

Exercise = Weight Loss, Except When It Doesn't



People who exercise regularly give many reasons for why they do what they do regardless of life's demands. They say exercise can improve their health, mood, strength and stamina.

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But for many, whether they say so or not, a desire to lose or control weight is a major motivation. Deciding if exercise is an effective method, though, can be a challenge.

On one hand, you may have heard that exercise is not very useful for knocking off extra pounds, though it helps to maintain weight. Or you may have heard that only weight-bearing exercise — like jogging or brisk walking — can help you lose those unwanted pounds, while activities like swimming and cycling are not helpful as far as weight goes.

At other times you may have wondered why, after you took up activities that were supposed to burn 500 calories a day, you failed to lose that pound a week.

What is the truth about exercise and weight, and how can you accurately calculate the caloric value of various activities?

In the August/September issue of ACE Certified News (published by the American Council on Exercise), Ralph La Forge, managing director of the Duke Lipid and Disease Management Preceptorship Program at Duke University Medical Center, compiled a detailed analysis of the various factors that influence the effect of exercise on weight loss.

Mr. La Forge started by refuting the prevailing belief that since a pound of fat (when burned) gives off 3,500 calories and since running or walking a mile burns 100 calories, a person should lose a pound for every 35 miles. In other words, if a previously inactive person starts running or walking five miles a day, that person should lose a pound a week, all other things being equal.

Some Calories Have to Be Subtracted

Not so, says Mr. La Forge, because this estimate fails to subtract the number of calories that person's body would have used had it just sat still for those hours. Rather, for a 154-pound person, the net caloric cost would be 54 calories per mile when walking up to 3.5 miles per hour, 97 calories speed-walking at 3.5 to 5 m.p.h., and 107 calories jogging or running.

In other words, running uses nearly twice the calories used when walking at a moderate pace over the same distance. Your starting weight is also a factor: if you weigh less than 154 pounds, the caloric burn is proportionately less; if you weigh more than 154, it is higher.

Furthermore, if you walk or run on a treadmill, the aid of the machine diminishes the number of calories your body uses by about 10 to 15 percent of what the machine says you are burning. But, Mr. La Forge noted, there is a positive side: "The mechanical advantage of some machines enhances exercise comfort and reduces impact and musculoskeletal stress."

In addition, if the weather is bad and you are unable or reluctant to work out outdoors, being able to exercise indoors may mean that you use more calories a week than you would otherwise.

Duration and intensity of physical activity are important factors in how much fat the body burns for energy, which, after all, is what you want to lose. The harder and longer you work out, the more fat you will shed.

When you [diet](#) without exercising, you lose both muscle and fat, which is counterproductive because muscle loss significantly lowers your basic metabolic rate, the number of calories your body uses at rest.

Type of Activity Matters

Weight-bearing activities that work against gravity — aerobic activities like walking, running, cross-country skiing, dancing, skating and stair-climbing — use proportionately more calories at a given level of effort than swimming, cycling or water aerobics.

The more muscle groups involved in your activities, the more calories you are likely to burn. That is why working out against gravity uses more calories than non-weight-bearing activities. On the other hand, because activities like swimming put less stress on weight-bearing joints, many people can do them for longer periods, making up for the lower caloric burn.

If your workout includes hills (real ones or on exercise equipment), you will use more calories per minute than doing the same activity on level ground. But if you engage in resistance exercises — working out with weights or on machines that strengthen various muscle groups — you may gain several pounds of muscle that partly offset the loss of body fat.