

1.1. What is physical activity?

Physical activity is any movement of the body which may occur as part of activities of daily living, leisure, and work. Think about each time you move a part of your body. That is physical activity.

1.2. Types of physical activity?

Physical activity will fall into low-intensity, moderate-intensity, and vigorous/high intensity.

- **Low intensity** physical activities do not raise the heart rate substantially and you may not sweat too much. Being able to talk during the physical activity signifies low intensity. Examples of low intensity exercises are a casual walk, simple dancing
- **Moderate intensity** physical activities will raise the heart rate substantially and will cause significant sweating. It is difficult to talk while exercising. Example is brisk walking, cycling, swimming, dancing etc
- **Vigorous/high intensity** physical activities will raise heart rate very substantially, cause significant sweating, and it is difficult to talk. Examples of vigorous/high intensity exercises are jumping rope, running,

It is important to consider the duration, intensity, and frequency of these exercises. Duration refers to how long the activity is carried out. Intensity is how hard or rapid the movements are and the frequency is how often the exercises are done.

Alternating between maximal effort vigorous exercise with low intensity rest periods produces an exercise form called High Intensity Interval Training (HIIT).

There are another group of physical activities which require building the strength of muscles or flexibility of muscles and joints.

- **Resistance and strength training** exercises: this involves bearing weight, straining the muscles, and building endurance. This leads to building both muscle and bone mass. This includes bearing weights, lunges, squats, crunches, push-ups etc.
- **Flexibility exercises** promote flexibility of joints and muscles. These includes yoga, tai-chi and stretches

It is important to consider the intensity, frequency, and repetitions. The intensity is the force or weight being borne. The frequency is how often, and the repetition is how many times the weight or force is carried out.

To get optimal treatment outcomes, persons living with type 2 diabetes are recommended to have:

- At least 150 minutes of moderate-intensity aerobic physical activity. This can be increased to more than 300 minutes a week.
- At least 75 minutes of vigorous intensity exercise. This can be increased to as high as 150 minutes a week to get maximum benefits.
- At least 20-minute session of resistance/strength training exercises for about 2 or more days a week.

These exercises should be done as a combination every week. It is important to avoid long periods of being sedentary per day.