

THE BASIC FUNDAMENTALS OF EXERCISE

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Have you ever thought of exercise as free medicine? Regular exercise has long been identified as an essential component to good health. It has the ability to cure, abolish, and minimize many chronic ailments plaguing people in our society today. This month's message serves as a well-timed follow-up to our previous article titled "*Starting an Exercise Program and Sticking to It*". Hopefully most of you have decided to embrace the powerful health benefits of regular exercise. For those of you still struggling with the idea of working up a good sweat for better health, it is never too late to start. Included in this article is a brief summary about some of the basic elements that comprise a balanced exercise program and how these elements can benefit your health.

There are some key points that must first be reviewed from last month's article on exercise. Exercise is something that needs to be fun, enjoyable, convenient and safe. Exercise activities should be appropriately geared toward the physical capabilities of the individual. An exercise program that may be considered safe for one individual may not be safe for another due to age, physical limitations, and other general health concerns. For this reason, a beneficial exercise program can vary greatly from one individual to the next. The great thing about exercise is that it can encompass so many different activities. Discussed below are three key components of a balanced exercise program.

Aerobic or *endurance* exercise improves the body's capacity to deliver oxygen to working muscles and organs. Swimming, bicycle riding, jogging, and power walking are a few examples of this type of exercise. It is recommended that an individual engage in a minimum of 30 minutes of endurance exercise at least three times per week. Aerobic and endurance exercise benefits the cardiovascular system and can strengthen heart function, lower blood pressure and bad cholesterol levels. It is also a great way to help lose weight, and for diabetics to control their blood sugar levels.

Resistance or *strengthening* exercise helps a muscle's ability to contract and do work. Strengthening exercises can vary from using machines in a fitness facility to using simple dumbbells at home. The main benefits of this type of exercise are obvious in one's ability to improve or maintain strength, but strengthening exercises can also help with preserving and building bone density, therefore being preventative against osteoporosis and the risk of fracture from falls. Strengthening exercise can also boost metabolism and help keep a healthy body weight.

Flexibility exercises help maintain a joint's complete movement or range of motion. Stretching is the most familiar form of this type of exercise but it can also

include activities such as Tai Chi, Pilates, and Yoga. Holding a sustained stretch for 15 to 30 seconds can make modest flexibility gains. This type of exercise becomes especially important when preparing for any endurance or strengthening activity to help ready the body and minimize the risk of injury. Individuals with arthritic conditions can find this type of exercise extremely beneficial in helping them cope with stiff and painful joints.

A total exercise program should incorporate the three components of *endurance*, *strength* and *flexibility*. As an individual's fitness level improves, the nature of their exercise program must also change in order to get continued benefits. The exercise characteristics of *intensity*, *duration*, and *frequency* will influence how one progresses through an exercise program. Let's first look at endurance exercise as an example. Someone performing the endurance portion of their exercise program of walking will find that after a short while they are able to walk quicker (intensity), longer (duration), and 5 days a week instead of 3 (frequency). This same person also finds that they are progressing in their resistance program because they can now lift a heavier dumbbell (intensity), 8 times instead of 5 (duration), and 6 times a week instead of three (frequency). For completion of this example, this individual is becoming more flexible and can now sit and reach further toward their toes (intensity), for 15 seconds instead of 10 (duration), and everyday instead of every other day (frequency). A simple explanation for all of this is that your body is learning through exercise how to adapt to these positive stresses being placed upon it. In order to keep progressing, the body must have a new stimulus placed on it every once in a while. Of course there are limits to this, and sometimes switching the nature of the exercise you perform can be an adequate change in stimulus, resulting in continued health benefits from exercise.

The powerful health benefits of exercise are numerous. The most likely reason for this is that exercise has the ability to positively affect every organ and structure in our body. A lifetime of regular aerobic, resistance, and flexibility exercise is ideal, but it is never too late to start. Exercise is like free medicine. It can act as a wonderful "drug" against many common ailments, and as such its use must be carefully prescribed and adjusted. If you are over 35, have been sedentary for some time, or have a specific health condition or limitation, consult with a knowledgeable personal trainer or health care provider before beginning any new exercise program.

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