

A Daily Dose of Exercise for Aging Baby Boomers

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It may be time to update the old adage that "an apple a day keeps the doctor away." For the rapidly growing baby boomer population, exercise is a much better bet than Granny Smith. Two-thirds of adults aged 65 and older suffer from multiple chronic conditions, and research shows that exercise is a simple, low-cost, and measurably beneficial tool to help prevent and even treat these maladies. Yet only 22 percent of older adults meet the U.S. surgeon general's recommended minimum weekly exercise guidelines, and only 32 percent of clinicians regularly advise their older patients about appropriate physical activity programs. In a recent [review article](#) published in the *Methodist DeBakey Cardiovascular Journal*, researchers from Hartford Hospital and the University of Connecticut set out to address this disparity and offer research-based guidelines for prescribing exercise to older adults.

As adults age, they typically experience increases in risk factors for chronic conditions such as hypertension, high cholesterol, diabetes, and cardiovascular disease. Without regular physical activity, these health issues are compounded by decreases in muscle tone, functional capacity, and overall fitness. In short, everyday activities become more difficult and overall quality of life declines.¹

Fortunately, health care providers can prescribe a relatively simple solution for many of their patients: increased physical activity.

"If you replace the word 'drug' with 'exercise,' it can be used to treat almost any chronic condition," explains Amanda Zaleski, M.S., an exercise physiologist at Hartford Hospital and doctoral student at the University of Connecticut. "Exercise can be used to help buffer the declines associated with aging. Chronic conditions ranging from depression to hypertension to high cholesterol can be treated with exercise, either as a stand-alone therapy or in combination with pharmaceuticals."

As the article's lead author, Zaleski says that one of her main goals was to "provide a framework for clinicians to follow if they didn't know where to begin with the prescription of exercise for older adults." A starting point for healthcare professionals is the exercise prescription (ExRx) recommended by the American College of Sports Medicine (ACSM), which breaks down exercise routines by frequency, intensity, time, type, volume, and progression. Essentially, the ACSM recommends that older adults set a goal of 150 minutes per week of moderate-intensity

PRE-EXERCISE HEALTH SCREENING: WHO NEEDS IT?

For most people, regular exercise is one of the best things they can do to improve heart health. However, for a small minority with underlying conditions, jumping into a new exercise program can put them at risk for acute complications. Physicians are encouraged to evaluate individual patients to determine whether they require more in-depth pre-exercise screening. The ACSM offers the following recommendations:

Go for it! Individuals who do not require screening:

- People with known cardiovascular, renal, or metabolic (CVRM) disease who are asymptomatic and physically active and have been cleared by their doctor within the last year. They can advance their exercise routines but should stop and consult their doctor at the first sign of symptoms.
- Healthy and asymptomatic but physically inactive people. It's usually safe for these individuals to gradually start new exercise programs. They should begin with light to moderate exercise and gradually ramp up the intensity.

Caution! Individuals who require screening:

- Anyone who develops symptoms of CVRM disease at rest or while exercising.
- Physically inactive individuals with known or suspected CVRM disease.
- Regardless of screening status, clinicians should counsel their patients about warning signs of disease, including excessive fatigue or shortness of breath at rest or mild exertion, chest discomfort, dizziness, difficulty breathing while lying flat, swollen ankles, or unusual heart rhythms.

ACSM Exercise Preparticipation Health Screening Recommendations² »

physical activity or 75 minutes per week of combined moderate- and vigorous-intensity exercise. Exercise sessions can be broken down into 30 to 60 minutes per day over 3 to 5 days per week to reach the desired total. Although low-impact aerobic exercise is emphasized, it should be supplemented with resistance/strength conditioning, flexibility exercises, and balance training, where appropriate.

As with any medical intervention, no one exercise program is appropriate for all patients, so providers need to consider their patients' comorbidities and chronic diseases to maximize the benefits for each individual. (See "Pre-exercise health screening: Who needs it?" for more information.) One excellent resource for health professionals is the ACSM's Guidelines for Exercise Testing and Prescription, which includes modified ExRx for 18 conditions that may affect older adults (e.g., arthritis, cardiovascular disease, hypertension, and osteoporosis).³ Although the ACSM's prescription for 150 minutes per week is a good starting point, clinicians can use these guidelines to tailor programs to their unique patients.

For example, Zaleski describes a few small changes to the ACSM guidelines that would benefit adults with hypertension. "Individuals with hypertension would receive a similar exercise prescription as an adult without hypertension," she says. "However, we can make minor changes such as recommending that hypertensive patients work out in the morning because most people experience an immediate reduction in blood pressure right after they exercise that they can benefit from throughout the day." Although working out in the evening would also likely lower blood pressure, Zaleski explains that the timing would not be as beneficial because, "in most individuals, blood pressure will likely decrease during sleep so they would not be maximizing the 'dose' of when they took the 'drug.'"

Another aspect that physicians must consider is how medications interact with exercise. Research shows that combining certain drugs with exercise can have both positive and negative side effects. For instance, cholesterol-lowering statin drugs, which are commonly prescribed to the older population, have a complex relationship with exercise. Although multiple studies show that combined statin therapy and aerobic exercise improve health outcomes more than either intervention used on its own, some patients experience adverse effects. For approximately 10 percent of statin users, the drugs may cause muscle pain and cramping. Exercise can worsen those side effects, and patients who feel sorer after working out are may be less likely to continue their exercise program.

To help motivate older patients to exercise, Zaleski encourages clinicians to take the "Exercise is Medicine" pledge to treat physical activity as a vital sign at patient intake, just like blood pressure or smoking status. Clinicians

can help boost patient compliance in three simple steps: (1) taking time to talk with patients about the benefits of exercise, (2) prescribing safe, customized exercise programs that will maximize rewards and minimize pain, and (3) encouraging patients to make exercise a fun, social activity.

The bottom line is that even small increases in physical activity can make a big difference, so clinicians should avoid intimidating patients with goals that may initially seem out of reach.

"We see the most gains in health-related outcomes when individuals go from doing absolutely nothing to something," Zaleski explained. "So although 150 minutes of moderate-intensity exercise a week may be a lofty goal for some, I don't think it should discourage physicians from prescribing exercise. Something is better than nothing, and even bouts of exercise in short 10-minute increments can yield positive health benefits."

FOR MORE INFORMATION, CHECK OUT THESE RESOURCES

[Coming of Age: Considerations in the Prescription of Exercise for Older Adults »](#)

[Exercise is Medicine »](#)

[American College of Sports Medicine's Guidelines for Exercise Testing and Prescription, 11th edition »](#)

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Laura Gerik is an intern at the *Methodist DeBakey Cardiovascular Journal*.

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