

Exercise for Beginners

Congratulations!!!!

You have just taken the first step to beginning your exercise program.

By taking the time to educate yourself on how to become physically fit, you have taken the first step toward a happy and healthier lifestyle. Knowledge is the key to getting the results you want.

Please take a minute and review the risks involved with exercise.

The next step is to get a physical fitness appraisal, if possible. Our fitness appraisal is designed to help you identify your physical strengths and weaknesses. If you are interested in a fitness appraisal, contact Gary Porter to set up an appointment. Appraisals are fast and convenient. We will work with your schedule. It is not necessary to get an appraisal before you begin working out, but it is recommended.

So what is Physical Fitness?

Physical Fitness has been given many definitions, but one that puts everything into perspective can be found in a physical education textbook written by H Clarke, and is called the Application of Measurement to Health and Physical Education.

"Physical fitness is the ability to last, to bear up, to withstand stress, and to persevere under difficult circumstances where an unfit person would give up. Physical fitness is the opposite to being fatigued from ordinary efforts, to lacking the energy to enter zestfully into life's activities, and to becoming exhausted from unexpected, demanding physical exertion. It is a positive quality, extending on a scale from death to 'abundant life'."

The Components of Physical Fitness

Cardio respiratory Endurance (CRE)

Usually considered to be the most important component of physical fitness, CRE involves the cardiovascular and respiratory systems and their ability to adapt to and recover from stress and physical activity. This function is extremely important because low levels of CRE have been linked to a marked increase in risk of premature death. Performing CRE type exercises has also been linked with reducing the risk of getting life threatening diseases, such as heart disease and type II diabetes.

The best way to maintain or increase your cardiovascular fitness is to find a form of aerobic exercise that you enjoy. This can be swimming, running, walking, biking, or another activity that raises your heart rate.

Your specific exercising heart rate range for exercise can be found by the following formula. If you stay within this range you will be performing aerobic exercise and will reap optimal exercise benefits.

First, find your maximum heart rate. To find your maximum heart rate, subtract your age from 220.

$$220 - \text{AGE} = \text{Maximum Heart Rate}$$

Now that you have your maximum heart rate you can determine your intensity, duration, and frequency levels. The American College of Sports Medicine recommends a workout at 55% - 90% of maximal heart rate for 15 to 60 minutes, 3 to 5 days a week.

As you begin your exercise program, be encouraged. The lower ends of these recommendations are just recommendations - any amount of activity is a great start. Work your way to higher intensities as your comfort, confidence, and cardiovascular fitness improves.

$$\text{Maximal Heart Rate} \times \text{Percentage} = \text{Workout Intensity (beats/min)}$$
$$197 \times 0.60 (60\%) = 118.2 \text{ beats/min}$$

One last hint on maintaining cardiovascular fitness - monitor your heart rate while exercising. Check your pulse once and a while to see if you are within your heart rate range. If your heart rate is too high - slow down or decrease the resistance. If your heart rate is too low, gradually increase your speed and/or resistance.

Musculoskeletal Fitness

Flexibility

Flexibility is the ability of a joint to move through an entire range of motion, without hindrance.

It is an important component in preventing muscle and tendon injuries while working out or performing daily activities. Stretching is most important before and after working out and before performing any strenuous activity.

Stretching can be dangerous and can lead to muscle and ligament injuries if done improperly. Some keys to making sure your stretching properly are to hold each stretch for about 30-60 seconds, do not bounce, never place a joint in a position that it doesn't naturally reach, and never stretch a muscle when it is not warm.

If you need instruction on stretching please ask the LifeQuest staff. We would be happy to help you develop a flexibility routine that stretches all major muscle groups.

Muscular Strength

Muscular Strength is the maximum amount of force that one can generate in an isolated movement.

Muscular strength and endurance have been linked with several health benefits:

- increased bone density
- increased connective tissue strength
- increased lean body mass
- anaerobic power and capacity

There are several ways to strength train: free weights, bands of synthetic materials, selectorized equipment, or by performing exercises that use your own body weight for resistance, i.e. push ups, sit ups, and dips.

The American College of Sports Medicine recommends strength training two times per week incorporating exercises for all major muscle groups a minimum of one set, 8 to 12 repetitions.

If you have specific training needs the LifeQuest staff would be happy to help you design a program to help you reach your personal goals.

Muscular Endurance

Muscular endurance is the ability of the muscles to repeatedly perform a submaximal task or to maintain a submaximal muscle contraction for extended periods of time.

Muscular endurance can be tested through a push up or sit up test. Normative values for age groups have been defined and are available. The only way to increase your muscular endurance is to perform the specific exercise to voluntary fatigue. You will find that if today you can only perform 20 push ups before failure, two days from now you will likely be able to perform more repetitions.

The body responds to the stresses it is put under. To focus your training on endurance, perform multiple sets of high repetition, low weight, resistive exercises.

If you have specific training needs the LifeQuest staff would be happy to help you design a program to help you reach your personal goals.