



KEEPING FIT WITH HIV

ACSM Guidelines Make Exercise Possible for Patients

By Joe Cannon, MS, CSCS, NSCA-CPT

One of the biggest challenges you may face as a nutrition professional could be developing an ideal fitness plan for a patient who's infected with HIV/AIDS.

Following are some important issues and exercise guidelines you'll need to consider when counseling these patients and helping them manage this chronic condition.

Impact of Exercise

Because of the association between exercise and immune response, the patient with HIV/AIDS may be reluctant to begin a fitness program. However, research shows exercise at low to moderate intensities doesn't increase the risk for developing other infections in people who have HIV or AIDS.¹ In fact, aerobic exercise and resistance training have been found to improve muscle and cardiovascular endurance as well as strength in those with HIV-induced muscle wasting.¹ What's more, resistance training has been shown to improve strength in older adults with HIV.² These facts are important since HIV is associated with greater degrees of frailty across the age spectrum. Mixed evidence suggests strength training may increase CD4 counts,³ a measure of the number of infection-fighting T cells per cubic millimeter of blood.

Current Recommendations

Once patients have received medical clearance from their doctors and they're ready and able to begin a fitness program, these guidelines from the American College of Sports Medicine⁴ (ACSM) will give them a safe and healthy start.

- **Aerobic activity.** Aerobic exercise should involve the large muscle groups of the body to improve exercise efficiency and the ability to perform activities of daily living. To that end, patients can engage in brisk walking, light jogging, and bicycling for 30 to 60 minutes three to four days a week. The intensity should be between 40% and 60% Karvonen heart rate.

- **Resistance training.** Strength training should involve exercises using free weights and machines, which are dynamic in nature and have concentric and eccentric components. Patients should strength train two to three days per week and include a range of exercises that recruits the major muscle groups in the legs, chest, and upper, mid, and lower back. The ACSM recommends performing 10 to 12 different exercises to achieve this goal. The intensity should be moderate, approximately 60% of one-rep max, which should enable patients to perform eight to 10 repetitions per exercise. [Suggest patients wipe down exercise equipment with a disinfectant before use to reduce the risk of infections.]

Increasing Fitness Level

Another thing to keep in mind is that the severity of HIV infection can impact fitness-level progression, so the goal shouldn't be to increase the number of reps performed because this would eventually target type 1 fibers and lead to decreased strength gains and lean body mass accumulation. Ideally, patients should stay within the range of eight to 10 reps per exercise. They should increase the resistance by performing two extra reps per set during two different exercise sessions, and gradually increasing the resistance 5 to 10 lbs to return them to the eight to 10 rep range.⁴ Warn patients that they should avoid overtraining because of its deleterious effect on the immune system. While not foolproof, recording resting heart rate (RHR) each week is one way to monitor for overtraining, since overtraining syndrome is associated with an increase in RHR.

Staying Limber

When it comes to improving flexibility, ACSM recommendations aren't significantly different from those for patients who don't have HIV/AIDS. The guidelines are to hold a stretch for 15 to 30 seconds, stretch after each exercise session, and don't stretch to the point of discomfort.

— Joe Cannon, MS, CSCS, NSCA-CPT, is a personal trainer, exercise physiologist, and health educator in the Philadelphia suburbs.

For references, view this article on our website at www.TodaysDietitian.com.

