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FITNESS AND YOU

There's proof walking reduces risk of death

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It's hard sometimes, and a little frustrating too, to provide people with the proof they demand that improved physical activity habits will pay off for them.

Because of the difficulty of isolating causes and effects when doing lifestyle research, and because of the relatively recent start on lifestyle research, in the field of fitness there has not been much in the way of 'ironclad, irrefutable, money in the bank, swear on your mother's grave' type evidence about the links between physical activity and good health.

And you can't blame people for requesting this type of evidence. After all, physical activity is hard work as most people see it, and it wouldn't be prudent for them to invest a lot of time and energy when the results were still somewhat in doubt.

If the results were certain or the energy investment were less, maybe things would be different for some people.

Fortunately, a recent study has provided good news on two fronts for these people. First, the results of the study, conducted in Dallas at the Institute for Aerobic Research, indicate that exercise confers significant protection from all causes of death – reducing the risk of death by ½ or more in men and women.

Second, the exercise level required to achieve most of this protection is quite manageable for the average person – as little as a 30 minute, 2 mile walk each day.

Previous studies, of course, have reached similar conclusions about the relationship between physical activity and longevity. In particular, protection against cardio-vascular disease has been well-established.

What makes this study important is its size and scope. The study has been called the most comprehensive fitness study ever conducted.

The study, published in the *Journal of the American Medical Association* in November, followed 13,344 subjects for eight years. Apart from the large sample size and long-term observation period, this study has also improved on previous studies by including both men and women (where most other studies included only men). In addition, the study continuously took objective treadmill measures of participants' fitness rather than relying on participants' self-reports of how much they exercise, which had been the standard for previous studies.

The study began with healthy participants who were divided into five groups based on their fitness levels. The lowest fitness group (group 1) was comprised of primarily sedentary people while the highest fitness group was comprised of people who exercised regularly, including individuals who ran as much as 40 miles per week.

Persons with pre-existing heart disease or hypertension were excluded from participation in the study. At the end of the 8 year study, 283 of the participants had died.

STUDY FINDINGS

In short, the important findings of this study were these;

* that risk of death from all causes is reduced by one-half or more in both men and women by being physically active;

* that in addition to protection from heart and vascular disease, exercise also provides protection from death attributable to a wide variety of other causes, including cancer;

* that risk of death can be cut by one-half simply by moving from a sedentary life-style to very light activity, approximately equivalent to walking 2 miles in one half-hour each day;

* that risk of death continues to decrease as exercise levels increase but that returns diminish as activity level increases beyond the half-hour walk intensity.

Although the mechanisms providing protection remain largely a mystery, the message is becoming clear. Quite plainly, people who exercise, even moderately, live longer.

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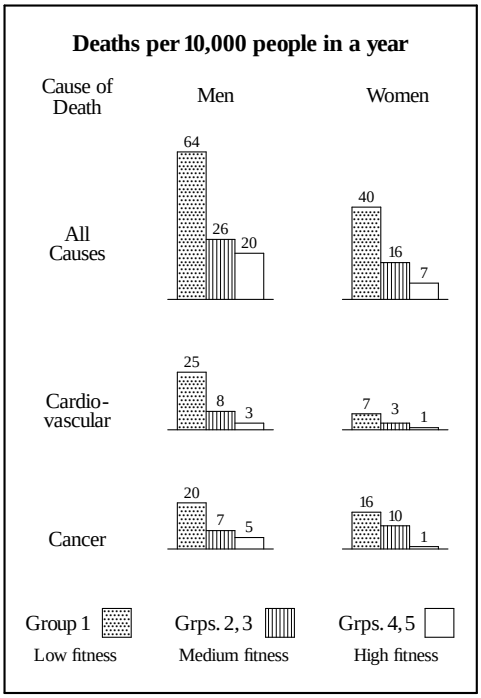

REFERENCE: Blair, S.N., Kohl, H.W., Paffenbarger, R.S., Clark, D.G., Cooper, K.H. and L.W. Gibbons: Physical Fitness and All-Cause Mortality. A Prospective Study of Healthy Men and Women. *J. Amer. Med. Assoc.* **262**(#17): November 3, 2395-2401 (1989). [D.C. Library call number PER R15.A48]

See also the editorial on page 2,437 of the same issue of this journal.