

Exercise your right to be fit!

The medicine of movement

By Tracey Long, PhD, RN, MS, MSN, CDE, CNE, CHUC, CCRN

Nearly all clinicians know exercise is good for our physical and mental health. But incorporating it into our busy lives can be a challenge. The only types of exercise some clinicians have time for are working long shifts, juggling life's demands, balancing the books, jumping on the bandwagon, climbing the ladder of success, and skipping meals.

Clinicians are in a unique position to help patients change their behavior to improve their health. Ironically, the first behavior clinicians need to change is to work toward improving our own exercise habits.

Jumping through hurdles

Clinicians have no problem describing the many benefits of exercise to patients, but most of us don't have a regular exercise program for ourselves. Even with strong evidence supporting the benefits of exercise, only about 25% of adults follow the recommendation to get at least 30 minutes of moderate-intensity physical activity daily; 37% admit they get no exercise at all. Our high-tech society makes it convenient to be sedentary; figuring out how to get Americans out of their seats and away from their TVs and computers poses a real challenge.

Moving in new definitions

One barrier that can be overcome may be as simple as semantics. For many, the word *exercise* carries the stigma of sweat, pain



and, when neglected, guilt. So simply replacing *exercise* with *movement* may be liberating. Movement is any bodily action produced by skeletal muscle contraction that increases energy use above the baseline level and requires tissue oxygenation. Movements with the most health-promoting and disease-preventing benefits include those that build cardiorespiratory endurance and muscle strength, toning, and flexibility.

Get moving

According to the Department of Health and Human Services, the more physically active you are, the more health benefits you gain for life. **Physical activity guidelines^A** established in 2008 can help physical educators, policymakers, healthcare providers, and the public understand the amounts, types, and intensity of physical activity needed to achieve health benefits across the lifespan. Combined with the **Dietary Guidelines for Americans^B**, these evidence-based documents support the physical activity objectives established for **Healthy People 2020^C**.

Exercise guidelines and prescriptions

Exercise guidelines and prescriptions are

based on the FITT formula, which stands for:

- Frequency (how often you exercise)
- Intensity (how hard you exercise)
- Time (how long you exercise)
- Type (which exercises you do).

Frequency recommendations are based on multiple research studies that show cardiovascular benefits occur with 2½ hours of exercise weekly.

The *intensity* level must be customized to each individual's health, age, and limitations. The American Heart Association rec-

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ommends reaching target heart rate (THR), calculated with this formula: 220 minus your age. Reaching THR helps you achieve maximum cardiovascular exercise, but you must sustain it for 20 to 30 minutes. Safety is a priority, though, and not everyone should attempt to reach 100% of THR. People taking beta blockers, for instance, may not be able to reach even 70%.

Time recommendations are 20 to 60 minutes of continuous aerobic exercise of moderate to vigorous intensity 3 to 5 days per week.

The *type* of exercise depends on individual preference and ability. Generally, aerobic exercise is best because it supplies oxygen for muscle movements. Anaerobic exercise, done while holding your

breath, may create lactic acidosis and side aches. Even while doing static exercise or weight training, pay attention to breathing.

Exercise caution

How much to exercise depends on your health status, initial fitness level, available time, activity preferences, personal goals, and available equipment and facilities. The minimum caloric expenditure for health is 150 kcal/day or 1,000 kcal/week. For the maximum health benefit, you'll need to perform 5 to 6 hours of physical activity per week and expend 2,000 kcal/week above your basal metabolic rate.

For an even higher fitness level or weight loss, you'll need to exercise in the upper end of the range by expending 300 to 400 kcal/day. But be aware that age, gender, and health status can influence the totals. Thirty minutes of moderate activity daily is equivalent to 600 to 1,200 cal/week of energy expenditure. Modify this expenditure if you have neuropathy, retinopathy, cardiac disease, or medication contraindications.

People with asthma should carry emergency inhalers and bronchodilators. Sedatives and antihistamines may cause drowsiness, slow reaction time, and impair balance and coordination, creating a safety risk during exercise. Stimulants may increase the heart rate and cause unwanted side effects. Exercise is contraindicated in people with known aortic aneurysms, aortic stenosis, decompensated heart failure, pulmonary or systemic embolism, thrombophlebitis, uncontrolled metabolic disorders, and ventricular tachycardia or other dangerous arrhythmias.

Training technologies

Although technology might be at the root of our sedentary lifestyles, we can use it to improve our movement and activity level. Nu-

merous smartphone apps can track walking, eating, sleeping, and exercise levels to promote self-awareness and progress toward goals. Finding these tools is as easy as exercising your fingers to an online search engine. (See *Exercise and fitness apps*.)

Movement mantras

You can help drive a shift toward a more active lifestyle by spreading the word that public health officials have been preaching—but tone it down to the kinder and gentler philosophy of getting into shape simply by moving more. And by all means, set an example yourself. By becoming better examples of healthy living, clinicians can help eliminate the mantra “No pain, no gain” and replace it with this sage advice: If you don’t have time for your health today, you won’t have health for your time tomorrow. ■

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Five easy ways to start exercising. Get moving by changing your thinking and working exercise into daily activity. *Harv Health Lett*. 2014;39(4):6.

Global recommendations on physical activity for

Exercise and fitness apps

A multitude of exercise and fitness apps are available for smartphones, computers, and tablets. Here's just a small sampling.

- MyFitnessPal
- Fitness Buddy
- iFitness
- 1000 Exercises
- Daily Workout Apps
- FitnessBuilder
- GymGoal ABC
- iTreadmill
- RunKeeper Pro
- Women's Health Personal Trainer
- Women's Health Workouts LITE
- Workout Trainer

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2008 Physical Activity Guidelines for Americans. U.S. Department of Health and Human Services. October 2008. www.health.gov/paguidelines/pdf/paguide.pdf.

Online Resources

A. health.gov/PAGuidelines/

B. health.gov/dietaryguidelines/2015/default.asp

C. healthypeople.gov/2020/topics-objectives/topic/physical-activity?topicid=33