



## **Muscle Fitness**

### **Introduction**

Muscle Fitness is the training of the muscular system to be more efficient. This improves a person's overall health and the ability to enjoy an active lifestyle. The two parts of muscle fitness are muscular strength and muscular endurance.

### **MUSCULAR STRENGTH**

Muscular strength is the amount of force a muscle can exert. Muscular strength can help prevent health problems. For example, increased abdominal strength can reduce the risk of back injury and pain. Muscular strength also improves bone density. Strong muscles better enable a person to enjoy vigorous activity. Muscles also burn more calories than fat. Both males and females need strength to be healthy, to avoid injury, and to look good. Both men and women look more attractive with strong muscles because they are more likely to have good posture and firm bodies.

The key to advances in areas of muscular strength is the overload principle. Exercise using more intensity in both reps and load builds muscle. When you overload the muscle it adapts and causes muscle fibers to grow stronger. Experts say that a muscle must be contracted 60% to 85% of its maximum to increase strength.

### **MUSCULAR ENDURANCE**

Muscular endurance refers to the muscles ability to do a repetitive movement many times without tiring. Muscular endurance exercise improves appearance, fitness, and physical and mental health. Muscular endurance enables a person to work and play with less fatigue. Muscular endurance training increases your lean body mass and decreases body fat. Muscular endurance developed through physical activity also increases cardiorespiratory fitness, helping reduce the risks of cardiovascular disease.

How do we increase muscular endurance? Increase your muscular endurance gradually by increasing the number of sets and repetitions before resting. If a person is using weight training to increase their muscular endurance, their program would feature from 50-100 repetition broken into 4 to 6 sets, using 50% to 70% of their maximum for resistance.

### **FITT PRINCIPLE for MUSCULAR STRENGTH**

- Frequency – 2 to 3 days a week
- Intensity – 60% – 85% of 1 RM

- Time – 3 - 8 reps, 1 – 3 sets
- Type – Free weights, selectorized equipment, Isotonic

### **FITT PRINCIPLE for MUSCULAR ENDURANCE**

- Frequency – 2 to 3 days a week
- Intensity – 50% - 70% of 1 RM
- Time – 12 – 20 reps, 4 – 6 sets
- Type – Free weights, selectorized equipment, Isotonic

### **PRINCIPLES OF MUSCLE FITNESS**

OVERLOAD - Lifting more than your muscles are used to by increasing resistance or repetitions

PROGRESSION - As your muscle fitness improves you will need to increase resistance, repetitions or sets

SPECIFICITY - Strength or endurance will only improve in the muscles you are working

### **ISSUES WITH MUSCULAR FITNESS TRAINING**

NUTRITION – A balanced diet with enough calories to replace energy loss during workouts and adequate amounts of proteins to ensure muscle development.

ANABOLIC STEROIDS – Synthetic drugs that resemble the male hormone testosterone. Use of steroids will lead to the following: headaches, irritability, severe acne, high blood pressure, extreme anger, reduced sperm count, shrunken testicles, enlarged breasts in males, and dark facial hair in females.

REST – A period of recovery is necessary to allow muscles to recover after a workout. Allow 1 day of rest in between major muscle groups to achieve maximum results.

### **CONCLUSION**

Exercise causes muscle tissue to break down. This is a natural occurrence that the healthy muscle overcomes when it rebuilds itself in reaction to the type of workout it receives. Rebuilding, also called recovery, requires adequate rest and good nutrition. Strength training programs promote positive results. A person could look forward to the following benefits from muscle fitness training: increased bone density, improved posture, improved self-image, increased elasticity in muscles and tendons, an increase in calorie burning due to an increase in lean muscle mass and increased resistance to injury.