

Exercise and Bone and Joint Conditions

As we get older, our bodies change. Muscle size and strength decrease primarily due to inactivity. Bone mass and density decrease, increasing the susceptibility to fractures. Tendons and ligaments become less elastic, making it easy to get overuse injuries. Joint inflammation and cartilage degeneration often occur due to arthritis.

Thirty minutes of physical activity a day can help individuals feel good and prevent some medical conditions. Even individuals with chronic conditions, such as osteoarthritis and osteoporosis, can benefit from a balanced fitness program.

Here are some exercise tips developed by the American Academy of Orthopaedic Surgeons for individuals with osteoarthritis, low back pain, osteoporosis, or total joint replacement.

Osteoarthritis

In 2006, more than 28 million Americans visited their physician for having some form of arthritis. (Source: National Center for Health Statistics; Centers for Disease Control and Prevention; 2006 National Ambulatory Medical Care Survey.) There are two major types of arthritis: osteoarthritis and rheumatoid arthritis. Often, weight-bearing joints, such as the knee, hip, and spine, are involved in osteoarthritis. Rheumatoid arthritis commonly affects joints in the hands, wrist, feet, and ankles.

Exercise is very important for individuals with arthritis. Exercise helps keep the joints flexible, the muscles around the joints strong, bone, and cartilage tissue strong and healthy; and reduces pain.

- Engage in a balanced fitness program that includes walking, swimming, cycling, and stretching exercises
- Avoid exercises that place excessive stress on the joints like aerobic workouts, running, or competitive sports activities

Low Back Pain

In 2006, Americans made 42 million visits to the doctor for back pain (Source: National Center for Health Statistics; Centers for Disease Control and Prevention; 2006 National Ambulatory Medical Care Survey.) Most often, back pain is caused by excessive strain of the back muscles and ligaments. Lifting improperly or a sudden twisting movement can result in low back pain. Other acquired conditions like infections or arthritis also can cause pain.

Exercise is a common treatment for people experiencing low back pain. Orthopaedic surgeons usually prescribe exercises that increase muscle strength to better support the spine as well as improve flexibility and function.

- Perform daily stretching exercises
- Engage in a more active exercise program once the initial pain subsides that includes walking, swimming, bicycling and strength training with light weights

Osteoporosis

Osteoporosis is a major health problem affecting 24 million Americans and contributing to an estimated 11 million bone fractures each year.

Osteoporosis is a condition in which the bones weaken and lose density, becoming thin, brittle, and susceptible to fractures. It is caused by the natural aging process because as people get older, they lose bone mass.

Exercise can help slow the progress of osteoporosis and build strong bone. Orthopaedic surgeons believe that a program of moderate, regular exercise (three to four times a week) is effective in the prevention and management of osteoporosis.

- Participate in weight-bearing exercises like walking, hiking, stair climbing, dancing, racquet sports and treadmill exercises
- Engage in strength training exercises with light weights

Total Joint Replacement

In 2006, more than 780,000 total joint replacement procedures were performed by orthopaedic surgeons in the U.S. (Source: National Center for Health Statistics; Centers for Disease Control and Prevention; 2006 National Hospital Discharge Survey.) The most frequent reason for performing a total joint replacement is to relieve the pain and disability caused by severe arthritis.

Most total joint replacements involve hip and knee joints; however, total joint replacement also can be performed on joints in the ankle, shoulder, fingers, and elbow.

Individuals with a total joint replacement still can lead active lifestyles. Exercise not only is important in the recovery process, but also in the years following the surgery. A proper exercise program can help restore mobility and strength in the joint.

- Avoid activities that place repeated stress on the replacement such as running, jogging, or skiing
- Engage in activities that do not place excessive stress on the replacement like swimming, bicycling, golf, and doubles tennis
- Seek medical advice before beginning any physical activity because some restrictions may be recommended

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