

PHYSICAL FITNESS

Physical Fitness – determined by the condition of your heart and circulatory system respiratory system, muscular system, degree of flexibility and your percent body fat.

Primary Health Risk Factors

- Inactivity
- High blood pressure
- Stress & tensions
- Sex of individual
- Age
- Obesity
- High level of cholesterol
- Smoking
- Heredity

Benefits of Exercise

- Improved appearance
- Improved self control
- Improved health
- Increased level of energy
- Increased success in school or job
- Increased life expectancy
- Improved body image
- More enjoyment of life
- Increased muscular strength & endurance
- Improved physical performance
- Sleep better
- Helps cope with stress

Physical Fitness is made up of both health related and skill components.

Health Related – components of physical fitness that contribute to how well the systems of the body operate.

- Flexibility
- Muscular Strength
- Muscular Endurance
- Cardiovascular
- Body Composition

Skill Related Fitness – Components of physical fitness that contribute to the ability to successfully participate in sports.

- Agility
- Balance
- Power
- Reaction Time
- Coordination
- Speed

Hypothermia – Reduction of body fluids or an increase in body temperature.

Heat Cramps – Health related problem in which certain muscles contract involuntarily and cause cramps.

Heat Exhaustion – Condition characterized by profuse sweating, dizziness, extreme weakness.

Heat Stroke – Medical Emergency characterized by hot, dry skin, and rising body temperature.

Dehydration – Loss of water from body tissue.

Fad Diets – Diets that promote weight loss without sound nutritional practices.

Pulse – Caused by pressure of blood on an artery wall; corresponds to heart beat.

Recovery Heart Rate – Heart rate after exercising.

Resting Heart Rate – Heart rate just after waking in the morning, before getting out of bed.

Set – A group of repetitions performed one after the other.

Repetition – The completion of a single, full range movement of the body part being exercised.

Target Heart Rate – 60 to 90 percent of the maximum heart rate; results in greatest cardiovascular benefits from exercise.

Endomorph – a large, soft bulging body and a pear shaped appearance.

- high percentage of body fat
- wide hips
- short neck
- round, full buttocks
- large abdomen
- short, heavy legs

Mesomorph – a solid, muscular, and large boned physique.

- firm, well developed muscles
- trim waist
- large bones
- muscular buttocks
- broad shoulders
- powerful legs
- muscular arms

Ectomorph – Slender body and slight build.

- small bones
- round shoulders
- thin muscles
- flat abdomen
- slender arms/legs
- small buttocks
- narrow chest

Isotonic – muscle contractions with movement, weight training

Isometric – muscle contractions with little or no movement

Intensity – how hard an activity is conducted

Duration – how long an activity is conducted

Effects of Training

1. The resting heart rate is decreased.
2. The amount of time required to recover from a bout of exercise is decreased.
3. There is a decrease in the respiratory rate and this will decrease the amount of energy used by the respiratory muscles to move air into and out of the lungs.
4. The heart muscle becomes stronger and this allows the heart to eject more blood with each beat of the heart.

MACHINES

Chest press	leg press	shoulder press
Lat. Pulls	toe raises	posture row / low pulley
Behind the neck press	tri-extensions	chinning
Dipping	sit-up	leg extension
Leg curl	hip flexor	hi low press
Benching	incline press	leg thrust
Free weights	curling	squatting
Incline bar	military press	hammer stretch

To be truly effective, aerobic exercise must be done briskly – raising the pulse rate to approximately 75 percent of the max. number of times your heart can beat in a minute. This is called your training heart rate. This should be your training goal. To achieve it, be sure to begin your exercise program at a 60 percent training rate and build up gradually. Exercise below 60 percent level will do much less to enhance your health or maintain your weight.

Avoid exercising so hard and so fast that you are gasping for air. When you are out of breath, you are exercising anaerobically – without oxygen. The muscles are demanding oxygen faster than your cardiorespiratory system is able to deliver it. Without sufficient oxygen, the muscles will quickly fatigue. In addition, if we are exercising to lose or maintain our weight, our effort becomes counterproductive with its anaerobic.

Aerobic exercise must be steady and sustained for at least 20 – 30 minutes depending on the intensity of the aerobics you are doing.

Aerobic exercise should be regular and consistent at least 3 times a week to maintain your aerobic fitness.

FITNESS AND WEIGHT TRAINING

Terms

Resting heart rate – taken before you do activity of the day

Maximum heart rate – 220 minus your age (220 – age = *)

Maximum weight lift – the most weight you can lift in one repetition

Target heart rate – between 60% - 85% of your maximum, what you should get your heart rate up to when exercising.

Warm up – brief, mild exercise to get you ready for a vigorous exercise

Cool down – brief, mild exercise done after vigorous exercise to help you recover

Repetitions – number of times an exercise is done

Set – a group of several repetitions

Anaerobic endurance – without oxygen, physical activity of a short duration that requires high rates of energy (sprint), weight lifting

Aerobic endurance – with oxygen, activity that relies on heavy oxygen use (run, cycle, walk)

Physical fitness – the ability to carry out daily tasks with vigor and to engage in leisure time pursuits and to meet the above average physical stresses in emergency situations.

Strength – how strong muscles are.

Flexibility – how far muscles will stretch.

Cardiovascular endurance – how much oxygen the body can supply to working muscles (heart)

Overload – a person needs to do more than would normally be done to improve fitness.

Power – release maximum force or to contract muscles in the shortest possible time

Endurance – how long muscles work

Agility – the ability of a person to change direction or body position quickly and control the movement of the entire body.

Balance – the ability to maintain a desired position of the body both in movement and in stationary positions.

Progression – a person needs to start exercising slowly and to increase the amount of exercise done over a period of time.