# Module 3 Benefits of Physical Activity / Exercise Dr Bintu T Kalyan, Assistant Professor, Department of Physical Education, Christ College (Autonomous) Irinjalakuda

Benefits of Physical Activity / Exercise

We all know that exercise is important in our daily lives, but we may not know or what exercise can do for us. Our bodies are designed and have evolved to be regularly active. Exercise is defined as any movement that makes your muscles work and requires your body to burn calories. There are many types of physical activity including swimming, running, jogging, walking and dancing. Being active has been shown to have many health benefits, physically, mentally, emotionally... it may even help you live longer and comfortably.

There are many benefits of regular exercises and maintaining fitness and these include

#### 1. Strong muscles and bones

Exercise play a vital role in building and maintaining strong bones and muscles. Physical activities like weight lifting, jumping, sprinting... can stimulate muscle building when paired with adequate protein intake. This is because exercise help to release hormones that promotes the ability of your muscles absorb amino acids. This process helps the muscle grow and reduce the break down at the cellular level. The high intensity exercises are also helps to make strong bones as compared to low intensity exercises.

## 2. Increased energy level

Exercise can be a real energy booster for healthy people as well as those suffering from various medical conditions. Engaging in regular physical activity can increase your energy levels. This is true even in people with fatigue and those suffering from serious illness. Physical activity helps the individual store more glycogen and glucose within their muscles and blood, that process makes our body more able to use energy as in a ready from.

## 3. Weight lose

Physical activity help us to burn more calories from our body. Moderate physical activity with proper diet will be more effective in weight lose process. Regular physical activity have shown to increase your metabolic rate, which burn more calories and help you to lose more weight. Additionally, studies have proven that combining the aerobic exercise with weight raining can maximize the fat lose and muscle gain.



# Module 3 Benefits of Physical Activity / Exercise Dr Bintu T Kalyan, Assistant Professor, Department of Physical Education, Christ College (Autonomous) Irinjalakuda

A gram of fat and carbohydrates will provides 9 and 4 calories of energy respectively. If you breaks 9 calories during workout you can reduce a gram from your body weight. An hour of brisk walking will help you to break 250-300 calories.

#### 4. It can make you feel happier

Exercise has shown to improve your mood and decrease feelings of depression, anxiety and stress. Active participation in exercise and games regulates our hormonal actions. It help us to reduce the secretion of stress hormones accumulation in your blood. As your body perceives stress, your adrenal glands make and release the hormone cortisol into your bloodstream. The increased amount of cortisol in blood will causes to blood pressure, poor sleep, recovery, weight gain...

#### 5. Free from hypokinetic diseases

Hypokinetic diseases means disease that occurs due to lack of physical activities. The word "hypo" means "less" and the word "kinetic" means "movements", hypokinetic means less movements. Ex. Obesity, diabetics, hypertension, stroke, some kinds of cancers... Daily physical activity is also recommended to reduce the risk of developing other diseases. All hypokinetic diseases are life threatening diseases, so we have to more aware about it and do the needful at the earliest.

#### 6. Brain health and memory

Exercise can improve brain function and protect memory and thinking skills. During exercise our heart beats become higher from the normal rate, which promotes the blood flow to the brain. That process will helps the brain to have sufficient oxygen and other nutrients. It can stimulate the production of hormones, which will enhance the growth and development of brain cells and other bodily actions. Exercise has been shown to reduce the risk of Alzheimer's disease due to aging process.

# 7. Relaxation and sleep quality

Regular exercise can help us to relax and sleep better. The energy depletion during the exercise is help the individual to sleep well. Moreover the increase in body temperature that occurs during exercise is also thought to improve sleep quality. The sudden increase in the body temperature during the exercise has an antibiotic effect and help the body to eject bacteria out. Regular physical activity regardless of whether it is aerobic or combination of aerobic and resistance training can help you sleep better and fell more energized during the day.



# Module 3 Benefits of Physical Activity / Exercise Dr Bintu T Kalyan, Assistant Professor, Department of Physical Education, Christ College (Autonomous) Irinjalakuda

#### 8. Increase the efficiency of heart and lungs

Regular exercise makes our heart and lungs strong and help us to increase the functionality of it. While we are doing exercise our body needs high amount of oxygenated blood and nutrients to produce energy. The heart and lungs will works together and supply the additional amount of blood to the body as per their capacities. Regular and moderate exercise increase the stroke volume of heart and tidal volume of lungs.

Stroke volume of the heart is the amount of blood pumped with a single contraction. If it is stronger enough it can pump the required amount of blood.

Tidal volume is the amount of air moves in or out of the lungs with each respiratory cycle. It measures around 500ml in average in a healthy adult man and 400ml in women.

The increased stroke volume and tidal volume will helps he individual to get sufficient amount of oxygenated blood with minimum effort and easily to body.

### 9. Increase the physical condition or fitness

Regular physical activity improves our physical capacities like strength, speed, endurance, flexibility... The increased physical qualities makes you physically fit and able to perform well with given conditions. We can use our body as per our wish and enjoy the freedom with movements.

## 10. Better immunity

Physical activities may help flush out the bacteria through lungs and airways. This may reduce our chance to getting a cold, flu or other illness. Exercise causes change in the level and number of antibodies and white blood cells in our body and also increase the body temperature during exercise. These all process are boost up body immunity in many ways and help our body to fight against illness.

