

## **The Need for Aerobic Exercise In Anti-Aging and Disease Prevention**

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The human body has over 600 muscles, giving it a tremendous capacity for movement and physical activity. Regular physical activity is as much a natural way of living as breathing in oxygen. Yet the average North American moves very little. Our activity level has been reduced by cars, washing machines, assembly lines, farm equipment, supermarkets, elevators, snow blowers, and golf carts, to name only a few movement-saving devices.

Going against our genetic blueprints in this way leads inevitably to disease and degeneration. The progressive decline in physical activity during this century has paralleled and contributed to the rise in obesity, heart disease, and cancer.

We have to find twentieth century substitutes for the activities we no longer need to perform. Walking, jogging, cycling, rowing, swimming, aerobics, dancing: there are lots of alternatives. Your body demands a minimum amount of physical activity every week. If it doesn't get enough, it undergoes a degenerative process that can be likened to starvation.

Even if your diet is ideal, your muscles will generate and shrink without adequate exercise. They will also become more susceptible to tears and ruptures. They will no longer adequately support your joints, especially your hips, knees, and lower back. You will be prone to osteoarthritis. Your bones will lose calcium more easily, increasing your chance of developing osteoporosis. Without adequate physical activity, you can count on progressive deterioration of your muscle and bone structure, your cardiovascular integrity, your digestive tract, and your other organ systems.

Exercise is one of the most empowering activities there is. You commit yourself, you carry out your intentions, and you enjoy the benefits. Many of the people I counsel have begun with a simple exercise program three times a week. Then they used the enthusiasm, self-confidence, and organization skills they gained to enrich their lives with other activities that contributed to their personal growth activities.

## **Importance of Aerobic Exercise**

Aerobic exercise increases the participant's oxygen intake and heart rate. Regular participation in an aerobic exercise program prevents the deterioration of your body, as well as bringing a huge number of positive health benefits. By aerobic exercise, we mean any activity that accelerates your heart rate within what is known as the "aerobic training zone" for a minimum of 20 minutes (ideally 30 to 60 minutes) at least three times a week. You should exercise at a level of intensity that has you breathing harder than normal but that still allows you to carry on a conversation. Examples of aerobic exercise including

jogging, stationary cycling, rowing, long-distance swimming, cross-country skiing, and dancing. All of these forms of exercise provide many health benefits.

## **Cardiovascular Benefits**

Aerobic exercise improves the capacity of your body's tissues to extract oxygen from red blood cells, transport it to the inside of the cells, and use it for energy production.

Although your red blood cells are always saturated with more oxygen than your body requires at any given moment, the ability of the tissue to pick up this oxygen can vary greatly from one person to the next. Any aerobically fit person picks up oxygen from the bloodstream about 25% more efficiently than someone who is unfit. And the more oxygen your tissues can pick up, the less stressful it is for your heart to deliver adequate quantities of oxygen to your tissues.

Light activity alone does not significantly improve the utilization of oxygen in your body. You must maintain an increased heart rate at least 20 minutes three times a week to create these aerobic adaptations. In just six to eight weeks, the average person can increase his or her oxygen consumption by 10-15% through aerobic exercise.

The benefits of improved oxygen utilization are enormous. You will have more energy. Your tissues will become more efficient at using the oxygen that is already there so your heart will be under less stress. Your heart will also become stronger and able to pump more blood through your body with every beat. Thus, it can beat more slowly and still provide adequate blood to your body. On average, an aerobically fit person actually has a slower resting heart rate (48 to 66 beats per minute) than an aerobically unfit person (72 to 99 beats per minute).

A slower resting heart rate is a tremendous advantage in itself. Between heart beats, your heart can deliver blood to its own coronary vessels and supply itself with more oxygen. To appreciate the importance of these aerobic adaptations, keep in mind that a heart attack occurs when your heart muscle cannot get the oxygen it needs. So, the better equipped your heart is to deliver oxygen to its own muscles, the better off you are. But that's not all. Studies also show that aerobically fit exercisers have higher levels of HDL cholesterol ("good" cholesterol) in their bloodstream. HDL cholesterol helps to prevent the arteries from narrowing and may even reverse the narrowing process.

## **Stress Reduction**

Aerobic exercise lowers psychological stress by balancing and regulating hormones that promote high blood pressure. During periods of stress, the amount of adrenaline hormones in your system increases. During aerobic exercise, your body releases adrenaline slowly and regularly; after exercising, your level of adrenaline returns to the

ideal baseline. Thus, aerobic exercise can help you relieve stress and retard the development of high blood pressure.

Many highly stressed people have discovered that aerobic exercise helps them unwind. It's also a great way to clear the cob-webs from your head and reduce the mental pressures of the day. In fact, aerobic exercise takes you into an "altered" state of consciousness that triggers positive thoughts, making it a powerful mind-body experience. For example, it is well-documented that exercise helps prevent recurring depression. It induces runner's high, the heightened mood state that usually kicks in 20 to 30 minutes into an aerobic workout session. Some research indicates that this high is actually created by the release of pleasure-giving brain chemicals known as endorphins.

Finally, exercise affects your appetite and food choices. Most people find it easier to make healthy food choices after an exercise routine. The appetite center seems to prefer healthier, lighter foods.

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Exercise and Fat Reduction

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