

PHYSICAL ACTIVITY



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Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure. Physical inactivity has been identified as the fourth leading risk factor for global mortality, causing an estimated 3.2 million deaths globally.

Physical activity is any body movement that works muscles and requires more energy than resting. Walking, running, dancing, swimming, yoga, and gardening are a few examples of physical activity.

Regular moderate intensity physical activity such as walking, cycling, or participating in sports has significant benefits for health. For instance, it can reduce the risk of cardiovascular diseases, diabetes, colon and breast cancer, and depression. Moreover adequate levels of physical activity will decrease the risk of a hip or vertebral fracture and help control weight.

TYPES OF PHYSICAL ACTIVITIES:

1. **Aerobic exercise:** It is one in which large amounts of oxygen are required continually for an extended period of time. Aerobic exercise are vigorous, continually and rhythmic. Improves cardio respiratory endurance.
2. **Anaerobic Exercise:** It is one in which the body's demand for oxygen is greater than what is available during exertion. Improves muscular strength and endurance.

3. **Isometric Exercise:** It is one in which a muscles tightened for five to eight seconds and there is no body movement. Pressing the palms of hands together.
4. **Isotonic Exercise:** It is one in which a muscle moves a moderate amount of weight eight to fifteen times through total range of motion. Improves muscle strength and endurance.
5. **Isokinetic Exercise:** It is an exercise using special machines that provide weight resistance through the full range of motion. Improves muscle strength, endurance, and flexibility.

Examples of physical activity:

- ❖ Walking
- ❖ Yoga
- ❖ Hiking
- ❖ Singles tennis
- ❖ Doubles tennis
- ❖ Jogging
- ❖ Rollerblading
- ❖ Basketball
- ❖ Swimming fast
- ❖ Pushing a lawn mover
- ❖ Skateboarding
- ❖ Volleyball
- ❖ Hockey
- ❖ Rugby
- ❖ Running
- ❖ Riding a bike fast or on hills
- ❖ Football
- ❖ Skipping rope
- ❖ Aerobics
- ❖ Martial arts
- ❖ Gymnastics.
- ❖ Water aerobics

THE BENEFITS OF PHYSICAL ACTIVITY:

1. **Control weight:** Both diet and physical activity play a critical role in controlling weight. People gain weight when the calories burn, including those burned during physical activity are less than the calories eat or drink. Getting to and staying at a healthy weight requires both regular physical activity and a healthy eating plan.
2. **Reduce Risk of Cardiovascular Disease:** Heart disease and stroke are two of the leading causes of

death globally. But getting at least 150 minutes a week (2 hours and 30 minutes) of moderate-intensity aerobic activity can put at a lower risk for these diseases.

3. Reduce risk of Type 2 Diabetes and Metabolic Syndrome: Regular physical activity 120 to 150 minutes (2 hours to 2 hours and 30 minutes) a week of at least moderate-intensity aerobic activity can reduce risk of developing type 2 diabetes and metabolic syndrome. Metabolic syndrome is a condition in which have some combinations of too much fat around the waist, high blood pressure, low HDL cholesterol, high triglycerides, or high blood sugar.

4. Reduce Risk of Some Cancers: Being physically active lowers risk for two types of cancer: colon and breast.

Physically active people have a lower risk of colon cancer than do people who are not active. If the people are a cancer survivor research shows that getting regular physical activity not only helps give a better quality of life but also improves physical fitness.

5. Strengthen bones and muscles: Physical activity supports body and helps to keep bones, joints and muscles healthy.

6. Improve mental health and mood: Regular physical activity can help keep thinking, learning, and judgment skills sharp as age. It can also reduce risk of depression and may help sleep better. The aerobic or a mix of aerobic and muscle-strengthening activities 3 to 5 times a week for 30 to 60 minutes can give these mental health benefits.

7. Increase Chances of Living Longer: Physical activity can reduce the risk of dying early from the leading causes of death like heart disease and some cancers.

CALCULATION OF CALORIES BURNED FROM PHYSICAL ACTIVITY:

Calorie = METS x Weight (kg) x Time (hours)

1 MET equal to 1 kcal/kg/hour

For example to estimate how many calories a 70 kg person would burn during 30 minutes of Gardening (5 METS),

Calories burned = 5x 70kg x 5 hours = 175

ENERGY EXPENDITURE OF AN AVERAGE SIZE MAN AGED 30

Activity	Kcal used per hour	KJ used per hour
Sleeping	70	294
Sitting	85	357
Standing	90	378
Playing Tennis	350	1470
Playing Foot ball	480	2000
Cycling	400	1680
Walking slowly	185	777
Swimming	575	2415
House work	200	840
Walking upstairs	1000	4200

References

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