

## AIDS AND EXERCISE

**A**n estimated 1 million to 1.2 million people in the United States are living with HIV (human immunodeficiency virus) or AIDS (acquired immunodeficiency syndrome) according to the Centers for Disease Control and Prevention (CDC). The CDC estimates that every year about 40,000 individuals become newly infected with the retrovirus.

HIV is acquired through contact with infected body fluids such as blood, semen, vaginal secretions and breast milk. Early signs of infection include abdominal cramps, diarrhea, fever and headaches that are often mistaken for symptoms of the flu. Some people may go for many years without any signs of serious illness. Eventually, as the virus takes its toll on the immune system, infected individuals develop night sweats and fevers, swollen glands, loss of appetite and digestive complaints, widespread musculoskeletal aches and pains and fatigue. This collection of symptoms is referred to as AIDS-related complex (ARC). AIDS, the full-blown disease, is diagnosed in HIV-infected people when CD4+ T cell counts become very low or the person acquires an "AIDS-defining illness," an illness or infection only seen in people with AIDS.

Once considered an illness inevitably progressing steadily toward death, for those with access to antiretroviral therapy, HIV may be more of a chronic disease that an individual can live with for many decades. As a result, helping maintain quality of life is paramount.

Medical experts believe that exercise can improve mood and quality of life for people living with HIV. And the HIV community itself believes that exercise training will make them stronger; improve well-being, body image and endurance; and protect them from opportunistic infections (potentially deadly infections that affect individuals with a weakened immune system).

### Introducing Exercise

HIV infection can lead to loss of muscle strength and reduced aerobic capacity. People become more deconditioned as the disease progresses. An appropriate program of exercise can improve exercise capacity in infected people and prevent or delay the downward spiral of deconditioning.

Unfortunately, there is no evidence that exercise directly stimulates immune function or slows the onset of AIDS. However, regular exercise does have psychological benefits and



can improve cardiovascular fitness, body composition and strength. Further, exercise is safe for medically stable adults living with HIV or AIDS.

### Starting an Exercise Program

If you've been diagnosed with HIV or AIDS, consult your physician before beginning an exercise program or increasing your level of physical activity. A physician can offer advice on HIV-related medical conditions and medication side effects that might affect your ability to exercise.

An appropriate exercise program includes three basic components: aerobic exercise, strength training and stretching activities to improve flexibility. A plan might include exercising three to four times per week on alternate days and can include 20 to 30 minutes of aerobic activity, such as outdoor or treadmill walking, cycling, group sports or aerobics classes.

The resistance phase of the exercise session should include eight to 10 exercises that focus on major muscle groups. Initially, start with one set of 12 to 15 repetitions for each strengthening exercise. Begin each workout with a warm-up and end with a cool-down that includes light-intensity activity and stretching.

If you have a fever or are experiencing a

secondary infection, decrease your activity level or take time off from training. Once you feel better, you can return to your regular exercise program.

An ACE-certified Advanced Health & Fitness Specialist can help design a safe and effective exercise program and monitor progression. A well-designed exercise program will help you to reap physical benefits and improve your sense of well-being and quality of life.

Connie B. Scanga, Ph.D., a research fellow at the Malaghan Institute, provided many of the exercise recommendations for this educational handout.

### Additional Resources

HIV InSite from University of California-San Francisco: <http://hivinsite.ucsf.edu>

AIDS Action Committee of Massachusetts: [www.aac.org/site/News2?page=NewsArticle&id=7867](http://www.aac.org/site/News2?page=NewsArticle&id=7867)

Medline Plus—AIDS: [www.nlm.nih.gov/medlineplus/aids.html](http://www.nlm.nih.gov/medlineplus/aids.html)

Centers for Disease Control and Prevention—A Glance at the HIV/AIDS Epidemic: [www.cdc.gov/hiv/resources/factsheets/At-A-Glance.htm](http://www.cdc.gov/hiv/resources/factsheets/At-A-Glance.htm)

*If you are interested in information on other health and fitness topics, contact: American Council on Exercise, 4851 Paramount Drive, San Diego, CA 92123, 800-825-3636; or, go online at [www.acefitness.org](http://www.acefitness.org) and access the complete list of ACE Fit Facts™*



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