

LAWSUIT PROOFING YOUR FACILITY | IDEAL WEIGHT GUIDELINES

# Fitness Management<sup>®</sup>

ISSUES AND SOLUTIONS FOR FITNESS FACILITIES

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CHOOSING THE RIGHT  
**CARDIO**  
EQUIPMENT

HOW TO PROFIT FROM  
**CARDIO TECHNOLOGY**

**DO AV SYSTEMS IMPACT  
MEMBER RETENTION?**

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By Matt Brzycki

## Is it important to exercise at the same time every day?



From the standpoint of program adherence, it's probably better to exercise at the same time every day. If a block of time can be set aside, or an "appointment" can be scheduled for exercise, the odds are much better that the workout will get done and become part of a regular routine. In addition, exercising at different times makes it more difficult to gauge performance. If you exercise at roughly the same time of the day, you'll find that your performances are less variable. **FM**

## Is low-intensity exercise better than high-intensity exercise for fat/weight loss?

Training with a relatively low level of intensity uses a greater percentage of fat; training with a relatively high level of intensity uses a greater percentage of carbohydrates. These physiological facts have led to the mistaken belief that low-intensity activity is better than high-intensity activity when it comes to using fat and losing weight.

In truth, even though a greater *percentage* of fat calories are used during low-intensity activity, a greater *number* of fat calories (and total calories) are used during high-intensity activity. In one study, a group of subjects walked on a treadmill at an average speed of 3.8 miles per hour (mph) for 30 minutes. In this instance, the subjects expended an average of about 240 calories, of which 59 percent (144) were from carbohydrates, and 41 percent (96) were from fat. As part of the study, the same group also ran on a treadmill at an average speed of 6.5 mph for 30 minutes. At this relatively higher level of intensity, the subjects expended an average of about 450 calories, of which 76 percent (342) were from carbohydrates and 24 percent (108) were from fat. In other words, training with a higher level of intensity resulted in a greater total caloric expenditure than training with a lower level of intensity (450 calories compared to 240), and also used a greater number of calories from fat in the same length of time (108 calories compared to 96).

Researchers in the area of exercise and weight management generally agree that it probably doesn't matter whether fat or carbohydrates are used while training in order to lose fat/weight. The main determinant of fat/weight loss is calories. **FM**



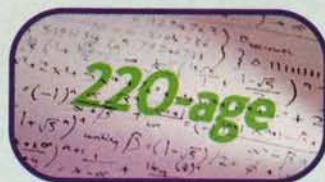
## Is it more accurate to use the term "kilocalorie" rather than "calorie"?

A calorie can be defined as the amount of heat needed to raise the temperature of 1 gram of water 1 degree Celsius. The term "calorie" is also used to discuss physical activity and food intake. To be accurate, however, it should really be "kilocalorie" (which is the amount of heat needed to raise the temperature of 1 kilogram of water 1 degree Celsius). Though incorrect, it has become standard practice to use "calorie" instead of "kilocalorie." **FM**



## Are there equations other than "220 - age" for estimating maximum heart rate?

There are literally dozens of equations to estimate age-predicted maximum heart rates. However, no equation has been more widely used than "220 - age." Despite its popularity, the accuracy of the equation has been questioned.



It's important to know that when "220 - age" is compared to other equations, there's actually little difference between them. For nearly all age groups, most of the equations differ by no more than about five beats per minute (which becomes an even smaller difference when multiplied by 60 to 90 percent to determine a heart rate training zone).

The actual maximum heart rates of individuals vary considerably and, thus, are difficult to estimate in a precise manner. So, realize that the equations are only estimates of the age-predicted maximum heart rate. And, most equations offer roughly the same degree of accuracy. However, the equation "220 - age" is more convenient and less complicated than others. **FM**

Matt Brzycki is coordinator of recreational fitness and wellness programs at Princeton University, N.J. He has more than 20 years of experience at the collegiate level and has authored, co-authored or edited 11 books.

Do you have questions that you need answered? Email them to [edit@fitnessmgmt.com](mailto:edit@fitnessmgmt.com).