

**Rationale for Exercise Program for Weight Management
Strategies for Success in Health Management**

Estimated calories expended per hour

Person weighing	Person weighing	120lbs	180 lbs
washing dishes		110	153
making beds		180	270
walking the dog (2MPH)		180	288
raking leaves		186	240
mopping		210	252
gardening		220	300
scrubbing (walls,tubs)		240	300
mowing lawn (push mower)		275	350
shoveling snow		530	768

Estimated calories expended per hour

Person weighing	Person weighing	120lbs	180 lbs
aerobic dance		289	391
tennis (singles)		357	483
bowling		176	240
golf (carrying clubs)		212	288
running (10MPH)		765	1035

Why does aerobic exercise have minimal effect in accelerating weight loss when combined with a low-calorie diet?

Many overweight/overfat individuals are unable to perform high amounts of exercise without subjecting their bodies to an undue level of orthopedic stress-thereby incurring an injury. High amounts of exercise are needed to promote weight loss, but the risk of orthopedic injury limits the amount of exercise that can be safely performed by many overweight/overfat individuals.

Some individuals who exercise tend to reward themselves by resting and relaxing more after their workouts are over. As a result, the net change in their total 24-hour caloric expenditure levels may be virtually unchanged.

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The "net caloric expenditure" of moderate aerobic workouts is relatively small. The net calorie cost of exercise is equal to the number of calories expended during an exercise bout that are used beyond the number of calories expended by an individual's resting metabolism (RMR) and other activities that the individual might have engaged in had he/she otherwise not been exercising

Net Caloric Expenditure for 4-Mile Walk in 1 Hour by a 150 lb. Person

Variable	Calories Expended
Gross Caloric Expenditure for a 4-Mile Walk	320

Resting Metabolic Rate for 1 Hour	-70
Caloric expenditure for mild physical activity the person might have engaged in had he/she not been formally walking	-70
Net Caloric Expenditure of a 4-Mile Walk*	180

*Note: One pound equals 3,500 calories.

Why to do aerobic exercise even if it does not increase rate of weight loss

It is important to keep in mind that the less lean body mass you have, the lower your resting metabolic rate will be. As a result, it is more likely that you will regain some or all of the weight loss you may have achieved. On the other hand, if you engage in exercise designed to improve your muscular fitness level at the same time you are losing weight, you will enhance the likelihood that you will be able to maintain your level of lean body mass.

It takes 2 types of exercise to lose weight and keep it off:

1. To burn a high number of calories (aerobic-type exercise),
2. To build and preserve muscle tissue (strength-training exercise).

Muscle tissue enables you to lose weight and keep it off because it helps you maintain your resting metabolic rate, thereby allowing you to burn a greater number of calories when you're at rest.

An analysis of the available data indicates that, in general, the combination of a conventional aerobic exercise program with a severely calorie-restricted diet does little (if anything) to help preserve lean body mass during weight reduction.

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As a consequence, the optimal exercise prescription for sound weight management is one that combines aerobic conditioning and strength training.