

EXERCISE: LIVE LONG AND PROSPER

FOR AT LEAST hundreds of years sloth has been recognized as a deadly sin.¹ In 1995 the CDC and the American College of Sports Medicine (ACSM) added their imprimatur to recommendations that Americans get off their collective couches. Now that they have acquired the prestige of a Government Policy, things will surely change.

Is this news? Actually, in some ways it is (or was in 1995). Previously, many touted a structured approach to exercise, suggesting that health benefits could only be attained through a program of regular vigorous physical activity. The newer guidelines² published by the CDC and ACSM reflect more recent studies indicating that significant health benefits may accrue from surprisingly modest activities, such as gardening and walking.³ This is not to say that an hour of croquet is physiologically equivalent to an hour of racquetball, but for the many who think that with exercise it's all or nothing—and opt for the latter—this may indeed be news worth hearing again (and again).

HISTORY OF EXERCISE

Not until the second half of this century did scientific evidence supporting the health benefits of exercise begin to accumulate. (Before then, you had to rely on common sense.) By the 1970s, data about the effects of vigorous exercise on cardiorespiratory fitness led the ACSM, the American Heart Association (AHA), and other national organizations to begin issuing physical activity recommendations to the public. These recommendations generally focused on cardiorespiratory endurance and specified sustained periods of vigorous physical activity involving large muscle groups and lasting at least 20 minutes on 3 or more days per week. Despite these recommendations, many Americans

proved to be not up to the challenge. For these individuals, the ACSM, the CDC, the AHA, the President's Council on Physical Fitness and Sports, and the National Institutes of Health have all recommended regular, moderate-intensity physical activity as an option for those who otherwise get little or no exercise. They can't all be wrong.

BENEFITS OF REGULAR PHYSICAL ACTIVITY

Regular physical activity that is performed on most days of the week reduces the risk of developing or dying from some of the leading causes of illness and death in the United States. Regular physical activity reduces:

- the risk of dying prematurely
 - the risk of dying from heart disease
 - the risk of developing diabetes
 - the risk of developing hypertension
 - blood pressure in already hypertensive individuals
 - the risk of developing colon cancer
 - the risk of falling among the elderly
 - feelings of depression and anxiety
- And if that isn't enough, it may help
- weight control
 - build and maintain healthy bones, muscles, and joints
 - foster a sense of psychological well-being

PHYSICAL ACTIVITY AMONG AMERICANS

Despite these substantial health benefits of physical activity, the recently released Surgeon General's Report³ provides striking evidence that many if not most Americans overwhelmingly lead lives that can be charitably described as sedentary. Nearly one-third of those active enough to respond to a recent Behavioral Risk Factor Surveillance Survey reported participating in no physical activity at all,[†] and two-thirds reported at most irregular activity.

OK, BUT WHAT ABOUT OREGON?

A recent CDC report placed Oregon among the top states in the nation for the percentage of people engaged in regular, sustained physical activity. But this doesn't mean that we're healthy enough to do regular, sustained jumping for joy over this news. Far from it. If most of the country scored an F, Oregonians only managed to score a D. In fact, 20% of adult Oregonians reported participating in no physical activity at all and 46% of those responding reported at most irregular physical activity. These pathetic figures hold true regardless of sex, race, income, and education. In part, this torpor may reflect a belief that only regular and vigorous physical activity will lead to better health—a belief supported by previous guidelines. But that was then. This is now, and that excuse no longer holds water.

CURRENT RECOMMENDATIONS

Examples of the kinds of moderate-intensity physical activities being touted are shown in the table (*verso*). Walking, climbing stairs (rather than taking the elevator), and even doing more house and yard work that requires mobility all can qualify. The evidence further suggests that the health benefits may be similar whether the physical activity occurs in one long session (e.g., 30 minutes) or in several shorter sessions (e.g. three 10-minute sessions). Mounting evidence suggests that the health benefits of physical activity are linked principally to the total amount of physical activity performed and not necessarily to the intensity or duration of the activity. Additionally, many people are more likely to continue a program of physical activity that can be spread throughout the day. One study, for example, has shown greater adherence to a walking program among those walking several times per day than among those walking once per day, when the total

*and if you chew gum at the same time—whoa, back off!!

† an impressive feat in and of itself. Presumably some threshold was implied or stated.

amount of walking time was kept the same.

People differ in their ability to perform various physical activities and these newer guidelines suggest an approach that nearly everyone can live with, to wit:

- all persons over two years old should accumulate at least 30 minutes of at least moderate intensity physical activity on most — preferably all — days of the week.
- The recommended 30 minutes of activity can be accumulated in bouts as short as 8 to 10 minutes.
- Those who perform lower-intensity activities should do them more often, for longer periods of time, or both.
- So-called “lifestyle” activities such as walking and gardening can be combined with more structured exercise such as jogging or swimming to

contribute to the daily total.

- Additional health benefits can be achieved by adding more time in moderate-intensity activity, or by substituting more vigorous activity.
- Persons with symptomatic cardiovascular disease, diabetes, or other chronic health problems who would like to increase their physical activity should be evaluated by a physician and provided an exercise program appropriate for their clinical status.
- Previously inactive men over age 40, women over age 50, and people at high risk for CVD should first consult a physician before embarking on a program of vigorous physical activity to which they are unaccustomed.

WHAT TO DO?

The new guidelines offer many options for those who would either like to begin or continue with a program of

physical activity. Summer-time is a great time to begin by getting out and working in the yard or taking a few walks during the day and maybe a longer hike on the weekend. For those who enjoy team sports, 15-20 minutes of competitive basketball or 45 minutes of volleyball will meet a day’s exercise requirement. For those who are unable to participate in vigorous activities, walking 1-3/4 miles in 35 minutes or spending 30-45 minutes gardening can provide the recommended daily activi-

ty. And people can mix and match — volleyball one day, bicycling the next, and walking or gardening on other days. For most people a program of one or more low- to moderate-intensity activities is most likely to encourage continued participation. The important thing, however, is designing a program with one or more activities that are enjoyable, and sticking to it! People are more likely to continue a program of physical activity if the activities are ones they enjoy. And again, that activity needn’t be continuous; walking a mile in 20 minutes in the morning and 3/4 of a mile in 15 minutes in the afternoon provides similar benefits to one continuous walk.

Physicians and other health advisors can play an important role by encouraging their patients and clients to either begin a program of physical activity, or to increase their level of activity as appropriate. Exercise should be seen as an integral part of everyone’s health care program. The current recommendations make clear that effective programs of physical activity are possible for everyone — children, active and inactive adults, the disabled, and seniors — and that even small changes that increase daily activity can substantially improve health and quality of life.

REFERENCES

1. Aquinas, T. *Summa Theologica*. Paris? ca. 1274. 1-2, q. 84, aa. 3-4.
2. Pate, RR, et al. Physical activity and public health: A recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine. *JAMA* 1995;273:402-407.
3. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health. *Physical Activity and Health: A Report of the Surgeon General*. 1996.

Opportunities for Exercise in Daily Life

- Walking and waxing a car for 45-60 minutes
- Washing windows or floors for 45-60 minutes
- Playing volleyball for 45 minutes
- Playing touch football for 30-45 minutes
- Gardening for 30-45 minutes
- Wheeling self in wheelchair for 30-40 minutes
- Walking 1-3/4 miles in 35 minutes (20 min/mile)
- Basketball (shooting baskets) for 30 minutes
- Bicycling 5 miles in 30 minutes
- Dancing fast (social) for 30 minutes
- Pushing a stroller 1.5 miles in 30 minutes
- Raking leaves for 30 minutes
- Walking 2 miles in 30 minutes (15 min/mile)
- Water aerobics for 30 minutes
- Swimming laps for 20 minutes
- Wheelchair basketball for 20 minutes
- Basketball (playing a game) for 15-20 minutes
- Bicycling 4 miles in 15 minutes
- Jumping rope for 15 minutes
- Running 1.5 miles in 15 minutes (10 min/mile)
- Shoveling snow for 15 minutes
- Stairwalking for 15 minutes

*less vigorous,
 more time*



*more vigorous,
 less time*