

# Exercise and Arthritis

By Kris Corbett NSCA CPT,  
ACSM ETT, PACE

Arthritis is a health problem that affects approximately 42.7 million Americans. Projections from the Center for Disease Control and Prevention estimate that 60 million people will be diagnosed with arthritis by the year 2020. Commonly characterized by stiffness, pain, and decreased joint function, arthritis may imperil the physical, psychological, social and economical well being of individuals, depriving them of their freedom and independence.

Physicians now commonly prescribe exercise for treatment of arthritis. Unfortunately for many arthritic people, complications associated with this disorder make exercise adherence a challenge. In addition, a great deal of confusion exists surrounding the appropriate type and dose of exercise. This article offers some manageable exercise options.

## What is arthritis?

While often referred to as if it were a single disease, arthritis is actually an umbrella term used for a

group of more than 100 medical conditions. The common thread among these 100 conditions is that they all affect the musculoskeletal system and specifically the joints (where two or more bones meet). Arthritis-related joint problems include pain, stiffness, inflammation and damage to joint cartilage (the tough, smooth tissue that covers the ends of the bones, enabling them to glide against one another) and surrounding structures. Such damage to cartilage can lead to joint weakness, instability and visible deformities that, depending on the location of joint involvement, can interfere with the most basic daily tasks such as walking, climbing stairs, using a computer keyboard, cutting your food or brushing your teeth. Many forms of arthritis are classified as systemic, meaning they can affect the whole body. In these diseases, arthritis can cause damage to virtually any bodily organ or system, including the heart, lungs, kidneys, blood vessels and skin. Arthritis-related conditions primarily affect the muscles and the bones.

## Exercise to the rescue

Up until the mid 1970's most physicians prescribed bed rest and reduced physical activity for patients with arthritis, but more recent research demonstrates that a regular program of cardiovascular exercise and progressive strength training can lead to improvements in strength, function and joint symptoms. The American College of Sports Medicine states that many problems common to arthritis including flexibility loss, muscle atrophy, weakness, osteoporosis, pain, depression and fatigue are found to respond favorably to a low-to moderate intensity, gradually progressing exercise program.

## Resistance/Strength Training

A well-designed resistance training program can help an individual with arthritis by strengthening the muscle groups around the affected joints, therefore offering protection and stabilization, improving shock absorption and reducing the mechanical stresses that can occur with cartilage degeneration. A sound program should incorporate all the major muscle groups not just those supporting the joints affected with arthritis. To ensure that affected joints are protected at all times, exercises should be performed with a controlled, smooth action.

## Cardiovascular Training

The goal of the cardiovascular exercise program should be to increase cardiovascular endurance. Exercise



selection is the most important and emphasis should be placed on exercises that are predominately non-weight bearing and utilize large muscle groups. High impact exercises should be avoided (running, high impact aerobics, etc.).

### The Flexibility Program

Stretching can help arthritic clients maintain and improve mobility. The flexibility program should place special emphasis on the lower back, hamstrings, calves, and front of the shoulders, since these areas frequently lose flexibility with age. Daily sessions have been proven safe.

An exercise program may include anything from walking around the block, to taking a yoga class, or playing a round of golf. Hopefully this article provides useful information on how to start exercising and the proper way to incorporate exercise into the management of arthritis. Whatever exercise program you choose, you should consult with your doctor before starting and seek the help of a professional to assist you with your program.



Kris Corbett owner of KMC Fitness (In-Home Personal Training and Wellness Consultant) has a BS in Exercise Physiology and Gerontology. With more than 15 years experience working with athletes and special populations, Kris specializes in optimal fitness for women. She has numerous certifications that include: Exercise Technologist - American College of Sports Medicine, Certified Personal Trainer - National Strength and Conditioning Association, Group Fitness Instructor - AFFA, PACE - Arthritis Foundation and Group Cycling - Schwinn.