



A.A. LEACH Fitness INFO Term 1



There are 5 main components to physical fitness:

- (1) **Cardiovascular endurance** - the ability of your heart, lungs and blood system to work and use oxygen in order to make energy (the harder you work the more energy your body needs)
- (2) **Muscular strength** - the amount of force a muscle can exert in one contraction (increased strength leads to better posture and less pressure on your joints)
- (3) **Muscular endurance** - the ability of the muscle to exert force over a long period of time (this will enhance your ability to do activities for a greater period of time)
- (4) **Flexibility** - the ability of your joints to move through a wide range of motion (this is developed by various forms of stretching and reduces the risk of injury)
- (5) **Body Composition** - the proportion of fat mass and muscle mass in the body (this is often referred to as body type which is often determined by genetics)

Calculating your heart rate ---→

Below is for More Gr.8 and 9 students.

Why is monitoring your heart rate important?

- Indicates level of effort
- Indicates speed of recovery
- Indicates state of emotions
- Gives you more responsibility for your own health

Resting heart rate- heart rate after complete uninterrupted sleep

Maximum heart rate- $220 - \text{age} = \text{beats per minute}$ (19 year old - $220 - 19 = 201$ bpm)

Moderate health zone- 50-70% of your maximum heart rate

$$(220 - \text{age}) \times .5 = \text{lower range of moderate health zone}$$
$$(220 - \text{age}) \times .7 = \text{higher range of moderate health zone}$$

Aerobic health zone- 70-85% of your maximum heart rate

$$(220 - \text{age}) \times .7 = \text{lower range of aerobic health zone}$$
$$(220 - \text{age}) \times .85 = \text{higher range of aerobic health zone}$$

Warm-up Review: It is important to warm-up in order to prevent injuries to joints and muscles during any type of physical activity.

Why Stretch? Stretching relieves tight muscles and increases range of motion, thus decreasing injuries. Stretches should be held at a point where only mild tension is felt. One stretch per muscle group is held for at least 15 seconds (for a maximum of 1 minute).

Benefits of a warm-up:

- increased circulation / improved performance
- increased body temperature / prevention of injuries
- mental preparation
- increased focus on task

Cool Down:

- gradual lowering of heart rate
- prevention of blood pooling (dizziness)
- minimize muscle soreness

There are three stages of a warm-up:

- 1) **Indirect**- any type of warm-up that is not related to the activity that the individual is warming up for (e.g. doing jumping jacks before a basketball game)
- 2) **Direct**- the warm-up is related the type of activity to be practiced or played (e.g. doing lay-ups before a basketball game)
- 3) **Identical Stage**- the warm-up is almost identical to the type of activity to be practiced or played (e.g. playing 3 on 3 before a basketball game)

All Students Gr. 7 - 9

F.I.T.T. Principle - 4 important guidelines to maintain or improve your level of fitness

Frequency - how often? - 3 to 5 times per week

Intensity - how hard? - it is important to work at a level which brings your heart rate into the age appropriate target zone

Time - how long? - exercise should be sustained for 30-45 minutes where the heart rate stays in the target zone

Type - what kind? - anything you like that help you achieve your goals

Physical fitness is something that is developed through conditioning the body at a higher level of effort than the body is used to.

Benefits to regular physical activity:

- meet new friends
- improved self-esteem
- achieve a healthy weight
- builds strong bones and strengthen muscles
- maintains flexibility
- promotes good posture and balance
- improves overall fitness and relaxation
- strengthens the heart
- promotes healthy growth

THE BELOW INFORMATION IS GRADE 9 USE ONLY

F.I.T.T. Principle - 4 important guidelines to maintain or improve your level of fitness

Flexibility

Frequency

6-7 times per week

Intensity

Full range of motion or until soreness is felt

Time

At least 15 seconds per stretch

Type

Stretches specific to the muscle area that is being stretched (e.g. sit and reach stretches the hamstrings)

Cardiovascular Endurance

Frequency

3-5 times per week

Intensity

How hard you are working is determined by your heart rate.

Time

30 minutes minimum

Type

The type of exercise you are doing (jogging, swimming, cycling, cross-country).

Muscular Strength

Frequency

2-4 times per week

Intensity

Muscular strength is improved by doing more weight fewer times. (e.g. 5 sets of 12 reps).

Time

How much rest you take in between exercises.

Type

What type of exercise you are doing (lifting weights, push-ups).

Muscular Endurance

Frequency

3-5 times per week

Intensity

Muscular endurance is improved by doing less weight more times.

Time

Defines how much rest in between sets (is less for endurance than strength).

Type

What type of exercise you are doing (lifting weights, sit-ups).