The 5 Fitness Components

1. Cardiovascular (aerobic) – Cardiovascular fitness is how efficient the heart, lungs and blood vessels work during activity.

2. Muscular Endurance – How long you can sustain activities like: sit-ups, push-ups, rowing, running uphill and other muscle building exercises is muscular endurance.

3. Flexibility – The range of motion of your joints and muscles and your ability to stretch is flexibility.

4. Muscular strength – How much hard work your muscles can do and how explosive and quick you are is muscular strength.

5. Body composition (fat to muscle ratio) – Your body should have a high percent of muscle and a low percent of fat to be healthy.

CARDIOVASCULAR FITNESS - AEROBICS (means with oxygen)

Aerobic exercise would be any large muscle movement done in a continuous and repetitive way for a long period of time. It is recommended that the exercises continue for at least 20 minutes at a pace, which raises the heart rate 60% to 80% of the maximum heart rate (MHR) and the increases respiration.

The FIT (frequency, intensity, time) principle for an aerobic workout is:

   F (frequency) – exercise 3 to 5 times a week
   I (intensity) – keep your heart rate at about 60% - 80% of MHR
   T (time)– Exercise continuously for 20 minutes

Cardiovascular exercise is the most important to maintain weight and health.

DIFFERENT TYPES OF AEROBIC EXERCISE

Aerobic exercises can be running or jogging, walking briskly, swimming laps, bicycling, dancing, rope jumping, stair climbing, playing handball, racket ball, squash, basketball, soccer, or interval training.
TYPES OF AEROBIC CLASSES

1. **High Impact** – Doing large muscle movements with vigor. Movements include jumping and hopping skills. Recommended for students who are in good physical shape and are not prone to knee, ankle, hip or back injury. This kind of exercise builds bones and muscles.

2. **Low Impact** – Doing large muscle movements having at least one foot on the ground at all times. Vigorous and jerking movements are eliminated from a low impact aerobic program which helps eliminate stress injuries. Low impact aerobics is recommended for beginners, older participants, those prone to injuries and those who do not want the joint stress of high impact aerobics.

3. **Dance Aerobics** – Doing actual dance steps and or other rhythmic movements to music for an aerobic workout. These may be high or low impact.

4. **Step Aerobics** – A type of aerobic program which uses gravity and the use of a step to increase the intensity if the workout.
   - The height of the step is to be increased as the participant gains conditioning.
   - Recommended for participants who are not prone to injuries to the knees, hips, ankles and back. Steps are not recommended for older participants.

5. **Slide Aerobics** – Side to side, ice skating motion, which is low impact but is difficult for some people to coordinate.

6. **Interval Training** – Combining different exercises such as weight lifting, jumping jacks, lunges, running, etc. at different stations for a 20 minute non-stop workout is an example of interval training.

7. **Tae Bo** – Doing a cardiovascular workout using martial arts punches and kicks.

8. **Spinning (stationary bikes), bicycling, lap swimming, rowing and other low impact exercises can be very vigorous and cardiovascular.**

MUSCULAR STRENGTH AND ENDURANCE

- **Anaerobic** (without oxygen)

Anaerobic exercise is muscle-building exercise, which should be done only once or twice a week to maintain muscle strength. Do this every other day for strength development. A day of rest is needed between workouts to get rid of lactic acid and waste products produced when muscles are working at 90% to 100%
maximum. To develop muscular endurance, do more repetitions at a lesser weight or take less time between repetitions to rest.

The **FIT (frequency, intensity and time) principle of an anaerobic** workout is:

- **F** – 1 to 2 times a week with at least 1 day rest in between strength building or alternate workouts between strength development and aerobics,
- **I** – 90% to 100% maximum effort to get stronger and faster,
- **T** – short bursts of maximum intensity effort with rest in between repetitions.

**DIFFERENT TYPES OF ANAEROBIC WORKOUTS**

Anaerobic activities are weight lifting for strength, sprints, pitching and hitting, long and high jumps, discus and javelin throws, pole vault, football tackling, ETC.

**PARTS OF A WORKOUT**

A. **Warm up** – A gradual increase of circulation is a must. The participants should start with big slow stretching type movements and gradually increase intensity, as the body warms up and circulation increases.

B. **Workout** – The cardiovascular workout should last at least 20 minutes at a pace which is working 60% to 80% of participants “Maximum Heart Rate”. The muscular endurance exercises should be several repetitions at 90% to 100%.

C. **Cool Down** – The cool down is important to gradually decrease the heart rate, remove waste products and to lower the body temperature to near normal levels.

   *Gradual slowing movements will help eliminate the lactic acid buildup which causes soreness. Participants should cool down for at least 7 to 10 minutes and should not stop the cooling down process until they have taken their pulse and it falls to **20 or below for a 10 second count**.*

**Flexibility**

Flexibility can be gained through stretching daily and should be done before and after any workout.
The increased range of motion will be best achieved if you stretch after the workout when muscles are warm.

Stretching should be static (not bouncy or jerky) and low impact kinds of exercise.

Stretching should occur daily to prevent injury and keep the body flexible.

**Types of stretching classes are:**

1. **Yoga** – Holding stretching positions for periods of time.
2. **Pilates** – Stretching and light muscular endurance through a range of motion, creates this unique cardiovascular workout.
3. **Tai Chi** – An oriental form of exercise that flows through movement and poses.
4. **HOW TO DEVELOP A FITNESS PROGRAM**

A. Decide what type of program would best suit your interests as well as your abilities and exercise needs.

B. **Cross train**- Alternate the types of exercises you do each day. Jog one day, swim the next, weight lift the third, etc. so you don’t develop only one component of fitness, you don’t get stress injuries from over use and to keep exercising interesting and challenging.

C. Wearing good athletic shoes is a must.

D. Comfortable, loose fitting and perspiration absorbing clothes will keep you more comfortable and exercising longer.

E. Drink water before, during and after exercising. Stay hydrated!!!

F. Have Fun!! Exercise with family and friends. Make your fitness program fun and interesting.

G. Make exercise be a priority in your daily schedule.