# Dynamic Chiropractic

SENIOR HEALTH

## **Health and Wellness Promotion for Older Adults**

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Industrialized nations are experiencing a demographic revolution caused by the continuing increase in longevity and the rapid rise in the percentage of the population older than 65 years of

age.<sup>1</sup> By the year 2020, it is estimated that older adults will make up 22 percent of the population.

Eighty-eight percent of older adults seek some form of complementary and alternative care. This is

more than twice the national average of 42 percent reported by Eisenburg.<sup>3</sup> With the graying of the baby boomer generation, a large number of older adults will be seeking to promote health and wellness by continuing the fitness programs they started when they were in their 40s and 50s.

Chiropractors who practice health promotion and wellness can offer significant assistance to older adults seeking to maintain and improve mental and physical fitness. Fitness is not a fad, but a goal to pursue by older adults as well as the middle-aged. Chronic illness can be prevented and slowed by well-crafted physical and mental fitness regimes. Such programs must be modified to accommodate the physical and mental changes that accompany aging. Recent evidence shows that older individuals, including those over age 70, do want to be involved in health promotion through

patient education and counseling.<sup>4</sup> Interventions that promote healthy aging will continue to gain significance as efforts to delay disability and loss of function intensify. To maximize benefits from adoption of a program to which the patient can adhere routinely, it is important to tailor the

exercise prescription to the individual.<sup>1</sup> A sustainable mental and physical fitness program will be achieved only if the person is participating in activities that they enjoy.

Physical and Mental Fitness

There is a close relationship between a strong, vital mind and physiological fitness.<sup>5</sup> Keeping physically fit improves emotional health, while an active and curious mind encourages activities that promote physical health. Mental fitness is as indispensable to well-being as physical

conditioning.<sup>5</sup> Aging is associated with a reduction in physical fitness with loss of muscular force and endurance, along with slowing of mental functioning. Physical activity has been demonstrated to provide substantial health benefits and to maintain functional independence and improve quality of life in older adults. Resistance training has a significant effect on muscle mass and force, whereas endurance training increases oxygen transport and consumption capacities - both components of physical fitness.

Engaging in strategies that control health has been demonstrated to provide a psychological mechanism that protects older adults from experiencing adverse emotional reactions and

decreased biological functioning.<sup>6</sup> Mood elevation, increased intellectual functioning and improved self-image are all reputed to be improved by exercise. Those with an internal locus of control who are self-directed, have been found to be less neurotic than those who endorse a powerful, external

locus of control and are externally directed.<sup>7</sup> Despite this, older adults are among those with the highest rate of depression and one in three men and two in three women engage in no regular

#### physical activity.8

It is necessary to have a lifelong process of optimizing opportunities for improving and preserving health and physical, mental and social wellness. Maintaining independence improves quality of life

and can be promoted through physical and mental activities.<sup>9</sup> As chiropractic physicians, it is incumbent upon us to educate older adults about the importance of staying physically and mentally active.

#### Assessment of Older Adults

An anti-aging checkup should point to factors that lead to functional decline and shifting of the outcome measures to focus on the people who are aging well to improve wellness. Pathological factors, physical activity, hormone levels, inflammation, depression and environmental factors should be considered. Clinical, functional and biological assessments, including evaluation of social and behavioral factors, are important components in the evaluation of older patients. Perhaps of greatest significance to chiropractors is the promotion and preservation of mobility. We only are as young as our spines are flexible. Along with regular physical activity, routine chiropractic care can help to maintain spinal mobility.

### Common Pathological Conditions That Accompany Aging

Screening for common pathological conditions common to older adults can be performed using questionnaires, in addition to physical examination and special tests. In some cases, imaging and laboratory tests are appropriate to prevent and detect dysfunction. While prevention for these conditions should be done early in life, detection and treatment are of prime importance in older adults.

#### Osteoporosis

Osteoporosis has a prolonged asymptomatic period and is associated with a substantial morbidity. It is a systemic disease, characterized by a reduction in bone mass that results in increased susceptibility to fractures. Osteoporosis prevention is based on exercise and optimal nutrition throughout life. Nutritional intake and exercise programs must be customized to address individual needs.

Risk factors for osteoporosis include a family history of osteoporosis, slender or small stature,

sedentary lifestyle, and a diet low in dairy products and green leafy vegetables.<sup>10</sup> Postmenopausal females are more susceptible, but this is not just a disease of older females, with one-third of

## osteoporotic hip fractures occurring in men.<sup>11</sup>

Behaviors that exacerbate osteo-porosis risk include inadequate calcium intake, sedentary lifestyle, heavy smoking, copious alcohol intake, greater than four cups of coffee/day, and exclusion of sunlight. Risk of osteoporosis in patients can be minimized through increased calcium intake, 15 minutes of sun exposure per day, smoking cessation, reducing coffee and alcohol intake, and regular, moderate exercise.

Physical screening should not rely on plain X-ray, since loss of bone density must be significant (30 percent to 40 percent loss of bone mass) before osteoporosis can be detected. A plain X-ray therefore is more useful for diagnosing fractures than for evaluating bone density. Ultrasound

imaging of the heel is more appropriate to measure bone density. Clinically, a patient in the 25<sup>th</sup> to

75<sup>th</sup> percentile can be treated with recommended nutrition and exercise changes, with repeat assessment after an appropriate interval. Below the 25<sup>th</sup> percentile, referral for drug therapy is indicated. Osteoporosis is a serious health risk that costs billions of dollars annually in the U.S.<sup>12</sup> Therefore, this condition should be addressed by all physicians who treat older adults.

### Diabetes

Diabetes is reaching alarming proportions in industrialized nations. With its complications, it is the

third most common cause of death in developed countries.<sup>11</sup> It is a significant cause of blindness, peripheral vascular disease, neuropathy and renal disease. Type II, adult-onset diabetes might be adequately controlled through diet and exercise, but certain cases may require drug intervention.

Risk factors include a family history of diabetes, obesity, and some ethnic and racial groups including Native Americans, African-Americans and Hispanics. Symptoms include polyuria, polydipsia, poly-phagia, sudden weight loss and weakness. Screening for fasting plasma glucose levels in high-risk individuals should be performed in people over the age of 50.

Dietary management is based on acceptable blood glucose levels. Maintenance of acceptable levels is more easily achieved in people of normal body weight. Reduced total energy intake normalizes the blood profile and increased exercise will favorably influence glucose profiles. Dietary recommendations include: unrefined carbohydrates rich in fiber with reduced intake of refined sugar. Reduction of sodium, saturated fat and alcohol also is recommended. When drugs are necessary to manage diabetes, care must be taken to adequately balance dosage with food intake, exercise levels and stress exposure.

### Hypertension

Hypertension is a disorder increasing with age and obesity. It is listed among the major risk factors

for both stroke and coronary artery disease.<sup>10</sup> Regular endurance exercise reduces the risk of myocardial infarction and stroke in susceptible people by lowering blood pressure. In addition, various factors can help to lower blood pressure if it is not severe. Restriction of salt, moderation in alcohol consumption, weight control, relaxation therapy and regular exercise all have proven

beneficial in reducing hypertension.<sup>12</sup> Regular monitoring of blood pressure during wellness office visits is essential, as well as making referrals for drug therapy when appropriate.

#### Cancer

With cancer being the second most common cause of death in America, reducing the risk of the disease in older adults is important. Chiropractors commonly don't treat cancer, but they do comanage patients with cancer. Screening for cancer is an important part of chiropractic health promotion and wellness in older adults, with referral when appropriate. The major preventive efforts to reduce cancer rates include reducing the risk of cancer by reducing carcinogenes and diagnosing carcinogenesis early, and then interrupting the progression of the disease. Behavioral choices can reduce the risk of cancer by avoiding exposure to carcinogens, promoting

immunological competence, and by detecting and intercepting early neoplastic changes.<sup>12</sup>

To reduce the risk of carcinogenic agents, patients should be encouraged to avoid: use of tobacco, environmental pollutants, excessive sun exposure and additives that act as mutants, and carcinogens in food substances. Attention should be drawn to the warning signs of cancer, which include:

- a nagging, persistent cough, or hoarseness;
- obvious change in a mole or wart;
- persistent indigestion or difficulty swallowing;
- unexplained thickening or a lump anywhere in the body;
- unusual bleeding or discharge;
- a sore that fails to heal; and
- a change in bladder or bowel habits.

People who have risk factors for a particular cancer should be advised to adhere to screening recommendations. Risk factors include a family history of specific cancers (breast and colorectal cancer), estrogen therapy (endometrial cancer), exposure to cigarette smoke and asbestos (lung cancer), chemical carcinogen exposure (workers in plastic, paint, and rubber factories have an increased risk of bladder cancer), fair skin and excessive exposure to sunlight (skin cancer). Males over the age of 60 are advised to seek screening for prostate cancer.

#### Arthritis

Arthritis in various forms affects more than 66 million Americans.<sup>13</sup> A differential diagnosis can be appropriately made through a bone and joint lab profile and urinalysis. Patients have the right to have more than one thing wrong with them and this is no more confounding than in patients with arthritis. Osteoarthritis (OA) is the more common type of arthritis, affecting more than 21 million Americans.<sup>13</sup>

This degenerative form of arthritis progresses the aging process with the breakdown of cartilage and bone affecting the weight-bearing joints including the knees, hips and spine. Weight reduction is an important part in the prevention of OA, along with moderate exercise. Glucosamine and chondroitin sulfate are among nutritional supplements that have proven beneficial in the prevention of osteoarthritic flare-ups. OA can be exacerbated by traumatic injury to joints and a careful history of past injuries is necessary. Rheumatoid arthritis (RA), on the other hand, is an abnormality of the body's immune system that causes an inflammation which leads to destruction and deformity of the joints. Rheumatoid arthritis is more common in men than women and affects approximately 2.1 million Americans. In severe and rapidly progressing RA, referral for drug therapy is necessary.

Gout is a metabolic form of arthritis from a buildup of uric acid. This leads to the formation of uric acid crystals in the joint that causes severe pain and swelling. Dietary restriction of some spices, organ meats and alcohol has proven helpful in controlling gout. Joint stiffness also is found in patients with fibromyalgia, although no damage is found in joints themselves. Fibromyalgia patients should be encouraged to participate in moderate exercise within their narrow window of tolerance. There are many more causes of arthritis for which the chiropractic wellness practitioner can promote relief and improvement in the quality of life for arthritis sufferers by making accurate diagnosis and conservative recommendations.

#### Resources for Promoting Health and Wellness in Older Adults

In addition to senior centers, many recreation departments offer programs designed specifically for older adults. Aquatic exercise programs are especially beneficial for patients who cannot participate in impact activities. *Tai chi* classes have become increasingly popular with older adults, especially those modified for specific conditions. *Tai chi* arthritis, diabetes and osteoporosis programs are designed specifically for those with limitations due to chronic conditions common in older individuals. *Tai chi* is specifically helpful for people with balance problems that increase the chances of injury from falls. Fear of falling commonly limits physical activity, causing a vicious

cycle of disability from inactivity. The Academy for Older Adult Wellness offers classes for health professionals who address problems of balance, arthritis and chronic diseases.

As patients age, positive attitudes about lifestyle changes can vastly improve their quality of life. Older adults are seeking health promotion and wellness counseling more frequently from alternative practitioners. Chiropractors have much to offer this rapidly expanding demographic group, not the least of which is maintenance of spinal flexibility.

Regular physical activity throughout life is important for maintaining a healthy body, enhancing

psychological well-being, and preventing premature death.<sup>6</sup> Health promotion and wellness counseling offers an important service for older adults, and is in the patient's best interest.

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