

WEIGHT LOSS / EATING HABITS

Exercise and Weight Loss: What to Tell Your Patients

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As a new year begins, more and more patients will enter your office seeking weight-loss advice. Most will join a local gym and then never use it again. Others will be hesitant to start an exercise program and concentrate on calorie reduction only. As people begin to think about weight loss, it's important to recognize that there are varied opinions out there on whether exercise actually leads to weight loss. Let's take a look at what the literature says regarding whether exercise will lead to weight loss, how much exercise and which types of exercise are best to facilitate weight loss, and what information you can share with your patients on this subject.

How Much Exercise Is Enough?

The American College of Sports Medicine has produced position statements over the years that recommend certain doses of exercise for helping in weight loss. In 1995, they recommended physical activity at least 30 minutes per day for three to five days per week. This was then extrapolated to the general population as the desired exercise amount for weight loss. However, there wasn't much weight-loss success when this was instituted.

In 2007, the ACSM changed its position statement specifically for weight loss. Physical activity recommendations increased to greater than 250 minutes per week for any significant level of weight

loss when combined with a restricted diet.¹ That said, it's important to note that the amount of exercise required to prevent weight regain for those who have lost weight is different than that

required for prevention of weight gain for normal weigh people. Schoeller, et al.,² conducted a prospective study and found that 80 minutes per day of moderate activity or 35 minutes per day of vigorous activity added to a sedentary lifestyle was sufficient. Phelan, et al., verified these findings,

indicating that more activity may be needed to prevent weight regain than to prevent weight gain.³

The National Weight Control Registry, started in 1994, the largest prospective investigation of longterm successful weight-loss maintenance, became a real eye opener in terms of the efforts that go into long-term weight maintenance. The average successful person has lost on average 66 pounds and has kept the weight off for an average of 5.5 years. Not surprisingly, 90 percent exercise, on average, about one hour per day, and 94 percent have increased their physical activity, with the most frequently reported form of activity being walking.⁴

Exercise and Preventing Loss of Resting Metabolic Rate

Apart from assisting in weight loss, exercise has significant benefits in preventing reductions in the resting metabolic rate (RMR). As we age, we tend to lose fat-free mass (FFM), which leads to a gradual drop in our resting metabolic rate. Unless we begin to gradually eat less as we age, this can be a

primary factor in weight gain.

However, does exercise actually prevent decreases in our resting metabolic rate? Most studies show this to be the case. A one-year study on weight loss in moderately overweight men showed a significant decline in RMR for those placed only on energy restriction. However, the group that reduced weight through exercise had no change in RMR.⁵ Another study also found that RMR

consistently declines in sedentary women, but not in women who perform regular endurance exercise.⁶

What Kinds of Exercise Are Best for Weight Loss?

A big misconception when it comes to weight loss is that a person needs to "start" an exercise program. All too often, we will see these type of patients entering our office in the new year, full of New Year's resolutions and ready to join a fitness club or begin some form of regimented exercise program. Others tend to limit the exercise part of their weight-loss program because they either don't have time to join a club or may feel a certain level of embarrassment because of their current weight.

However, increasing physical activity doesn't necessarily mean putting time aside to do a structured exercise program. The key is to gradually begin introducing various activities throughout the day to increase energy expenditure. Taking a sedentary person from no physical activity to a high dose of activity can often lead to failure in a weight-loss program. A study that investigated the perception of exercise difficulty in predicting weight regain after a weight-loss program noted an association between rating of perceived exertion and weight regain, indicating that it was an important predictor

of weight regain following a weight-loss intervention.⁷

If a structured program is not the answer for every patient, then what are the options? No one particular exercise appears to be the magic bullet. The type of exercise you recommend to your patients will depend on several factors, including their fitness level, motivation, presence of associated medical conditions (example: arthritic knees), and willingness to make time for exercise.

The Value of Intermittent Exercise

Intermittent exercise refers to the ability of doing frequent bouts of exercise (e.g., three sets of 10minute bouts of exercise) during the course of the day rather than a continuous 30-minute exercise

session. Although intermittent exercise has been shown to increase cardio respiratory fitness⁸ and have positive effects on coronary heart disease risk factors, there is no substantial evidence that it is

effective in initiating weight loss in overweight people. However, one study⁹ did examine the use of short bouts of exercise with overweight, young women who were undergoing a calorie-restricted diet. The study found that exercise accumulated in several short bouts has similar effects to a continuous bout with regard to aerobic fitness and weight loss.

Even though studies have not provided solid evidence of the utility of short bouts of exercise, this does not mean that prescribing intermittent bouts of exercise for your patients will result in failure. Please note that any form of exercise is better than none. This form of exercise has two advantages which can be utilized when setting up a weight loss exercise prescription:

Prevents weight gain: Intermittent exercise alone may not be effective in weight loss, but has been shown to be especially effective in preventing weight gain and for improving some measures of

metabolic fitness.⁹

Effective for initial adoption of exercise: Jakicic, et al., have shown that this strategy can be effective for initial adoption of exercise.¹⁰⁻¹¹ It can be advantageous for people who are sedentary, have no time for exercising, lack motivation in initiating an exercise program, or dislike continuous exercise. The recommendation to utilize intermittent exercise allows an individual to gradually adopt an exercise program without feeling that they are making a sudden, dramatic lifestyle change. The challenge lies in increasing the physical activity recommendations once the client has lost some weight, citing an increase in client confidence and motivation as the driving force for making long-term lifestyle changes.

Lifestyle Activity and Weight Loss

Increasing lifestyle activity is of some benefit for patients who are sedentary and require initial

adoption of exercise. When combined with a dietary intervention, Andersen, et al.,¹² demonstrated that lifestyle activity results in weight loss comparable to aerobic forms of exercise after 16 and 68 weeks of treatment. Their study also supports the concept that a program of caloric reduction plus lifestyle physical activity may be a suitable alternative for dieting adults who have difficulty adhering to a program of vigorous activity.

Although opinions regarding the value of exercise in facilitating weight loss are varied, there is a consensus that a combination of exercise, calorie restriction and behavioural changes is absolutely

critical.¹³ A comprehensive assessment of a patient's ability to adhere to an exercise program is essential prior to making the right recommendations on the type of program to pursue. A structured program is not always the only solution.

Constantly educating the patient on the importance of exercise in terms of their overall health is essential to maintain motivation, in addition to ensuring that increased physical activity becomes an ingrained habit even after weight loss is achieved. So, the next time a patient enters your office with the perception that exercise isn't necessary in their weight-loss goals, utilize this information to help them on the path to weight loss and long-term weight-loss maintenance.

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