



Improving the 5 Components of Fitness

Cardiovascular Fitness, Muscular
Strength, Muscular Endurance,
Flexibility and Body Composition

Nirvana Spa and Pulse 8 Seminar Series – Week 2



Cardiovascular Fitness

- Refers to the ability of the lungs to provide oxygen to the blood and heart to transport oxygenated blood to the cells of the body. A good level of CV fitness leads to...
- Decreased Blood Pressure
- Increased HDL Cholesterol and Decreased Total Cholesterol
- Decreased Body Fat
- Increased Heart function and its ability to pump more blood...



Cardiovascular Fitness

- Decreased Stress reactions and Anxiety
- Decreased Glucose-stimulated insulin
- Increased Oxygen output to body
- Decreased resting Heart Rate, Increased Cardiac Output and Increased Aerobic Work Capacity.



Cardiovascular Fitness

- How to improve CV fitness.....?

Interval training, Fartlek training and Steady State Exercise

- Monitoring your progress?

Heart rate tests (RHR, MHR), timed workouts (performance), maximal tests to exhaustion (bleep test).



Muscular Strength

- Refers to the amount of force a muscle, or muscle group can exert, against a resistance. High levels lead to....
- Decrease Cardiovascular disease risk
- Decrease Back pain
- Obesity, Diabetes (Type 2), Arthritis and Cancer
- Builds & maintains lean muscle mass
- Increases bone strength and density
- Decreased Body Fat (%).



Muscular Strength

- How to improve Strength.....?
Resistance training
Specific rep ranges and weight %
- Monitoring it?
One rep max tests (take care!)
Upper and lower body (bench press + squat)
Weight machines, Free weights/Hand weights, Tubing/Bands,
Calisthenics (bodyweight exercise).



Muscular Endurance

- Muscular endurance is the ability of a muscle or group of muscles to sustain repeated contractions against a resistance for an extended period of time. This leads to...
- Increased stamina
- Increased metabolism (body composition changes)
- Fewer injuries (support etc)
- Extended workout periods/intensities
- Increased bone strength
- Lean mass etc
- Increased CV fitness.



Muscular Endurance

- How to improve Endurance.....?

Repetitive exercise like rowing, running cycling etc; where you will increase blood flow and endurance of working muscles, also **high repetition** resistance exercise will help

- Monitoring it?

1 minute push up tests (upper), 1 minute sit up tests, flex arm hang test (shoulders and back endurance), farmers walk test (whole body).



Flexibility

- Flexibility refers to the ability to move joints through their entire range of motion, from a flexed to an extended position. The flexibility of a joint depends on many factors including the length and suppleness of the muscles and ligaments and the shape of the bones and cartilage that form the joint
- A well-planned flexibility program eases tension around joints
- Overall flexibility is less important than having the right flexibility for your sport. Extreme flexibility may be due to slack ligaments and muscles which may offer less joint support and may even increase the risk of injuries
- Our posture is impaired by muscle imbalances and reduced flexibility, flexibility will also assist in stress management.



Flexibility

- How to improve flexibility.....?

Static stretching, dynamic stretching and PNF (Proprioceptive Neuromuscular Facilitation) stretching will increase flexibility (volume). Flexibility may however be genetic.

- Monitoring it?

Shoulder flex test

Sit and reach test

Groin test (in groin stretch position, soles together).



Body Composition

- Used to describe the percentages of fat, bone and muscle in the human body. As muscular tissue takes up less space in our body than fat tissue, our body composition as well as our weight determines leanness. Good composition leads to...
- Improved Body definition
- Improved CV health – blood pressure, cardiovascular disease
- Improved Metabolic health – type 2 diabetes and high cholesterol, improved lean mass (metabolism), improves muscle visibility.



Body Composition

- How to improve your composition.....?
Fat burning exercise (cardiovascular) combined with resistance training to decrease fat mass and increase muscle mass
- Monitoring it?
Hydrostatic underwater weighing
Bioelectrical impedance analysis (TANITA!)
Skinfold assessments
Clothing.



Questions?