

SECTION

4

**HEALTH PROMOTION,
RISK REDUCTION, AND
DISEASE PREVENTION**
(Competencies 11–12)

CHAPTER 11
Promoting Healthy Aging

CHAPTER 12
Identifying and Preventing
Common Risk Factors

CHAPTER 11

PROMOTING HEALTHY AGING

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LEARNING OBJECTIVES

At the end of this chapter, the reader will be able to:

- Discuss the promise and limitations of the Healthy People initiatives.
- Apply the health contract technique and nutritional bull's-eye for behavior change.
- Describe several model health promotion programs.
- Explain the concept of re-engagement and provide examples of it.
- Identify the components of Medicare prevention.
- Explain the importance of life review.
- Recognize the importance of exercise and nutrition for healthy aging.
- Discuss the importance of the Green House project to the future of long-term care.

KEY TERMS

- Center for Science in the Public Interest (CSPI)
- Depression
- Exercise
- Green House
- Health behavior change
- Health contract/calendar
- Healthy People initiatives
- Life review
- Medicare prevention
- Mental health

- Model health promotion programs
- Nutrition
- Nutrition bull's-eye
- Re-engagement

Health promotion works, no matter what one's age, and even after decades of practicing unhealthy habits. But it does not work for everyone, all the time. So what needs to be done to increase the odds of promoting healthy aging successfully? Certainly the entire burden cannot be placed on the guilt-ridden backs of individuals. The federal and state governments play a significant role. So do religious institutions, businesses, community centers, hospitals, medical clinics, health professionals, educational institutions, families, neighborhoods, and even shopping malls. In this chapter some of these influences on healthy aging will be explored.

Exercise and **nutrition** are probably the two most widely publicized components of health promotion, and they will be given their due in this chapter as well. We will use a broad definition of health promotion in this chapter, one that includes such diverse topics as self-management through health contracts, promoting mental health through life reviews, promoting **re-engagement** rather than retirement, and promoting the health of frail elders through unique homes rather than through institutions that are merely called (nursing) homes.

One aspect of health promotion lies with the federal government. We'll start by talking about the

Healthy People initiatives and Medicare prevention.

HEALTHY PEOPLE INITIATIVES

The federal government has been establishing goals for healthy aging since 1980 when the U.S. Public Health Service published the report *Promoting Health/Preventing Disease: Objectives for the Nation*. This 1980 report outlined 226 objectives for the nation to achieve over the following 10 years. It was referred to by some as Healthy People 1990.

A decade later, in 1990, another 10-year national effort, Healthy People 2000, was initiated by the U.S. Public Health Service in another effort to reduce preventable death and disability for Americans. A third effort is currently under way with the Healthy People 2010 initiative; however, the number of objectives has increased to 467, and these are distributed over 28 priority areas.

There are some notable benefits to the Healthy People initiatives. On the positive side, these initiatives give recognition to health promotion rather than focusing exclusively on wars on diseases (e.g., tabulating the number of deaths from cancer or heart disease, and then organizing a campaign against them). The Healthy People initiatives are health oriented, and as such they recognize the complexity of the socioeconomic, lifestyle, and other nonmedical influences that impact our ability to attain and maintain health.

A second major benefit of the Healthy People initiatives is that they are focused on documenting baselines, setting objectives, and monitoring progress. For instance, according to the *Healthy People 2000 Review, 1998–1999* (National Center for Health Statistics [NCHS], 1999), 15% of the objectives for the year 2000 were met, and 44% demonstrated movement toward the target. However, since the initiative relied mostly on data monitoring and a small amount of publicity—and very little financial support—it is unclear whether Healthy People 2000 contributed directly to this progress. For example, in an area where there was no financial support for encouraging change—being overweight or obese—the trend in America for adults between the ages of 20 and 74 has been in the opposite direction: a steady increase in weight gain for Americans over the decade (NCHS, 1999). There was a similar result

with sedentary behavior among Americans. In the absence of financial support for encouraging change in this area, light to moderate physical activity on a near-daily basis between the ages of 18 and 74 had not improved over the decade (NCHS, 1999).

Focusing on those age 65 or over, the Merck Institute on Aging and Health came out with a report card on the Healthy People 2000 initiative (available at www.gericareonline.net) that revealed several failing grades. Older Americans did not reach the 2000 target goals, and in fact fell far short of them in the areas of physical activity, being overweight, and eating fruits and vegetables. Additional failing grades were assigned to the target goals of reducing hip fractures for persons age 65 or over, and fall-related deaths for persons age 85 or over.

In contrast to the mere monitoring of most Healthy People 2000 target goals, financial assistance was provided to older adults through Medicare during the decade for mammogram coverage, pneumococcal vaccination, and influenza vaccination. With this financial support, the percentage of compliance in these three areas doubled among older adults during the decade (Haber, 2002). Consequently, the Healthy People 2000 target goals were met for mammogram screening and influenza vaccination, and fell just short of being met for pneumococcal vaccination.

This raises the question of whether the federal government should be doing more than monitoring data changes when it comes to promoting healthy aging. A comparable question can be asked of state governments. The Healthy People initiatives were supposed to have had a counterpart initiative at each of the state health departments. In this author's experience with several states, however, the initiatives either have been ignored or the state health department has conducted a modest project that was accomplished several years ago, but did not follow up with additional activity. Financing and leadership are needed to make these programs successful. To find out more about the Healthy People 2010 initiative, go to www.health.gov/healthy-people/state/toolkit.

MEDICARE PREVENTION

The federal government does more than just establish Healthy People initiatives. It also reimburses

TABLE 11-1	Medicare Prevention
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One-Time “Welcome to Medicare Physical”

Within 6 months of initial enrollment; no deductible or copayment.

Physician takes history of modifiable risk factors (coverage makes special mention of depression, functional ability, home safety, falls risk, hearing, vision), height and weight, blood pressure, EKG.

Cardiovascular screening

Every 5 years; no deductible or copayment.

Ratio between total cholesterol and HDL, triglycerides.

Cervical cancer

Covered every 2 years; no deductible, copayment applies.

Pap smear and pelvic exam.

Colorectal cancer

Covered annually for fecal occult blood test; no deductible or copayment.

Covered every 4 years for sigmoidoscopy or barium enema; deductible and copayment apply.

Covered every 10 years for colonoscopy; deductible and copayment apply.

Densitometry

Covered every 2 years; deductible and copayment apply.

Diabetes screening

Annually, those with prediabetes every 6 months; no deductible or copayment.

Not covered routinely, but includes most people age 65+ (if overweight, family history, fasting glucose of 100–125 mg/dl [prediabetes], hypertension, dyslipidemia).

Mammogram

Covered annually; no deductible, copayment applies.

Prostate cancer

Covered annually; no deductible or copayment.

Digital rectal examination and PSA test.

Smoking Cessation

Two quit attempts annually, each consisting of up to four counseling sessions.

Limited to those with tobacco-related diseases (heart disease, cancer, stroke) or drug regimens that are adversely affected by smoking (insulin, hypertension, seizure, blood clots, depression). Clinicians are encouraged to become credentialed in smoking cessation.

Immunization

No deductible or copayment.

Influenza vaccination covered annually; pneumococcal vaccination covered one time, revaccination after 5 years dependent on risk.

Other Coverage

Diabetes outpatient self-management training (blood glucose monitors, test strips, lancets; nutrition and exercise education; self-management skills: 9 hours of group training, plus 1 hour of individual training).

Medical nutrition therapy for persons with diabetes or a renal disease: 3 hours of individual training first year, 2 hours subsequent years.

Glaucoma screening annually for those with diabetes, family history, or African American descent.

Persons with cardiovascular disease may be eligible for comprehensive prevention programs by Drs. Dean Ornish and Herbert Benson: coverage 36 sessions within 18 weeks, possible extension to 72 sessions within 36 weeks.

Frequency and Duration

These are estimates of what researchers recommend, relying most heavily on the U.S. Preventive Services Task Force recommendations, but not exclusively on them.

Blood pressure: Begin early adulthood, annually, ending around age 80.

Cholesterol: Begin early adulthood, every 2–3 years, ending around age 80.

Colorectal cancer: Begin age 50, every 5–10 years for colonoscopy, ending around age 80.

Mammogram: Begin age 40, every year or two; begin age 50 annually; begin age 65 every 2 years; ending around age 80.

Osteoporosis: Begin early adulthood for women (no frequency recommended); every 2–3 years after age 65 for women, less frequently for men.

Pap test: Begin with female sexual activity, two normal consecutive annual screenings, followed by every 3 years; two normal consecutive annual screenings around age 65, then discontinue.

Prostate cancer: Do not do routinely, except if there is a family history or African American heritage.

Definitions

Hypercholesterolemia: LDL above 160/130/100 (depending on risk factors); HDL below 40; ratio (total/HDL) 4.2 or above.

Diabetes: Fasting glucose 126 mg/dl and above; prediabetes, 100–125 mg/dl.

High blood pressure: Over 140/90; between 120/80 and 140/90 is prehypertensive.

Osteopenia: 1–2.5 standard deviations below young-adult peak bone density.

Osteoporosis: 2.5 standard deviations or more below young-adult peak bone density.

SOURCE: Permission from D. Haber, *Health Promotion and Aging: Practical Applications for Health Professionals*. New York: Springer Publishing Company, 4th edition, 2007, pp. 100–101.

Medicare recipients for certain prevention activities (see **Table 11-1**). Some of Medicare's reimbursement policies have emerged from the research evidence reviewed by the U.S. Preventive Services Task Force (USPSTF). USPSTF was launched by the U.S. Public Health Service to systematically review evidence of effectiveness of clinical preventive services. This task force periodically updates its research guidelines on a wide variety of screening and counseling recommendations, such as breast cancer screening, colorectal cancer screening, and counseling to promote physical activity.

These updates have been compiled into a two-volume loose-leaf notebook and a CD for the period 2001 to 2006. This notebook, and periodic updates after 2006, can be accessed by calling the AHRQ Publications Clearinghouse (800) 358-9295, by sending an e-mail to ahrqpubs@ahrq.gov, or by visiting the Web site at www.ahrq.gov/clinic/pocketgd.htm.

If you review the USPSTF recommendations, however, you will notice that they are often out of sync with Medicare reimbursement policies. Some

reimbursement policies appear to have been influenced more by medical lobbyists advocating for specific segments of the medical industry (e.g., oncology, urology, orthopedics) than by policy derived from evidence-based medicine (Haber, 2001, 2005).

Although the movement into Medicare prevention—with substantially expanded coverage in 1998 and 2005—undoubtedly benefits older Americans, there is room for considerable improvement in the way the Medicare program promotes health and prevents disease. Lobbyists have promoted medical screenings that are reimbursed too frequently or over too long a period of time. Some screenings may not be worth the expense (e.g., fecal occult blood test, barium enema, sigmoidoscopy, routine prostate cancer screening, baseline EKG). Conversely, Medicare policy is stingy toward risk reduction counseling, which, not surprisingly, has little if any lobbying effort behind it.

Analysts have argued that prevention resources are limited, and we should re-examine policy that

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is so heavily focused on medical screenings. Perhaps it would be more effective, and cost-effective, to focus on counseling in the areas of sedentary behavior, inadequate nutrition, smoking and tobacco use, and alcohol abuse (Haber, 2001, 2005).

Medical screenings and immunizations are undeniably important tools for disease prevention, but the data collected by the U.S. Preventive Services Task Force (1996) resulted in a surprising conclusion: "Among the most effective interventions available to clinicians for reducing the incidence and severity of the leading causes of disease and disability in the United States are those that address the personal health practices of patients" (p. xxii). Stated another way "conventional clinical activities (e.g., diagnostic testing) may be of less value to clients than activities once considered outside the traditional role of the clinician," namely, counseling and patient education (USPSTF, 1996, p. xxii).

To end this section on an encouraging note, Medicare prevention is moving in positive directions, with coverage for:

- Nutrition therapy for persons with diabetes and kidney disease
- An initial physical examination that includes prevention counseling
- Smoking cessation—for those who have an illness caused by or complicated by tobacco use
- Comprehensive health promotion programs developed by Drs. Dean Ornish and Herbert Benson, for beneficiaries with heart problems

It is important not only to expand these counseling and health education programs, but also to publicize them. Years after implementation, for instance, only a small percentage of seniors eligible for the newly implemented initial physical examination took advantage of this opportunity (Pfizer, 2007).

HEALTH BEHAVIOR CHANGE

Theories help us understand what influences health behaviors and how to plan effective interventions. A theory of **health behavior change** attempts to explain the processes underlying the learning of new health behaviors. The two most widely cited theories of behavior change are social cognitive theory (Bandura, 1977) and stages of change (Prochaska & DiClemente, 1992). Other theories that

BOX 11-1 Recommended Readings

Birren, J., & Cochran, K. (2001). *Telling the stories of life through guided autobiography groups*. Baltimore, MD: Johns Hopkins University Press.

Freedman, M. (1999). *Prime time: How baby boomers will revolutionize retirement and transform America*. New York: Public Affairs.

Haber, D. (2007). *Health promotion and aging: Practical applications for health professionals* (4th ed.). New York: Springer.

Lorig, K., Ritter, P., Stewart, A., Sobel, D., Brown, B., Bandura, A., et al. (2001). Chronic disease self-management program: 2-year health status and health care utilization outcomes. *Medical Care*, 39(11), 1217–1223.

Rabig, J., Thomas, W., Kane, R., Cutler, L., & McAlilly, S. (2006). Radical redesign of nursing homes: Applying the Green House concept in Tupelo, Mississippi. *The Gerontologist*, 46(4), 533–539.

Thomas, W. (2004). *What are old people for?* Acton, MA: VanderWyk & Burnam.

have marshaled support are health locus of control (Wallston & Wallston, 1982), health belief model (Becker, 1974), reasoned action (Fishbein & Ajzen, 1975), community empowerment (Wallerstein & Bernstein, 1988), and community-oriented primary care (Nutting, 1987).

The author of this chapter is not an advocate of any single theory. Theories are broad and ambitious, attempting to relate a set of concepts systematically to explain and predict events and activities. Concepts, however, are the primary elements of a theory, and each theory has a concept or two that is particularly well developed and helpful in guiding a risk reduction intervention. Borrowing concepts from different theories can help one plan an intervention.

One behavior-changing tool that borrows concepts from a variety of theories is the health contract/calendar (**Figures 11-1** and **11-2**). The **health contract/calendar** relies on the self-management capability of a client, after initial assistance is provided by a clinician or health educator. The client is helped to choose an appropriate behavior change goal and to create and implement a plan to accomplish that goal. The statement of the goal and the plan of action are then written into a contract format.

A health contract is alleged to have several advantages over verbal communication alone, especially when the communication tends to be

limited in direction (i.e., mostly from health professional to client). The alleged advantages of a contract, which still need additional empirical testing, are that it is a formal commitment that not only enhances the therapeutic relationship between provider and client, but also requires the active participation of the client. The contract also:

- Identifies and enhances motivation
- Clarifies measurable and modest goals
- Suggests tips to remember new behaviors
- Provides a planned way to involve support persons such as family and friends

FIGURE 11-1 Health contract.

My health goal is: _____ _____	
<p>My motivation for my health goal is:</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p>	<p>Problems that may interfere with reaching my health goal and solutions:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
My Plan of Action	
For social or emotional support I will...	
To remind me of new behaviors I will...	
_____	_____
My signature /	Support person's signature
_____	_____
date	date

SOURCE: Permission from D. Haber, *Health Promotion and Aging: Practical Applications for Health Professionals*. NY: Springer Publishing Company, 4th edition, 2007, p. 114.

FIGURE 11-2 Health calendar.

Fill in activities and make an X on each day you complete them.

Month: _____

Backup plan:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Weekly Success #days completed/ #days contracted

SOURCE: Permission from D. Haber, *Health Promotion and Aging: Practical Applications for Health Professionals*. NY: Springer Publishing Company, 4th edition, 2007, p. 114.

- Provides a means to problem-solve around barriers that previously interfered with the achievement of a goal
- Suggests ways to design a supportive environment
- Provides incentives to reinforce behaviors

- Establishes a record-keeping system (i.e., a month-long calendar for the health contract/calendar technique)

The health contract/calendar technique includes a set of instructions (see Haber, 2007b) that helps older adults establish a goal, identify motivation, implement a plan of action, identify potential problems, and encourage solutions to overcome these barriers. The contract is signed and dated at the bottom by the older adult and a support person. Progress is typically assessed after one week, and the success of the contract is reviewed at the end of a month. There is also the potential for providing ongoing support.

Health contracts have been applied with varying degrees of success to a wide variety of behaviors, such as drug use, smoking, alcohol abuse, nutrition, and exercise (Berry et al., 1989; Clark et al., 1999; Cupples & Steslow, 2001; Haber, 2007a; Haber & Looney, 2000; Haber & Rhodes, 2004; Jette et al., 1999; Johnson et al., 1992; Leslie & Schuster, 1991; Lorig et al., 1996, 2000; Moore et al., 2000; Neale et al., 1990; Schlenk & Boehm, 1998; Swinburn et al., 1998).

There are many versions of health contracts ranging from the simple to the complex. Here is an example of a simple weight-loss contract developed by Dr. Joseph Chemplavil, a cardiac endocrinologist in Hampton, Virginia:

I, (patient's name), hereby promise to myself and to Dr. Chemplavil, that I will make every effort to lose my (agreed-upon) weight, and I will pay \$1 to Dr. Chemplavil's Dollar for Pound Fund, for every pound of weight that I gain, on each visit to the office, by cash. I also understand that I will receive \$1 from the same fund for each pound of weight that I lose.

Dr. Chemplavil paid out \$1,044 to 118 patients, received \$166 from 30 patients, and two patients broke even (Kazel, 2004).

Research on health contracts has been limited and often marred by a lack of random assignment to treatment and control groups, small sample sizes, and lack of replication. In addition, there are several uncertainties about the effectiveness of health contracts in terms of one's ability to identify which components work better than others (e.g.,

health education, social support, the professional-client relationship, memory enhancement, motivation building, contingency rewards, etc.), whether contracts work better with one type of person than another, and how to determine the content and amount of training that is required for health educators or clinicians to help clients implement health contracts.

Even without a definitive body of research, health contracts are widely used. They are simple to administer, time-efficient, and even cost-effective when medical personnel assign the completion of health contracts to a health educator or trained office worker. The health contract can also be effectively taught to students in the classroom who are interested in health education, risk factor counseling, or program development (Haber, 2007a).

Exercise

The 1996 *Surgeon General's Report on Physical Activity and Health* was an outstanding review of the research on the effects of physical activity on people's health, and it has yet to be improved upon. According to the Surgeon General's report, regular exercise and physical activity improve health in a variety of ways, including a reduction in heart disease, diabetes, high blood pressure, colon cancer, depression, anxiety, excess weight, falling, bone thinning, muscle wasting, and joint pain.

However, 60% of adults did not achieve the recommended amount of physical activity, and 25% of adults were not physically active at all. Inactivity increased with age; by age 75 about one in three men and one in two women engaged in no physical activity. Inactivity was also more common among women and people with lower income and less education.

The most significant component of the Surgeon General's report was its advocacy for several tested exercise principles. First, motivation is very important, and to enhance it requires a large degree of modesty in setting goals and at least a small degree of enjoyment. Hence, the emphasis on being more physically active rather than a narrow adherence to a rigid exercise regimen.

Second, Americans should get at least 30 minutes of physical activity or exercise most days of the week. This statement provided a major perspective

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shift from previous recommendations by government and exercise leaders. This new message recommended that Americans become more concerned about total calories expended through exercise than about intensity level or duration of continuous exercise. Regarding intensity level, the report stresses the importance of raising respiratory rate and body warmth—physiological changes that are apparent to the participant—but not to be too concerned about raising intensity level to a target heart rate, particularly if the person is sedentary or has a less than active lifestyle.

Regarding duration of continuous exercise, it is no longer deemed essential to obtain 30 consecutive minutes of exercise. For Americans, the large majority of whom are not too active, accumulating shorter activity spurts throughout the day is effective. Taking a brisk walk in a shopping mall or climbing a few stairs in spare minutes can accumulate the benefits of exercise. A review of the research literature concludes that accumulating several 5- or 10-minute bouts of physical activity over the course of the day provides beneficial health and fitness effects (DeBusk et al., 1990; Jakicic et al., 1995; Lee et al., 2000; Murphy et al., 2002; Pate et al., 1995). One study reported that if a person times these bouts of activity correctly they can gain the added benefit of replacing junk food snack breaks (Jakicic et al., 1995).

Regarding exercise itself, it is difficult for adults to go from inactivity to an exercise routine. Thinking about how to accumulate short bouts of activity is a useful way to get started on better health and fitness. For example, nurses can encourage older adults to vacuum the carpet more briskly than normally (even if it means doing it in segments throughout the day), or to put more energy into leaf raking or lawn mowing, gardening with enthusiasm, or dancing to music on the radio. In addition, nurses should not underestimate the ability of older adults to engage in adventurous or unusual sports (**Figure 11-3**).

Finally, the Surgeon General's report urged Americans to be active most days of the week. We should aim for the habit of everyday physical activity or exercise, but should not allow the occasional lapse to discourage us. Making physical activity or exercise a near-daily routine is more likely to become an enduring habit than the pre-

viously recommended three-times-per-week exercise routine.

For most older adults, a brisk walking program will provide sufficient intensity for a good aerobics program. An 8-year study of more than 13,000 people indicated that walking briskly for 30 to 60 minutes every day was almost as beneficial in reducing the death rate as jogging up to 40 miles a week (Blair et al., 1989). The authors of a study of 1,645 older adults reported that simply walking 4 hours per week decreased the risk of future hospitalization for cardiovascular disease (LaCroix et al., 1996).

The National Center for Health Statistics (1985) reported that walking has much greater appeal for older adults than high-intensity exercise. A national survey indicated that a smaller percentage of persons age 65-plus (27%) engaged in vigorous activities, in comparison to 41% of the general adult population (41%); however, people of all age groups (41%) were equally likely to walk for exercise.

Many older adults are concerned about unfavorable weather and may abandon their walking routine as a consequence. Prolonged hot or cold spells may sabotage a good walking program. Rather than discontinue this activity because of the weather, adults may choose to walk indoors at their local shopping malls. Many shopping malls—about 2,500 nationwide—open their doors early, usually between 5:30 and 10:00 a.m., for members of walking clubs.

There is also a relationship between one's neighborhood and one's health. Residents who depend on a car to get to most places and have few sidewalks for safe walking are likely to be more obese and have chronic medical conditions that impact on health-related quality of life (Booth et al., 2005; Sturm & Cohen, 2004). For every extra 30 minutes commuters drive each day they have a 3% greater chance of being obese; in contrast, people who live within walking distance of shops are 7% less likely to be obese (Frank et al., 2004). Older persons who believe their neighborhoods are favorable for walking are up to 100% more physically active (King et al., 2003; Li et al., 2005). People at high risk for inactivity may increase their physical activity when they have access to walking trails (Brownson et al., 2000).

A sedentary person is estimated to walk about 3,500 steps a day, and the average American about

FIGURE 11-3

Older adults may continue sporting activities well into later life and share them with their grandchildren. These grandparents took their adult grandchild on a shark dive in the Bahamas.



SOURCE: Courtesy of Stuart Cove. (www.stuartcove.com).

5,130 steps. Many advocates believe Americans should aim for 10,000 steps a day, or about 5 miles. Workplace physical activity, particularly among blue-collar occupations, helps many people reach the 10,000-step target, leaving older adults (and overweight office workers) most likely to be at risk (McCormack et al., 2006).

Pedometers are small devices that count steps, and are typically attached at the waist. They first appeared in Japan in 1965 under the name Manpometer—*manpo* in Japanese means 10,000 steps. Their introduction into America took another few decades, but they have been rapidly increasing in popularity—even McDonald's distributed them for a while as part of an adult Happy Meal called Go Active (salad, bottled water, and a pedometer for \$4.99). Studies, though, have been equivocal

about the benefits of using a pedometer to motivate individuals.

One study, for instance, reported that pedometers added no additional benefit to a coaching intervention (Engel & Lindner, 2006), whereas another publication noted that it increased the frequency of short walking trips (Stovitz et al., 2005). One study reported that cheap pedometers are likely to overestimate the actual number of steps taken (De Cocker et al., 2006). There are many ways in addition to the use of a pedometer to add steps to a daily routine. For information and guidelines on this topic, contact America on the Move, at www.americaonthemove.org.

Another option for older adults is to join a non-competitive walking or hiking club, or to participate in a nearby walking or hiking event. Two

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opportunities in this regard are the American Volkssport Association at 800-830-9255 or www.ava.org, and the local Sierra Club at www.sierraclub.org. If you want to add a mind-body dimension to walking, try ChiWalking, which combines walking with the principles of tai chi (www.chiwalking.com).

Traveling to another city can also be an excuse not to exercise. Or it can be an opportunity to gather information from the local newspaper or chamber of commerce about a walking tour for an enjoyable way to get exercise and a unique way to learn about offbeat aspects of a city's history. Most if not all big cities have walking tours, and some sound particularly intriguing (such as Oak Park, Illinois's self-guided walking tours of Frank Lloyd Wright homes and the Big Onion walking tours of New York City's ethnic communities and restaurants [www.bigonion.com]).

There are many other aspects of exercise besides aerobics that are important for older adults to know about, including strength building, flexibility, and balance. There are also many important topics that need to be considered, such as safety, qualified exercise leaders for older adults, fitness clubs that motivate older adults, and the compatibility of an exercise routine with the medical status of an individual. For a detailed description of a model exercise program and related exercise topics, see Haber (2007b).

NUTRITION

Nutrition is only one component in the development and exacerbation of disease (heredity, environment, medical care, social circumstances, and other lifestyle risk factors also play a part), but eating and drinking habits have been implicated in 6 of the 10 leading causes of death—heart disease, cancer, stroke, diabetes, atherosclerosis, and liver disease—as well as in several debilitating disorders like osteoporosis and diverticulosis.

Older adults are in a particularly precarious position because they are more vulnerable to both obesity and malnutrition than other age groups. The highest percentage of obese adults is in the age group 50–69, with those ages 70–79 the next most obese (Squires, 2002). Also, older adults are at the highest risk of being malnourished (Beers & Berkow, 2000). Social isolation, dental problems,

medical disease, and medication usage are among the risk factors for malnourishment in older adults.

Older adults are more conscientious about nutrition than other age groups, according to one national study (Harris et al., 1989). In this sample, a higher percentage of those over age 65 (approximately two-thirds) than of those in their 40s (one-half) reported trying “a lot” to limit sodium, fat, and sugar; eat enough fiber; lower cholesterol; and consume enough vitamins and minerals.

If older adults are paying more attention to their nutritional habits, one can only speculate that they may be motivated by more immediate feedback (heartburn, constipation, and so forth), or by feelings of greater vulnerability (higher risk of impairment from disease and of loss of independence). The next cohort of older adults—today's baby boomers—bring more than motivation to the table. They also bring a higher formal education level, including a strong interest in health education.

The federal government provides a modest amount of nutrition education for older adults and the rest of the American public. The 2005 *Dietary Guidelines for Americans* includes a 70-page blueprint for nutritional policy; a revised Food Guide Pyramid, dubbed MyPyramid; and a Web site, www.mypyramid.gov. The guidelines are redrafted every 5 years by the U.S. Department of Agriculture (USDA) and the Department of Health and Human Services (DHHS). The Food Guide Pyramid, however, had not been updated for 13 years, and the Web site was a brand new initiative. The entire update was billed as an interactive food guidance system rather than a one-size-fits-all initiative.

The guidelines basically encourage Americans to eat fruits, vegetables, whole grains, and low-fat or fat-free dairy products, and there is much more detail on the consumption of these foods than was provided by previous guidelines. Fruits and vegetables are increased to 5 to 13 servings per day. Salt guidelines are specific for the first time, limiting it to one level teaspoon a day. Trans fat is identified for the first time, and the advice is to keep intake as low as possible. Saturated fat limitations have become specific, keeping it to 10% of calories or less. Cholesterol level is to be less than 300 milligrams. Added sugars or sweeteners are discouraged for the first time, particularly in drinks. Whole

grains are differentiated from the broad category of carbohydrates, and the recommendation is half the grain servings should be whole grains.

The Web site offers people specific dietary recommendations on grains, vegetables, fruit, milk, meat and beans, total fat, saturated fat, cholesterol, sodium, oils, and fats/sugars. Types and duration of physical activity are assessed as well, with specific recommendations. The Web site is interesting and informative.

Another educational tool is the **nutrition bull's-eye** developed by Covert Bailey (1996). The goal of the bull's-eye is for people to consume the nutritious foods that are listed in the center of it. These foods are low in saturated fat, sugar, and sodium, and high in fiber. They include skim milk, nonfat yogurt, most fruits and vegetables, whole grains, beans and legumes, and water-packed tuna. As you move to the foods listed in the rings farther away from the bull's-eye, you eat more saturated fat, sugar, sodium, and low-fiber foods. In the outer ring of the bull's-eye, therefore, are most cheeses, ice cream, butter, whole milk, beef, cake, cookies, potato chips, and mayonnaise.

Unlike the Food Guide Pyramid, Bailey's bull's-eye is focused on making distinctions *within* food categories. Whole-wheat products, for instance, are in the bull's-eye, whereas products made from refined white flour and those with added sugar are placed in the outer circles. Fresh fruits and vegetables are in the bull's-eye, but juiced vegetables and fruit that lose fiber and that concentrate sugars are placed in a ring just outside of the bull's-eye. Skim milk, low-fat and nonfat cottage cheese, and part-skim mozzarella are in the center ring, whereas whole milk and most cheeses are in the outer circles of the target.

The author has offered older clients a personalized version of the nutrition bull's-eye. In this version, you begin with a blank bull's-eye, and then add food and drink products that you usually consume to each of the rings. The foods and drinks in the personalized nutrition bull's-eye (see **Figure 11-4**) are clearly superior; the second ring is not quite as nutrient dense; the third ring is neutral, products that are not particularly harmful or helpful; and the outer ring includes the least nutritious foods and drinks that should be consumed sparingly.

In the center and innermost ring of the personalized bull's-eye, patients also add the foods and

drinks that they are not currently consuming, but that they find sufficiently desirable and are considering adding to their diet (in italics in Figure 11-4). The assignment of food and drink products to each of the rings is likely best done with the aid of a dietitian who can assess their nutritional value. (Darsen Rhodes and Mandy Puckett, former nutrition students at Ball State University, identified products for the personalized nutrition bull's-eye in Figure 11-4.)

The **Center for Science in the Public Interest (CSPI)** is the premier educational and advocacy organization for promoting better nutritional habits in the United States. Its educational component consists of the *Nutrition Action Healthletter*, published monthly, which informs more than 800,000 subscribers, including this author. The organization is best known, however, for its advocacy accomplishments, under the leadership of its executive director and cofounder (in 1971), Michael Jacobson.

Jacobson and CSPI staff, for example, have led the fight for nutrition labels on food items in the supermarket; for exposing the hidden fat in Chinese, Mexican, Italian, and delicatessen food; for pressuring movie theaters to stop cooking popcorn in artery-clogging coconut oil; for warning labels on Procter & Gamble's fake fat, Olean, which may interfere with the absorption of nutrients and cause loose stools and cramping; for more accurate labeling of ground beef in supermarkets; and for the listing of trans fat on nutrition labels.

For more information, contact the Center for Science in the Public Interest, at their Web site www.cspinet.org.

MENTAL HEALTH

Neither the average 50% reduction in income at retirement nor the increases in emotional losses, physical losses, and caregiving responsibilities in later life result in a persistent reduction in life satisfaction among most older adults. As sociologist Linda George (1986) notes, "Older adults are apparently masters of the art of lowering aspirations to meet realities" (p. 7).

Life Review

One tool for preserving or enhancing the **mental health** of older adults is the **life review**, which is

musical selections from an earlier time, or a trek back to an important place in one's past. It can be conducted by oneself, in a dyad, or as part of a group process. A life review is more likely to be conducted by or with an older adult who is relatively content with his or her life and not seeking therapy than it is to be used therapeutically with an older adult. Nonetheless, life reviews are believed to have therapeutic powers, and they are incorporated into a wide variety of counseling modalities (Haber, 2006).

Notable Quotes

"To age gracefully requires that we stop denying the fact of aging and learn and practice what we have to do to keep our bodies and minds in good working order through all the phases of life."

—Andrew Weil, MD, from his introduction in his national best-seller *Healthy Aging: A Lifelong Guide to Your Well-Being*, p. 7.

perhaps more important in old age when there may be a need to put one's life in order and to come to an acceptance of present circumstances (Butler, 1995).

The review of positive and negative past life experiences by older adults has enabled them to overcome feelings of depression and despair (Butler, 1974; Butler et al., 1991; Watt & Cappeliez, 2000). Another study of the life review process reported positive outcomes in terms of stronger life satisfaction, psychological well-being, self-esteem, and reduced depression (Haight et al., 1998).

Although life reviews are usually helpful for improving the mental health of most older adults who are seeking meaning, resolution, reconciliation, direction, and atonement, physicians, nurses, and other clinic personnel find it is too time-consuming to listen to the reminiscences of older clients in this era of medical care. Health profes-

sionals can, however, play a key role in referring older clients to appropriate forums or helping them obtain relevant life review materials.

The psychiatrist Robert Butler first extolled the benefits of the life review process to his colleagues and the public as early as 1961, as a way of incorporating reminiscence in the aged as part of a normal aging process. Dr. Butler described the life review as more comprehensive and systematic than spontaneous reminiscing, and

Whether older adults participate in life reviews or not, they are vulnerable to **depression** due to losses that accompany aging such as widowhood, chronic medical conditions and pain, and functional dependence (Lantz, 2002). Not only can these emotional and physical losses lead to depression, but depression in turn can lead to more physical decline (Penninx et al., 1998b).

Although the mechanism is not understood, depression increases the likelihood of mortality from cancer (Penninx et al., 1998a) and heart disease (Frasure-Smith et al., 1995). The mortality rate for depressed patients with cardiovascular disease is twice that of those without depression (Lantz, 2002). Even mild depression can weaken the immune system in older persons if it goes on long enough (McGuire et al., 2002).

Depression also plays a significant role in suicidal behaviors, and older persons have the highest suicide rate of any age group. Older adults account for 25% of all suicide deaths, though they make up only about 13% of the general population. This elevated suicide rate, however, is largely accounted for by white men age 85 or older. The suicide rate of this age/gender category is six times higher than the overall national rate (Centers for Disease Control and Prevention, 1999).

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Depression in older adults often goes undetected until it is too late. Between 63% (Rabins, 1996) and 90% (Katon et al., 1992) of depressed older patients go untreated or receive inadequate treatment. One retrospective study of older adults who had committed suicide revealed that 51 of the 97 patients studied had seen their primary care physician within one month of their suicide date. Of these 51, only 19 were even offered treatment, and only 2 of the 51 patients studied were provided adequate treatment (Caine et al., 1996).

Barry Lebowitz (1995) of the National Institute of Mental Health estimated that 15% of Americans age 65 or over suffered from serious and persistent symptoms of depression, but only 3% were reported to be suffering from the clinical diagnosis of major depression. In other words, although depressive disorders that fulfill rigorous diagnostic criteria are relatively rare, subthreshold disorders are considerably more common, infrequently diagnosed or treated with prescribed antidepressants, and because they usually go untreated, are likely to become chronic conditions (Beekman et al., 2002).

Detection of depression is hampered not only by the underreporting of symptoms by older patients, but also by biases on the part of physicians and family members. In one study, 75% of physicians thought that depression was understandable in older persons, that is, a normal facet of old age (Gallo et al., 1999). Family members may also view the signs and symptoms of depression as “normal aging,” when in fact the persistence of depressive symptoms is not normal.

MODEL HEALTH PROMOTION PROGRAMS FOR OLDER ADULTS

Although there is no certain method for determining what constitutes a **model health promotion program**, there has been no shortage of attempts to identify them, develop a catalog that includes a summary of these exemplars, and distribute the catalog around the country in order to encourage their replication. Many of these model health promotion programs have been developed over the years with the aid of federal grants and other funding sources, have gone through multiple program evaluations, and can be helpful to health professionals who are interested in launching or improving their own program.

BOX 11-2 Recommended Electronic Newsletter

Human Values in Aging is edited by Harry (Rick) Moody. It is a free, monthly e-newsletter that contains items of interest about humanistic gerontology, including late-life creativity, spirituality, the humanities, arts and aging, and lifelong learning. For a sample copy or free subscription, e-mail hrmoody@yahoo.com.

One of the more recent efforts in this regard has been organized by the Health Promotion Institute (HPI) of the National Council on Aging. HPI started by summarizing 16 model programs or best practices and compiling them into a loose-leaf directory. The summaries included information on the planning process, implementation of the program, and program evaluations. Each year, new best practices have been added to this directory. If interested in obtaining a copy, contact the National Council on Aging, Health Promotion Institute, 300 D St., SW, #801, Washington, DC 20024; 202-479-1200; or www.ncoa.org.

Six model health promotion programs that have focused on older adults and have received national attention are summarized in the following sections. These programs have received federal funding and foundation support to evaluate their effectiveness and to encourage their replication.

Healthwise

The best-known older adult medical self-care program is Healthwise, located in Boise, Idaho. The Healthwise program relies mostly on the *Healthwise Handbook*, which provides information and prevention tips on 190 common health problems, with information periodically updated. The *Healthwise Handbook* (Healthwise, 2006) is now in its 17th edition. This handbook includes physician-approved guidelines on when to call a health professional for each of the health problems it covers. Some Healthwise community programs have supplemented the distribution of the handbook with group health

education programs or nurse call-in programs. There is a Spanish language edition of the *Healthwise Handbook*, called *La Salud en Casa*, and a special self-care guide for older adults called *Healthwise for Life*.

With the assistance of a \$2.1 million grant from the Robert Wood Johnson Foundation, Healthwise distributed its medical self-care guide to 125,000 Idaho households, along with toll-free nurse consultation phone service and self-care workshops. Thirty-nine percent of handbook recipients reported that the handbook helped them avoid a visit to the doctor (Mettler, 1997). Blue Cross of Idaho reported 18% fewer visits to the emergency room by owners of the guide.

Elements of the Healthwise program have been replicated in the United Kingdom, South Africa, New Zealand, Australia, and Canada. In British Columbia, the *Healthwise Handbook* was distributed to every household, and all 4.3 million residents had potential access to the Healthwise content through a Web site and a nurse call center.

Additional information can be obtained from Donald Kemper or Molly Mettler, at www.healthwise.org.

Chronic Disease Self-Management Program

Kate Lorig, a nurse-researcher at the Stanford University School of Medicine, and her medical colleagues have been evaluating community-based, peer-led, chronic disease self-management programs for more than two decades, beginning with the Arthritis Self-Management Program (Lorig et al., 1986). This program has since evolved into a curriculum that is applicable to a wide array of chronic diseases and conditions.

Typically, each program involves about a dozen participants, led by peer leaders who have received 20 hours of training. The peer leaders, like the students, are typically older and have chronic diseases that they contend with. The program consists of six weekly sessions about 2½ hours long each, with a content focus on exercise, symptom management, nutrition, fatigue and sleep management, use of medications, managing emotions, community resources, communicating with health professionals, problem solving, and decision making. The program takes place in community settings such as senior centers, churches, and hospitals.

The theoretical basis of the program has been to promote a sense of personal efficacy among participants (Bandura, 1997) by using such techniques as guided mastery of skills, peer modeling, reinterpretation of symptoms, social persuasion through group support, and individual self-management guidance. In addition to improving self-efficacy, Lorig and colleagues (2001) reported reduced emergency room and outpatient visits, and decreased health distress, fatigue, and limitations in role function.

The Chronic Disease Self-Management Program is housed at Stanford University's Patient Education Research Center, 1000 Welch Road, #204, Palo Alto, CA 94304; 650-723-7935; <http://patienteducation.stanford.edu/programs/cdsmp.html>.

Project Enhance

Senior Services of Seattle/King County began the Senior Wellness Project (later renamed Project Enhance) in 1997 at the North Shore Senior Center in Bothell, Washington. It was a research-based health promotion program that included a component of chronic care self-management that was modeled after Kate Lorig's program (Lorig et al., 1999). The program also included health and functional assessments; individual and group counseling; exercise programs; a personal health action plan with the support of a nurse, social worker, and volunteer health mentor; and support groups. A randomized controlled study of chronically ill seniors reported a reduction in number of hospital stays and average length of stay, a reduction in psychotropic medications, and better functioning in activities of daily living (Leveille et al., 1998).

Project Enhance is a partnership among a university, an Area Agency on Aging, local and national foundations, health departments, senior centers, primary care providers, older volunteers, and older participants. Versions of this model program are being replicated at senior wellness sites around the country (80+ sites in the United States) and two sites in Sweden to test its effectiveness in a variety of communities, in an assortment of sites, serving a diversity of clientele. Findings have demonstrated higher levels of physical activity and lower levels of depression among its participants (Dobkin, 2002).

Project Enhance is currently divided into two components: Enhance Fitness and Enhance Wellness. Enhance Fitness is an exercise program that

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focuses on stretching, flexibility, balance, low impact aerobics, and strength training. Certified instructors have undergone special training in fitness for older adults. Classes last an hour, involve 10 to 25 people, and participants can track their progress through a series of functional evaluations.

Participants who completed 6 months of Enhance Fitness improved significantly in a variety of physical and social functioning measures, as well as reporting reduced levels of pain and depression. There was also a reduction in health care costs (Ackerman et al., 2003). The Enhance Fitness program has been replicated in 64 community sites across 6 states.

Enhance Wellness focuses on mental health, with an emphasis on lessening symptoms of depression and other mood problems, developing a sense of greater self-reliance, and lowering the need for drugs that affect thinking or emotions. Enhance Wellness typically consists of a nurse and social worker working with an individual. An analysis of the effectiveness of the program found that it reduced depression one year after the program and improved exercise readiness, physical activity levels, and self-reported health (Phelan et al., 2002).

To learn more about Project Enhance, contact Susan Snyder, Program Director at Senior Services of Seattle/King County at susans@seniorservices.org.

Ornish Program for Reversing Heart Disease

Dr. Dean Ornish, a physician at the University of California at San Francisco and founder of the Preventive Medicine Research Institute, has developed a program for reversing heart disease that has been replicated at several sites around the country. Dr. Ornish (1992) has recommended a vegetarian diet with fat intake of 10% or less of total calories, moderate aerobic exercise at least three times a week, yoga and meditation an hour a day, group support sessions, and smoking cessation.

Dr. Ornish and his colleagues have reported that as a result of their program, blockages in arteries have decreased in size, and blood flow has improved in as many as 82% of their heart patients (Gould et al., 1995). A 5-year follow-up of this program reported an 8% reduction in atherosclerotic plaques, while the control group had a 28% in-

crease. Also during this time, cardiac events were more than doubled in the control group (Ornish et al., 1998).

The applicability of Ornish's program to the average patient is still of uncertain utility. It may take highly motivated individuals (e.g., patients with severe heart disease) and significant medical and health support (requiring significant resources) for the model program to be useful to others. For additional information, contact Dean Ornish, MD, at <http://www.pmri.org>.

Benson's Mind/Body Medical Institute

Dr. Herbert Benson is a physician affiliated with Harvard Medical School, and best known for his best-selling books on the relaxation response and for popularizing the term *mind/body medicine*. For individuals feeling the negative effects of stress, Benson's program teaches them to elicit the relaxation response, a western version of meditation. The Benson-Henry Institute for Mind/Body Medicine's clinical programs treat patients with a combination of relaxation response techniques, proper nutrition and exercise, and the reframing of negative thinking patterns.

Benson's nonprofit scientific and educational institute conducts research, provides outpatient medical services, and trains health professionals, postdoctoral fellows, and medical students. The Benson-Henry Institute for Mind/Body Medicine can be contacted at www.mbmi.org.

The research results from Benson's and Ornish's programs attracted the attention of Medicare, which funded a demonstration project to evaluate these programs. As a consequence of the demonstration project, in 2006 Medicare began to reimburse eligible patients for participation in the two cardiac wellness programs, Ornish's Reversing Heart Disease and Benson's Mind/Body Medicine. These two programs have expanded the emphasis in Medicare from acute care medicine, rehabilitative medicine, and prevention to the inclusion of comprehensive wellness.

Strong for Life

The Strong for Life program is a home-based exercise program for disabled and nondisabled older adults. It focuses on strength and balance, and provides an exercise video, a trainer's manual, and a user's guide. The program was designed by physical

therapists for home use by older adults, and relies on elastic resistive bands for strengthening muscles. The exercise program led to a high rate of exercise adherence among older participants, as well as increased lower extremity strength, improvements in tandem gait, and a reduction in physical disability (Jette et al., 1999).

This program is housed at Boston University's Roybal Center, Sargent College, 635 Commonwealth Ave., Boston, MA 02215; 617-353-2713; www.bu.edu/roybal.

RE-ENGAGEMENT INSTEAD OF RETIREMENT

In 2011, baby boomers begin turning age 65 and start becoming the gerontology boomers. Most of them will not retire, if by retirement is meant a type of disengagement. Why will these gerontology boomers be different from the current crop of retirees?

First, the boomers will be the *longest-lived cohort* of older adults. They may have 25 or 30 years of life to negotiate after giving up their main line of work. How many of them will be comfortable with the idea of a quarter century without additional earnings? How many will be comfortable letting go of education, exploration, and engagement?

The boomers will be the *best-educated cohort* of older adults. Between 1950 and 2000, the percentage of Americans age 65 or over with a high school diploma leaped from 18% to 66%; college graduates jumped from 4% to 15%. In 1991, 17% of Americans age 60–64 were involved in adult education; by 1999 that had jumped to 32%. They say a mind is a terrible thing to waste, not only from the individual's standpoint, but from society's as well. Seventy-six million minds to be precise.

The boomers will be the *healthiest cohort* of older adults. Almost 90% of Americans ages 65–74 report that they have no disability, and the disability rate for older Americans continues to decline. An increasing number of older adults are exercising in late life, with brisk walking for exercise becoming commonplace among the old. Not only is a mind a terrible thing to waste, so is a healthy body.

Also, the boomers may become the *most-engaged cohort* of older adults. Fifty-four percent of boomers say helping others is important to them. A 2002

national survey by Hart Research Associates reported that about 60% of older Americans believe that retirement is a "time to be active and involved, to start new activities and to set new goals." A 2005 survey by Civic Ventures and the MetLife Foundation reported that 58% of leading-edge baby boomers, those between ages 51 and 59, said they want to take jobs that serve their communities.

In addition, the boomers will be the *largest cohort* of retirees ever. The number of Americans age 65 or older will increase from 35 million in 2000 to more than 70 million in 2030. When these boomers came into the world they revolutionized hospitals and health care just through their sheer size. They did the same thing to public schools, the Vietnam War, and then the housing market, spurring a tremendous growth in building. A cohort this large is unlikely to pass into retirement and leave it unchanged. And boomers are unlikely to accept things as they are.

What might older adults do, if they decide to re-engage rather than retire? Here are two possibilities.

Experience Corps

Experience Corps is a foundation-supported program that has placed 2,000 older adults as tutors and mentors with 20,000 low-income children in urban, public elementary schools and after-school programs in 19 cities. These programs not only boost the academic performance of students, but enhance the well-being of the older volunteers in the process (Fried et al., 2004; Rebok et al., 2004; Tan et al., 2006). Much work remains as two-thirds of the nation's fourth graders in major urban areas are reading below basic levels for their grade. For more information, contact Experience Corps at www.experiencecorps.org.

The North Carolina Center for Creative Retirement

The North Carolina Center for Creative Retirement (NCCCR) has implemented a course entitled Creative Retirement in Uncertain Times. Through lectures, case studies, discussion groups, and community activities, older participants explore their image of retirement, their ability to revitalize themselves, and their plan of action.

With the help of a civic engagement grant from the National Council on Aging, NCCCR created a

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Leadership Training Program for Older Persons. It enables low-income older adults age 50 or older to gain the skills and confidence necessary to advocate for their peers by becoming effective leaders in community organizations that rarely include representatives from low-income groups.

The North Carolina Center for Creative Retirement can be contacted at www.unca.edu/ncccr. For information about demonstration grants awarded to encourage civic engagement, contact the National Council on Aging, 300 D. St., SW, #801, Washington, DC, 20024; 202-479-1200; www.ncoa.org.

There are hundreds of courses hosted at institutes of higher education targeted toward older adults, some of which are peer-led by retired older adults. Older adults can find out if there are similar educational offerings in their local area by contacting nearby colleges and universities.

GREEN HOUSE

Nursing homes are not homes, they are institutions. No matter how well run they are, they are not places where most of us want to end up. We are at the beginning of revolutionizing the long-term care industry, and no one has been more innovative and successful at this early stage than William Thomas, MD, founder of the **Green House**. Dr. Thomas started out his career as a medical director in a nursing home and was saddened by how regimented and joyless the environment was.

In traditional nursing homes, residents are viewed as sick and dependent, which fosters learned helplessness and induced disability. Staff may encourage wheelchair dependency to serve the needs of staff members who are pressed for time. Dressing, feeding, bathing, and toileting need to be routinized and sped up for aides needing to stay on schedule. A staff member is more likely to rely on incontinence briefs than to take the time to develop individualized toileting routines.

Green Houses, in contrast, look like surrounding homes in a residential community. They are homes, not home-like, though they are bigger than the average home. The first ones were constructed in Tupelo, Mississippi, in 2003, and were 6,400 square feet. The rooms in these homes include extra expense, such as ceiling lifts, but these innovations can save costs

over the long term by reducing back injuries, employee turnover, and workers' compensation.

Green House workers are paid more and are better trained than the typical nursing assistant, but the extra costs are offset by employee empowerment that reduces staff turnover and additional training expenses. The annual employee turnover rate in the average nursing home is 75%, whereas it was less than 10% in the first Green House in Tupelo. Moreover, not one staff person left during the house's first 3 years of existence.

About 10 people live in a Green House, each having a private room and bath, and access to a central hearth where cooking and socializing are done. There is a surrounding garden for contemplative walks and for growing vegetables and flowers. Doors can be opened to view the garden and hearth from an individual room or closed for privacy. With the circular nature of the individual rooms, both the garden and the central hearth are within 30 feet. There is strategically placed furniture to help with "cruising" to central areas and to help with gains in mobility (see **Case Study 11-1**).

Green Houses promote autonomy. Residents get up, eat, and go to bed when they want. They decide on which foods to eat, and that may even include pizza, wine, or ice cream. Medications are locked in individual rooms, rather than distributed by a cart that is wheeled from room to room. There are few features that are different from the typical home. If there are unusual features, they are deemphasized, like a ceiling lift that is recessed and used only when needed for transfer. Induction cooking in the kitchen prevents residents from burning themselves on a stove. Stoves have shut-off valves, with pot trappers to prevent hot pots from burning residents. A safety gate around the kitchen can be used when necessary.

People in the first 10 Green Houses were selected from nursing homes and represented a typical nursing home population. Of the first 40 selected, 12 had advanced dementia, and all Green House residents had the typical array of physical and cognitive limitations associated with the average nursing home resident.

Decision making is lodged in residents and workers, unless there are safety or budget issues that can-

Case Study 11-1

Dr. Brown is a retired superintendent of a large public school system in the Midwest. He has been widowed for 5 years and just recently retired at the age of 69 after experiencing a fall down a flight of stairs at his home that resulted in a fractured hip, skull fracture, and broken shoulder for which he has been treated in the hospital and is being discharged soon. Dr. Brown's two adult children have encouraged him to sell his home and move somewhere where there is help available when he needs it. Dr. Brown hates the thought of a nursing home, especially since his wife spent about a year in one before her death. He is not certain whether an assisted living facility would work for him either. The family asks the hospital nurse for assistance in exploring living options for Dr. Brown.

Questions:

1. What questions should the nurse ask of Dr. Brown to help determine his preferences for living situations?
2. What other factors are essential to know about Dr. Brown in order to assist him with proper choices?
3. Are there any other team members who should be consulted within the hospital that could help with this decision? If so, who?
4. Would a Green House be a better option than assisted or independent living for Dr. Brown? Why or why not? What factors must be considered before answering this question?

not be handled at that level. Aides are called shahbazim (derived from the mythical Persian royal falcon that protected the king), with the primary job responsibility to protect, nurture, and sustain.

Ideal staff ratio is 1 for every 5 residents; nurse ratio is 1 for every 2 houses (or 1 per 20 people), and administrator ratio (and one assistant) 1 for every 12 houses (or 1 per 120 people). Staff find replacements for themselves if sick, either through a substitute pool or through overtime (which is managed within the allowable budget).

Workers receive 120 hours of additional training in areas such as CPR, first aid, culinary skills, safe food handling, communication, and dementia care. They are better paid than the average long-term care worker (\$11 per hour versus \$7.50) and are given rotating responsibility (purchasing food and cooking, housekeeping, scheduling, budget, etc.). Unless the nonclinical work teams endanger safety or overspend budget, administrators cannot overrule their decisions.

Every Green House has been fully staffed so far, with never a day understaffed. Wheelchair use has declined, and the strength of residents has increased. Residents have the option to eat in a group or alone, with an individualized menu and pleasant surroundings—referred to as a convivium. A local cookbook is assembled to cater to the tastes of people born in a region. Shahbazim can eat with residents and participate in activities with them, along with family and friends.

Most of these ideas are summarized in William Thomas's book, *What Are Old People For?* and in a journal article titled, "Radical Redesign of Nursing Homes" (Rabig, Thomas, Kane, Cutler, & McAlilly, 2006). In a publication called *CNS SeniorCare*, Thomas (Rabig et al., 2006) sums up his philosophy:

Old age, like all the other phases of our lives, should be about life and living. Treating aging as a medical condition that must be managed with the professional distance prescribed by the medical model is wrong and

BOX 11-3 Web Exploration

Visit the Web site <http://www.mypyramid.gov> and explore it for helpful tips and resources. Compare the pyramid to the modified and updated pyramid for older adults found at <http://nutrition.tufts.edu/docs/pdf/releases/ModifiedMyPyramid.pdf>.

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leads to terrible suffering. For decades we have organized the life of the elder or disabled individual in a skilled nursing facility around the needs of the institution, rather than individuals who live there. (p. 14)

The Robert Wood Johnson Foundation provided a \$10 million grant (from 2006 to 2010) to establish at least 30 Green Houses around the United States and to allow other long-term care owners and administrators to replicate them through training support and up to \$125,000 in predevelopment loans.

SUMMARY

Many exciting changes are taking place in the field of health promotion and aging. Perhaps it is time to establish a pro-aging movement—in contrast to the commercial and exploitive anti-aging movement. No longer needing to impress employers, in-laws, or peers, older adults are free to be themselves. Aging people have an opportunity to be freer, wiser, more engaged in helping others, and more willing to be an advocate not only for their own health, but for the well-being of society.

Critical Thinking Exercises

1. Are you in favor of the federal government monitoring goals for healthy aging? If so, how would you improve federal intervention? If not, why?
2. What do you think is the most important health objective that should be set for the Healthy People 2020 initiative, and what should federal and state governments do to help?
3. How familiar are you with the health-promoting resources in your community? Find one that you are unfamiliar with but believe may be important for older persons. Summarize it sufficiently to answer most questions that older adults might have about it.
4. What is your opinion of the existing Medicare prevention coverage? What would you change, and why?
5. Write a health contract/calendar for yourself for one month. At the end of this time explain your success or lack of such with accomplishing your health goal.
6. What has been your major barrier when it comes to engaging in exercise on a regular basis, and have you attempted to overcome it? If so, how?
7. Check out the new Food Guide Pyramid on the Web site <http://www.mypyramid.gov>, and see what you can learn about nutrition that is interesting to you. Do you have any suggestions for improving this site?
8. Research suggests that older adults are more conscious of their nutritional habits than younger adults. Conduct your own survey of five older adults and five younger adults, asking them to rate how much attention they give to eating what is good for them, using a scale of 1 (not very often) to 10 (all the time). Does your convenience sample corroborate the positive relationship between age and good nutritional habits?

Personal Reflections

1. Create your own nutrition bull's-eye, filling in the foods and drinks that you consume or might consider consuming. Use it for a week to guide your eating choices. Take a list of the food products in the center of your bull's-eye to the supermarket with you. Did you find this technique to be helpful?
2. Have you ever conducted a life review with an older adult? If you have, how satisfying was it for you and for them? If not, why not? How do you feel about not having done one with an older family member?
3. Choose one of the model health promotion programs summarized in this chapter and find out something of interest to you about that program that is not mentioned in this chapter.
4. The author believes that if we become more responsive to the health care needs of older adults, we will probably provide better health care for people of all ages in the United States. What do you think is the logic behind this belief?
5. What does this quotation by Henry Wadsworth Longfellow mean to you? "Age is opportunity no less than youth itself, though in another dress, and as the evening twilight fades away, the sky is filled with stars, invisible by day."
6. Describe a geriatric job, or an aspect of a job, that you would enjoy doing (related to nursing or not) and would be an important service for older adults, but is not currently being done.

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