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UPDATED PHYSICAL ACTIVITY GUIDELINES

American College of Sports Medicine and American Heart Association provide physical activity recommendations for adults and older adults

All healthy adults ages 18 to 65 years need moderate-intensity aerobic physical activity for at least 30 minutes on five days each week or vigorous-intensity aerobic physical activity for at least 20 minutes on three days each week, according to updated physical activity guidelines released today by the American College of Sports Medicine (ACSM) and the American Heart Association (AHA).

Further, adults will benefit from performing activities that maintain or increase muscular strength and endurance for at least two days each week. It is recommended that 8-10 exercises using the major muscle groups be performed on two non-consecutive days. To maximize strength development, a resistance (weight) should be used for 8-12 repetitions of each exercise resulting in willful fatigue.

The preventive recommendation specifies how adults, by engaging in regular physical activity, can promote and maintain health, and reduce risk of chronic disease and premature death.

A companion recommendation similar to the updated ACSM/AHA recommendation for adults is specifically applied to adults age 65 and older, and adults age 50-64 with chronic conditions or physical functional limitations (e.g. arthritis) that affect movement ability or physical fitness.

The recommendations are an update and clarification of the 1995 recommendation from the Centers for Disease Control and Prevention (CDC) and ACSM on the types and amounts of physical activity needed by healthy adults to improve and maintain health. The intent is to provide a more comprehensive and explicit public health recommendation for adults based upon available evidence of the health benefits of physical activity.

The core recommendation remains fundamentally unchanged despite more than 10 years passing since it was issued. New science has been evaluated to understand the biological mechanisms by which physical activity provides health benefits and the physical activity profile (type, intensity, amount) that is associated with enhanced health and quality of life. This publication reflects a review of that evidence, and considers key issues not fully clarified in the original recommendation.

The updated recommendation for adults is improved in several ways.

1. Moderate-intensity physical activity has been clarified.

The 1995 document specified “most, preferably all days per week” as the recommended frequency while the new recommendation identifies five days per week as the recommended minimum.

2. Vigorous-intensity physical activity has been explicitly incorporated into the recommendation.

To acknowledge both the preferences of some adults for vigorous-intensity physical activity and the substantial science base related to participation in such activity, the recommendation has been clarified to encourage participation in either moderate- and/or vigorous-intensity physical activity. Vigorous-intensity physical activity was implicit in the 1995 recommendation. It is now explicitly an integral part of the physical activity recommendation.

3. Specified: Moderate- and vigorous-intensity activities are complementary in producing health benefits, and a variety of activities can be combined to meet the recommendation.

This combining of activities is based on the amount (intensity x duration) of activity performed during the week and uses the concept of METs (metabolic equivalents) to assign an intensity value to a specific activity.

4. Specified: Aerobic activity is needed in addition to routine activities of daily life.

The updated recommendation now clearly states that the recommended amount of aerobic activity (whether of moderate- or vigorous-intensity) is in addition to routine, light-intensity activities of daily living, such as self care, casual walking or grocery shopping, or that last less than 10 minutes, such as walking to the parking lot or taking out the trash. Few activities in contemporary life are conducted routinely at a moderate intensity and last for at least 10 minutes. However, moderate- or vigorous-intensity activities performed as a part of daily life (e.g., brisk walking to work, gardening with shovel, carpentry) performed in bouts of 10 minutes or more can be counted towards the recommendation. This concept was implied but not effectively communicated in the original recommendation.

5. “More is better.”

The new recommendation emphasizes the important fact that physical activity above the recommended minimum amount provides even greater health benefits. The point of maximum benefit for most health benefits has not been established but likely varies with genetic endowment, age, sex, health status, body composition and other factors. Exceeding the minimum recommendation further reduces the risk of inactivity-related chronic disease. Although the dose-response relation was acknowledged in the 1995 recommendation, this fact is now explicit.

6. Short bouts of exercise are OK.

The original recommendation introduced the concept of accumulating short bouts of physical activity toward the 30-minute goal, but there was confusion about how short these episodes could be. For consistency, the minimum length of these short bouts is clarified as being 10 minutes.

7. A muscle-strengthening recommendation is now included.

Muscle-strengthening activities have now been incorporated into the physical activity recommendation. The 1995 recommendation mentioned the importance of muscular strength and endurance but stopped short of making specific declarations in this area. Available evidence now allows the integration of muscle strengthening activities into the core recommendation.

8. Wording has been clarified.

Minor wording changes in the recommendation have been made to enhance clarity in communications. For example, the term “aerobic,” or endurance, has been added to clarify the type of physical activity being recommended and to differentiate it from muscle-strengthening exercises, which are now part of the core recommendation.

The updates also provide a clearer sketch of what combinations of moderate- and vigorous-intensity activity can be performed to meet this recommendation. Moderate-intensity aerobic activity is described as generally equivalent to a brisk walk, or activity that noticeably accelerates the heart rate.

The recommendations also summarize new research that links muscular strength to health benefits, such as protection against bone loss and a decreased risk of all-cause mortality.

The updated recommendations emphasize that relatively modest amounts of physical activity will improve health; physical activity for cardiorespiratory fitness and expanded health gains, such as weight loss, may require more than a minimum 30 minutes of moderate activity most days of the week. In general, there are more agreements than differences when it comes to physical activity recommendations. Differences on “minutes-per-day” recommendations appear because they are intended for different groups, and may be gender-specific or relevant to overweight or obese individuals.

The papers have published jointly in *Medicine & Science in Sports and Exercise*[®], ACSM’s official journal and *Circulation*, a journal of the American Heart Association. For more information or additional details on the physical activity guidelines, please visit www.americanheart.org/fitness.