nutrition education to promote eating breakfast should be included in efforts to improve the nutritional status of children.

Researchers administered a 4-day eating behavior survey and a 24-hour dietary recall to 1,151 second through fifth graders attending four elementary schools in East Orange, New Jersey. Almost 80 percent of these children qualified for free or reduced-price school meals. Of the subjects, 97 percent were African American, 51 percent were male, 21 percent were in second grade, and 79 percent were in grades three through five. These surveys revealed that between 12 and 26 percent of children go to school on a given day without having eaten breakfast. Children who skipped breakfast were significantly more likely to fail to achieve dietary adequacy for nearly every nutrient studied. More than one-third of children who skipped breakfast consumed less than 50 percent of the recommended dietary allowance (RDA) for vitamins A, E, B6, and folacin, and nearly 25 percent consumed less than 50 percent of the RDA for calories, vitamin

C, calcium, and iron.

Tobacco

Effect of maternal cigarette smoking on pregnancy complications and Sudden Infant Death Syndrome. J.R. DiFranza and R.A. Lew. *Journal of Fam*-

Dirranza and R.A. Lew. Journal of Family Practice 40 (April 1995): 385–94. Smoking is a preventable cause of miscarriage, low birthweight, and deaths from perinatal disorders and Sudden Infant Death Syndrome (SIDS). Prevention efforts should be targeted to teenaged girls because of the low success rate of smoking cessation among pregnant women.

The authors reviewed medical literature to identify conditions causing illness or death among children as a result of maternal tobacco use. Self-report studies estimate that approximately 19 percent of pregnant women and 30 percent of women of reproductive age smoke, indicating a 37 percent quit rate during pregnancy. Mothers who smoke were between 1.7 and 2.6 times more likely to have a spontaneous abortion. The authors estimated that between 19,000 and 141,000 spontaneous abortions, or between 3 and 7.5 percent of all miscarriages, occur because of tobacco use in the United States every year. Mothers who use tobacco are 1.82 times more likely to have low birthweight babies. An estimated 32,000 to 61,000 (11 to 21 percent) of lowweight births could be attributable to smoking. Maternal smoking is associated with perinatal mortality, with odds ratios of 1.25 for stillbirths and 1.22 for neonatal deaths. Between 1,900 and 4,800 (3.4 to 8.4 percent) of perinatal deaths may be attributable to tobacco use. Infants born to women who smoke are almost three times as likely to die from SIDS

than babies born to nonsmoking mothers. Maternal smoking may have caused between 1,178 and 2,203 (21.7 to 40.7) of SIDS deaths in 1990.

Mental Health and Mental Disorders

Major depression in a community sample of African Americans. D.R. Brown, F. Ahmed, L.E. Gary, et al. *The American Journal of Psychiatry* 152 (March 1995): 373–78.

Physicians must be made aware of the prevalence of major depression among African Americans, and African-American communities must be made the targets of outreach programs for the prevention of depression.

Researchers interviewed 865 urban African-American adults aged 20 years and older in Norfolk, VA, giving them the National Institute of Mental Health Diagnostic Interview Schedule. Among this sample, there was a 3.1 percent prevalence of major depression, with an average age at onset of 26.1 years. People who were in poor or fair health and people aged 20-29 years were more likely to suffer from major depression, as were people who moved at least once during the past 5 years or who experienced many stressful life events. Sociocultural factors and family background were not associated with major depression. Women were slightly more likely to have major depression than men. Of people with major depression, only 11 percent saw a psychiatrist or mental health professional for help, and 7 percent saw no one.

Violent and Abusive Behavior

Domestic violence: an educational imperative? L.R. Chambliss, R.C. Bay, and R.F. Jones III. *American Journal of* *Obstetrics and Gynecology* 172 (March 1995): 1035–38.

Obstetrics and gynecology residents should receive more complete training in the area of domestic violence to provide adequate assistance to their battered patients.

Researchers distributed surveys to 83 obstetrics and gynecology residencies asking about demographic data, the curriculum with respect to domestic violence, the prevalence of battering among patients, satisfaction with current education about domestic violence, and knowledge of pending legislation. The average residency program taught five residents per year. At least one faculty member in 28 percent of residencies had expertise in domestic violence. Other programs reported that they did not have a resource person for domestic violence because of lack of interest or because the problem is better handled by others. Thirty percent of programs reported that only 1 percent of patients were battered. Three-quarters of residents did not recognize at least one clinical scenario as suggestive of domestic violence. Of the residencies, 28 percent reported that they teach their residents to ask all or almost all patients about battering, while 19 percent encouraged residents to "use their own judgment" in interviewing patients about domestic violence. Sixty percent were aware of pending domestic violence legislation.

The risk of assaultive violence and alcohol availability in Los Angeles County. R.A. Scribner, D.P. MacKinnon, and J.H. Dwyer. *American Journal of Public Health* 85 (March 1995): 335–40. Reducing the availability of alcohol may reduce the incidence of assaultive violence. Data suggested that a 2 mm Hg reduction in diastolic blood pressure (DBP) would result in a 17 percent decrease in the prevalence of high blood pressure and a 6 percent reduction in risk of stroke.

Researchers analyzed the 74 larger cities in Los Angeles County in 1990, obtaining Uniform Crime Reports of assaultive violence, data on alcohol outlets, and sociodemographic data for each city. The findings demonstrated a geographic association between the rate of assaultive violence and the density of alcohol outlets: for every 10,000 people, there were 20 alcohol outlets and 114 assaultive offenses. In a typical Los Angeles County city (50,000 residents, 100 outlets, 570 offenses per year), one alcohol outlet was associated with 3.4 additional assaultive violence offenses in 1990. Being black or unemployed were the only other covariates that were consistently associated with the rate of assaultive violence.

Maternal and Infant Health

Breast-feeding education and practice in family medicine. G.L. Freed, S.J. Clark, P. Curtis, et al. *Journal of Family Practice* 40 (March 1995): 263–69. Family medicine residents and physicians must be taught about the benefits of breast-feeding, clinical management strategies, and practical counseling skills.

Researchers administered a questionnaire to 766 family medicine residents and 334 family physicians about their knowledge, attitudes, education, and activity regarding breast-feeding promotion. Forty percent of residents and 29 percent of physicians were female. One-third of residents had personal experience with breast-feeding, as did twothirds of physicians. Respondents demonstrated significant deficits in knowledge about breast-feeding benefits. Forty-three percent of all respondents selected inappropriate advice for a mother concerned about insufficient milk supply. Only 56 percent of residents and 53 percent of physicians were aware that supplementing breast milk with formula is a cause of breast-feeding failure. Although respondents believed that breastfeeding should be promoted, one-quarter of physicians stated that breast-feeding promotion was not an important use of their time. Respondents with personal breast-feeding experience were more likely to promote breast-feeding to their patients more often.

Pregnancy outcomes of Pacific Islanders in Hawaii. E.C. Kieffer, G.R. Alexander, and J.M. Mor. *American Journal of Epidemiology* 141 (April 1, 1995): 674–79.

Among Pacific Islanders in Hawaii, low birthweight does not adequately measure infant mortality risk.

Researchers studied 7,474 births to Polynesian women (1,649 Hawaiian and 5,825 Samoan infants) in Hawaii from 1979-90. Thirty-eight percent of Hawaiian women and 29 percent of Samoan women were unmarried. Twenty percent of Hawaiian women and 18 percent of Samoan women had low educational attainment. Only 43 percent of Hawaiian women and 35 percent of Samoan received adequate prenatal care. Despite these risk factors, low and very low birthweight percentages were less than the U.S. average (6.6 percent and 2.9 percent among Hawaiian and Samoan infants, respectively). High birthweight was common, especially among Samoan infants. Being unmarried and having a first child after age 17 increased the risk of having a low birthweight baby, while having high educational attainment and being Samoan decreased this risk. However, low birthweight did not adequately measure infant mortality risk. This population experienced

higher than average neonatal mortality, particularly among normal birthweight infants. Fourteen per 1,000 Hawaiian infants died after birth, as compared with 7.2 Samoan infants. Poverty and maternal chronic disease may increase infant mortality risk in this population.

Heart Disease and Stroke

Implications of small reductions in diastolic blood pressure for primary prevention. N.R. Cook, J. Cohen, P.R. Hebert, et al. *Archives of Internal Medicine* 155 (April 10, 1995): 701–09. Reducing blood pressure by 2 mm Hg across the mean population through lifestyle modifications could greatly reduce the incidence of coronary heart disease (CHD) and stroke.

Researchers examined data from the Framingham Heart Study and the National Health and Nutrition Examination Survey II. Participants in the studies were white men and women aged 35 to 64 years. Data suggested that a 2 mm Hg reduction in diastolic blood pressure (DBP) would result in a 17 percent decrease in the prevalence of high blood pressure and a 6 percent reduction in risk of stroke. The authors estimate that a successful population intervention alone could prevent 84 percent of CHD prevented by medical treatment for people with a DBP of 90 mm Hg or higher. This intervention could prevent 93 percent of strokes prevented by medical treatment for people with a DBP of 95 mm Hg or higher and 69 percent of strokes for people with a DBP of 90 mm Hg or higher.

Diabetes and Chronic Disabling Conditions

Weight gain as a risk factor for clinical

Women who gained between 5 and 7.9 kg after age 18 experienced almost twice the risk of developing diabetes.

diabetes mellitus in women. G.A.

Colditz, W.C. Willett, A. Rotnitzky, et al. *Annals of Internal Medicine* 122 (April 1, 1995): 481–86.

Women who experience modest, typical weight gains are at increased risk for diabetes. This data supports the importance of maintaining a constant body weight throughout adult life.

A total of 114,281 female registered nurses aged 30 to 55 years responded to a questionnaire about medical history and health behaviors in 1976. Followup surveys were conducted in 1984, 1986, 1988, and 1990. A total of 2,204 nurses were diagnosed with diabetes during the followup period. The main predictor of risk for diabetes mellitus was body mass index (BMI). As BMI increased, so did risk for diabetes. Even women with an average BMI (24 kg/m²) had an elevated risk. Women who gained between 5 and 7.9 kg after age 18 experienced almost twice the risk of developing diabetes. Women who gained between 8.0 and 10.9 kg experienced 2.7 times the risk of developing diabetes. Women who lost more than 5 kg reduced their risk of diabetes by half.

Physical activity and incidence of diabetes: the Honolulu Heart Program.

C.M. Burchfiel, D.S. Sharp, J.D. Curb, et al. *American Journal of Epidemiology* 141 (February 15, 1995): 360–68. Physical activity may confer protection against diabetes in men.

In the Honolulu Heart Program, researchers examined 6,815 Japanese-American men aged 45–68 years who had not been diagnosed with diabetes in 1965–68. Followup surveys were conducted between 1968 and 1974, in which men reported the number of hours spent at physical activity of various levels as well as whether or not they took diabetic medication. Men who performed the least physical activity at baseline were most likely to develop diabetes, while the most physically active men had the lowest incidence of diabetes. The incidence of diabetes decreased with increasing physical activity over the period of the study, from 73.8 to 34.4 per 1,000. Older men (aged 55–68 years) were as likely to benefit from physical activity as were younger men (aged 45–54 years).

Sexually Transmitted Diseases

Congenital syphilis surveillance in upstate New York, 1989–1992: implications for prevention and clinical management. F.B. Coles, S.S. Hipp, G.S. Silberstein, et al. *The Journal of Infectious Diseases* 171 (March 1995): 732– 35.

Women at high risk for syphilis should be screened during pregnancy and at delivery and given treatment for syphilis during pregnancy. Also, infants must be completely evaluated for congenital syphilis.

A total of 322 infants born to 318 mothers were reported to the congenital syphilis registry during 1989–92; 98 infants (28 percent) were classified as clinical cases and 232 (72 percent) were asymptomatic. Seventy-five percent of the mothers were black, 245 were unmarried, and almost all were less than 30 years old. Of the women, 218 (89 percent) had one or more risk factors for syphilis: 92 used drugs; 62 had a prior history of syphilis; and 25 were infected with syphilis more than once during the most recent pregnancy. Forty-six percent of the women had had no prenatal care, and 74 percent received no treatment for

syphilis during pregnancy. Only 60 of the infants were completely evaluated for congenital syphilis; 105 were not evaluated, and 157 received only a partial evaluation. Six infants died after birth, and 31 were stillborn.

Immunization and Infectious Diseases

Missed opportunities for tuberculosis prevention. J.M. McAnulty, D.W. Fleming, M.A. Hawley, et al. *Archives of Internal Medicine* 155 (April 10, 1995): 713–16.

Fully implementing such prevention measures as skin testing could cause a major reduction in tuberculosis (TB) morbidity.

A total of 153 patients with active tuberculosis reported to the Portland (Oregon) health department from July 1991 through June 1992. The authors determined previous history of TB therapy, previous TB skin test status, the presence of medical conditions for which skin testing is recommended, and previous health care. Ninety-eight (64 percent) of the patients were male, 81 (53 percent) were white, 33 (22 percent) were Asian, and 27 (18 percent) were Hispanic. Of these patients, 90 (59 percent) had indications for recommended procedures but had not previously undergone the procedures. Ten patients (7 percent) did not complete therapy for previous disease; two (1 percent) did not complete preventive therapy; 12 (8 percent) never received preventive therapy; and 66 (43 percent) who had indications for screening never received a skin test.

MEETINGS

Annual Meeting of the International Childbirth Education Association. Phoenix, AZ. Pat Turner, (612)854–8660. July 20–23.

Annual Meeting of the Clinical Immunology Society. San Francisco, CA. Pamela Ballinger, (609)848–1000. July 21–23.

1995 National Congress of Family Practice Residents and Students. Kansas City, MO. Sponsored by the American Academy of Family Physicians; Caroline Reniker, (800)274–2237, ext. 3230. **July 27–29**.

National Medical Association Annual Scientific Meeting. Atlanta, GA. Pat Norman, (202)347–1895. July 29–August 3.

Annual Meeting of the American Psychological Association. New York, NY. Raymond D. Fowler, (202)336–6080. August 11–15.

8th World Congress on Pain. Vancouver, Canada. Sponsored by the International Association for the Study of Pain, (604)681–2153. **August 17–22**.

22nd Annual Meeting of the American Association of Diabetes Educators and Educational Program. Boston, MA. Mary Beach, (800)338–3633. August 23–27.

Annual Meeting of the Association of State and Territorial Health Officials. Seattle, WA. C. Beversdorf, (202)546– 5400. **September 6–8.**

National Primary Care Conference. Chicago, IL. (617)861–0270. September 13–16.

47th Annual Scientific Assembly of the American Academy of Family Physicians. Anaheim, CA. Mickey Schaefer, (816)333–9700. September 21–23.

Annual Meeting of the Association of Mental Health Administrators. Boston, MA. M.R. Helm, (708)480–9626. September 30–October 3.

In Funding

The National Institute on Deafness and Other Communication Disorders (NIDCD) has an ongoing program announcement to examine the evaluation and treatment of communication problems resulting from traumatic brain injuries. Areas of study may include underlying neural damage following a brain injury and the pathophysiology of the speech production deficits and language disabilities. For more information, contact Beth Ansel, Ph.D., Division of Human Communication, NIDCD, Executive Plaza South. Room 400–C. 6120 Executive Boulevard, MSC 7180, Bethesda, MD 20892; (301)402–3461.

In Print

Alcohol and Other Drugs

The American Association of Retired Persons (AARP) has developed two publications for older adults. Late Life Depression and Suicide Potential: A Physician's Guide to Identification and Treatment is designed to assist physicians in diagnosing and treating depression among their older patients. Approximately 5 million older Americans suffer from serious and persistent symptoms of depression, and an additional 1 million suffer from major depressive disorder. Alcohol Abuse Among Older People gives helpful background information about alcoholism among older adults. Older Americans are hospitalized more frequently for alcohol-related problems than for heart attacks. To receive up to 50 free copies of the brochures, contact AARP, Social Outreach and Support, Dept. ML, 601 E Street NW., Washington, DC 20049; (202)434-2277.

Cancer

CTIVITIES

What To Do If You Get Breast Cancer (ISBN 0-316-09289-4), by Lydia Komarnicky, M.D., and Anne Rosenberg, M.D., was recently published by Little, Brown and Company. The book gives detailed information about where to go when a woman finds a lump and where to get a reliable and safe mammogram, and includes facts about costs, mammogram interpretations, and other breast-imaging techniques. The authors discuss the pros and cons to radical mastectomy and lumpectomy and the side effects and efficacy of chemotherapy and radiation. The authors also explain where to go for help during this troubling time. The book lists for \$10.95 in paperback and \$21.95 in hardcover.

Three new booklets about cancer screening are available now from Education Programs Associates (EPA). You Can Make a Difference When It Comes to Breast Cancer describes the latest American Cancer Society recommendations for effective breast selfexam; A Mammogram Saved My Life describes the benefits of mammography, especially for women over 50; and What You Should Know if Your Pap Test Is Abnormal encourages women with an abnormal Pap test to get necessary followup care. All the booklets are available in English and Spanish, are written at an elementary reading level, and include multicultural illustrations. Contact EPA, 1 West Campbell Avenue, Building D, Campbell, CA 95008; (408)374-3720.

The Telemedicine Handbook: Improving Health Care with Interactive Video, by Jane Preston, M.D., describes how to provide health care to patients in remote areas, to save money and resources, and to expand and enhance continuing education through telemedicine.

Nutrition

The Healthy Eating Brochure Series helps people learn how easy it is to adopt nutritious, delicious, low-fat eating habits. Titles in the colorful, easy-to-read series include *Reading* Food Labels, Healthy Cooking, Low-Fat Eating, Healthy Food Shopping, The Food Pyramid, and Healthy Eating Out. Health professionals can use these brochures as handouts during educational activities, as envelope inserts, and for "take one" public displays. Each title is available in a pack of 50 for \$17.50. To order, contact Krames Communications, 1100 Grundy Lane, San Bruno, CA 94066-3030; (800)333-3032.

Food and Drug Safety

The Nonprescription Drug Manufacturers Association (NDMA) and Reader's *Digest* jointly have published a booklet on the proper use of nonprescription, over-the-counter (OTC) medicines. Know What You're Taking: Advice for Your Family About Medicines for Self-Care discusses prescription vs. OTC medicines, gives instructions on how to read the label, gives advice about interactions, alerts consumers to product tampering, and provides advice for pregnant women and nursing mothers. To receive a free copy of the booklet, contact NDMA, 1150 Connecticut Avenue NW., Washington, DC 20036; (202)429–9260.

Maternal and Infant Health

Effect of Corticosteroids for Fetal Maturation on Perinatal Outcomes, the product of a National Institutes of Health (NIH) Consensus Development Conference, discusses the short- and long-term benefits and adverse effects of antenatal corticosteroid treatment for the infant and mother. The influence of the type of corticosteroid, dosage, timing, circumstances of administration, and associated therapy on treatment outcome is explored. The consensus panel made recommendations for use of antenatal corticosteroids and suggested research to guide clinical care. Antenatal corticosteroid therapy reduces mortality, respiratory distress syndrome, and intraventricular hemorrhage in preterm infants. Free copies of this statement are available from the Office of Medical Applications of Research, NIH, Federal Building, Room 618, Bethesda, MD 20892; (800)644-6627.

Crosscutting

The Telemedicine Handbook: Improving Health Care with Interactive Video, by Jane Preston, M.D., describes how to provide health care to patients in remote areas, to save money and resources, and to expand and enhance continuing education through telemedicine. Using computer, video, and network communications services. telemedicine is in use across the country. The author outlines the history of telemedicine, explains the technology and equipment needed for telemedicine, discusses costs and system management, examines policy and legal issues, rates the quality of care resulting from the use of telemedicine, and notes how telemedicine could be used in continuing education. To order, contact **Telemedical Interactive Consultative** Services, Inc., 2616-A Jefferson, Austin, TX 78703; (214)718-5141.

In Video

Smart Supermarket Shopping with the New Food Label is a videotape designed to teach consumers how to use the new food label in planning and preparing meals. The video takes viewers on a tour of each supermarket section, comparing labels on dairy products, grains, bread, frozen foods, and snacks. The 21-minute video is available for \$89.95. To order, contact Lowfat Lifeline, 234 Cass Street, Port Townsend, WA 98368; (360)385–6835.

In Multimedia

The American Medical Association (AMA) has released a four-part series of educational videotapes and booklets designed to give patients and their families the latest medical information on heart disease, which causes more than 200,000 deaths in the United States each year. The AMA Healthy Heart Series was created for use by physicians and other health care professionals to help patients see how hearts work, how problems develop, and how risks can be minimized in their own lives. Titles in the series are Guide to Your Healthy Heart, Guide to Stop Smoking, Guide to High Blood Pressure Control, and Guide to Controlling Your *Cholesterol*. The set of four videotapes is available to AMA members for \$268 and to nonmembers for \$302; each videotape is available to AMA members for \$79 and to nonmembers for \$89. A starter pack of 50 16-page booklets is available to AMA members for \$135 and to nonmembers for \$151. Contact Milner-Fenwick, Inc., (800)432-8433.

Etcetera

OFFICE OF DISEASE PREVENTION AND HEALTH PROMOTION

The mission of the Office of Disease Prevention and Health Promotion (ODPHP) is to provide leadership for disease prevention and health promotion among Americans by stimulating and coordinating Federal activities. ODPHP is organized into five areas: prevention policy, clinical preventive services, nutrition policy, health communication, and community action.

Committee Oversight

National Coordinating Committee on Clinical Preventive Services

National Coordinating Committee on School Health

National Coordinating Committee on Worksite Health Promotion

Prevention Report is now a quarterly service of the Office of Disease Prevention and Health Promotion, Public Health Service,U.S. Department of Health and Human Services,Switzer Building, Room 2132, 330 C Street SW., Washington, DC 20201.

This is an administrative publication. A limited number of copies has been produced, and no general distribution is being made. However, the material is in the public domain, and duplication is encouraged. For information, call the National Health Information Center, (800)336–4797 or (301)565–4167.

The National Resident Matching

Program announced that 51 percent of the 13,549 medical school seniors in the United States plan to spend at least their first year of residency training for general practice. This figure is the highest in 7 years. The three general practice areas attracting the students are family practice, internal medicine, and pediatrics. In 1993, 48.1 percent of medical school seniors chose to do residency training in general practice.

"Do Your Level Best," sponsored by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), has been launched to increase awareness of the benefits of controlling blood sugar levels in people with insulin-dependent diabetes. According to the Diabetes Control and Complications Trial conducted by NIDDK, keeping blood sugar levels as close to normal as possible slows the onset and progression of eye, kidney, and nerve diseases caused by diabetes. By dialing (800)GET-LEVEL (438-5383), callers can hear a recorded message on how good blood sugar control can help prevent complications from diabetes.

An average company's payroll includes 6–12 percent in direct disability costs. Skills necessary to evaluate a worker's job-related injury or illness will be presented in two **"Impairment and Dis/ Ability Evaluations"** courses developed by the American College of Occupational and Environmental Medicine (ACOEM). The courses address musculoskeletal, spinal, and neurological impairment assessments; work fitness; disability assessment; behavioral and mental illness; chronic pain evaluation; and report writing. For more information, contact ACOEM, (708)228–6850.

A lowering of legal blood alcohol content (BAC) levels of 0.08 percent is associated with reductions in driver involvement in alcohol-related fatal crashes. The National Highway Traffic Safety Administration (NHTSA) has released A Preliminary Assessment of the Impact of Lowering the Illegal BAC Per Se Limit to 0.08 in Five States, a study examining the effects of 0.08 BAC legislation in California, Maine, Oregon, Utah, and Vermont. For a copy of the report, contact the National Center for Statistics and Analysis, NHTSA, NRD–31, 400 Seventh Street SW., Washington, DC 20590; (202)366-1470.

The March/April 1995 issue of the American Journal of Health Promotion focuses on underserved populations. The topics covered include debunking the myth of healthy Asian Americans and Pacific Islanders; using cultural themes to promote health among Southeast Asian refugees; health promotion among African Americans; alcohol abuse prevention among Native Americans; and meeting health promotion needs of Hispanic communities. For more information, contact American Journal of Health Promotion, 1812 S. Rochester Road, Suite 200, Rochester Hills, MI 48307-3532; (810)650-9600.