The "FIT" Principle

The "FIT" Principle describes the three factors included in any training program. "F" = frequency, "I" = intensity, and "T" = time.

Frequency
Frequency refers to the number of workout sessions each week. For optimal health benefits, cardiorespiratory endurance (aerobic) exercise should be performed at least three times a week. More than five aerobic training sessions per week may improve performance, but health gains beyond the 3-5 day recommendation will be minimal, and the individual greatly increases risk for injury.

Muscular strength/muscular endurance and flexibility activities should be performed at least twice per week. Muscular strength and muscular endurance can both be improved with a resistance program; they need not be trained separately. Similarly, an individual can combine all components of fitness into a single workout.

Example:
- Perform walking as a warm-up for 5-10 minutes
- Walk, jog, bicycle or perform another aerobic activity for 20-45 minutes at one time
- Cool-down for five minutes, performing the aerobic work at a low intensity, to lower the heart rate from higher aerobic levels
- Perform resistance training, working all the major muscle groups of the body
- Stretch all the major muscle groups of the body, five or more minutes

Intensity
Intensity refers to how hard the work bout is. Aerobic exercise intensity affects a person's heart rate: the higher the intensity, the higher the heart rate. Although there are a number of ways to calculate how high a person's heart rate should be during an aerobic exercise bout, one of the ways to do so is by calculating a percentage of heart rate reserve. Heart rate reserve is the difference between a person's maximal heart rate (often calculated by subtracting age from the value 220) and that same person's resting heart rate. 60-85% of heart rate reserve is the approximate intensity range for aerobic exercise. Exercising beyond 85% of the heart rate reserve may lead to fatigue without any noticeable improvements. If interested, determine your target heart rate (O).

Some individuals cannot detect a heart rate when performing aerobic exercise, other individuals may take medications that alter their heart rates. In such cases, the people may need an alternate method of gauging workout intensity. The Rate of Perceived Exertion (RPE) scale is a way of doing just that. A person rates how intense his workout is by assigning a number (there are two scales, one from 0-10, the other from 6-20) to how he feels. Next to each number is a comment that relates to the intensity of a workout. For example, on the 0-10 RPE scale, the number "2" reads "weak." This means a person who feels his workout is not very strenuous at all—in fact, rather weak, would rate that intensity level as "2." See two examples of RPE Scales (R). The "Talk Test" is another alternative for gauging the intensity of an aerobic workout. The Talk Test refers to the exerciser's ability to speak throughout a workout, specifically an aerobic workout. If
a person cannot talk while performing the exercise, i.e. her breathing will not allow her to, she is working too intensely. Obviously, this is a very generalized manner of rating one's exercise intensity.

Intensity for muscular strength and muscular endurance work is related to the amount of force applied to a resistance (how much weight is to be lifted), and varies based on whether the exerciser is interested more in strength or muscular endurance gains. When muscular strength is emphasized in a weight training workout, the intensity is higher, which is reflected in the amount of weight lifted. Higher intensity means the amount of weight lifted should be higher. Since heavy weights cannot be lifted as frequently, a workout emphasizing muscular strength will typically include heavier weights and fewer repetitions. Similarly, when muscular endurance is emphasized in a weight training workout, the intensity is lower. A lower-intensity weight workout translates to using lighter weights but lifting them for more repetitions, or holding a contraction for a longer period of time.

In flexibility exercise, intensity is gauged by how far a person stretches. A muscle should be lengthened to the point where a stretching sensation is felt; if pain occurs, the exercise is too intense, and the stretch should be lessened until no pain is felt. Heart rate is NOT used to gauge intensity for muscular strength, muscular endurance, or flexibility exercise.

**Time**

Refers to the duration of the work bout, excluding warm-up and warm-down. For increased cardiorespiratory endurance performance and improved cardiovascular health, recent guidelines have changed to reflect the current attention toward workout intensity as an important component. The American College of Sports Medicine's physical activity guidelines include performing moderate bouts of aerobic physical activity for 30 minutes a day for five days per week, OR vigorous aerobic activity for 20 minutes, at least three times per week. If an individual cannot perform aerobic work for one of these two time periods, then he or she may use these guidelines as goals. As the individual becomes more aerobically fit, the time of the bout can increase. Research seems to point to the conclusion that, in order to obtain health benefits, splitting up the activity sessions can be effective, as long as the moderate-intensity physical activity totals at least 30 minutes throughout the day.

The duration of a muscular strength and muscular endurance work bout will depend upon how many muscles and muscle groups an individual wants to exercise. Although an individual should focus on training all of the major muscle groups in the body, it is not necessary to target each specific muscle in order to improve health.

The duration of a flexibility work bout will depend upon how long each stretch is held. Any stretch should be held for several seconds--preferably 10 seconds and up. An individual focusing on improving flexibility will want to hold stretches for longer periods, as is typically seen in yoga classes. The participant should be careful to avoid ballistic stretching, performed using rapid, bouncy movements which use force to lengthen muscles. Although this particular type of stretching has been indicated to improve flexibility, it also can lead to muscular injury.