Aerobic vs. Anaerobic

Aerobic exercise seems to be a core component of many fitness programs, especially beginner’s workout routines. However, should they incorporate anaerobic exercise as well? A fundamental question centers around aerobic vs. anaerobic exercise and the benefits that each offer. It’s really a difference of low intensity vs. high intensity. Generally people think of aerobic training as low intensity cardio performed in the “fat burning zone.” There is less familiarity with anaerobic exercise. Anaerobic exercise encompasses high intensity training such as a strength training routine or HIT routine. This chart breaks down different exercise zones by heart rate (aerobic is in the middle, anaerobic is darker in color).

Aerobic vs. Anaerobic Exercise

Aerobic literally means “with oxygen.” Oxygen is required to keep muscles in motion for a long period of time. Muscles use this oxygen to burn fat. Aerobic exercises include activities that are long duration and low to moderate intensity, including jogging, swimming, cycling, or skiing.

Just as aerobic means “with oxygen,” anaerobic means “without oxygen.” While you obviously need oxygen to perform anaerobic exercise, your muscles do not receive enough oxygen to generate energy to maintain a high intensity exercise. Instead, the muscles utilize glycogen, which ultimately comes from carbohydrates. Activities that are short and intense are considered anaerobic exercises, including sprinting and weight training.
Benefits of Aerobic Exercise

Aerobic exercise has a number of health benefits. At least 30 minutes of daily activity can help improve your heart, lungs and blood flow that ultimately leads to a longer life. Here are some other benefits:

1. Weight loss
2. Increased endurance
3. Improved immune system
4. Reduced risk of obesity, heart disease, high blood pressure, type 2 diabetes, stroke, and certain types of cancer
5. Improved cardiovascular system and circulation
6. Increased good cholesterol, decreased bad cholesterol

Benefits of Anaerobic Exercise

Anaerobic exercise also offers quite a few benefits. Anaerobic exercise makes your muscles stronger and helps decrease body fat. A strength training routine allows you to build muscle mass, increase bone density, decrease body fat, and provides many of the same overall health benefits as aerobic exercise. Another common form of anaerobic training is a HIT (High Intensity Training) routine, which involves short bursts followed by recovery periods. This type of training has been shown to increase your metabolism after completion of the exercise to allow for more calorie burning than low intensity exercise. There’s also the release of HGH, a hormone that promotes fat loss and muscle gain. You also improve your cardiovascular system and increase your aerobic capacity. That’s right, anaerobic training actually helps your aerobic capacity.
Performing Aerobic Training and Anaerobic Training

As you can see, both aerobic training and anaerobic training each have unique benefits. Therefore, both are a valuable part of any fitness routine. However, aerobic exercise should be the starting point in a beginner’s workout routines. To perform high intensity anaerobic training, you must have a good aerobic base built up. There is debate amongst advanced exercises whether they should perform aerobic vs. anaerobic exercise. Aerobic exercise is almost too easy for such people and does not necessary provide a workout that is as beneficial, especially given the fat burning effects of anaerobic exercise. Aerobic exercise should still be included though as there are important health benefits to lower intensity exercises. Additionally, too much anaerobic exercise can lead to burnout or overtraining injuries.

Next time you choose between aerobic vs. anaerobic exercise, remember that the difference is really low intensity vs. high intensity. Aerobic training is low intensity, long duration and anaerobic training is high intensity, short duration. Aerobic exercises like walking or jogging offer numerous health and cardiovascular benefits while anaerobic exercises such as a strength training routine or HIT routine generally allow for more efficient fat burning and muscle building.