

Module 2: Benefits of Physical Activity

3.1 Hypokinetic Diseases and Conditions

- It describes many of the diseases and conditions associated with inactivity and poor fitness. Health problems brought about by lack of exercise have increased.

1. Cardiovascular Diseases

Two kinds of *risk factors* exist: **primary (most important)** and **secondary (less important)**. Sedentary, or inactive, living is one *primary risk factor*, so cardiovascular disease is considered a hypokinetic condition. *Secondary risk factors* include stressful living and excessive alcohol use.

Coronary artery disease is a cardiovascular disease that is the number one cause of early death. Coronary artery disease exists when the arteries in your heart are clogged. Clogging of the arteries is called **atherosclerosis**. It occurs when substances including fats, such as cholesterol, build up on the inside walls.

a. Heart attack

Occurs when the blood supply into or within the heart is severely reduced or cut off. As a result, an area of the heart muscle can die. During a heart attack, the heart may beat abnormally or even stop beating.

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b. Stroke It is the third leading cause of death and occurs when the oxygen in the blood supply to the brain is severely reduced or cut off.

Important terms

Blood pressure - the force of blood against your artery walls.

Systolic blood pressure - The pressure in your arteries immediately after the heart beats. The one that gets the higher readings.

Diastolic blood pressure - the lower of the two numbers and is the pressure in the artery just before the next beat of the heart.

High blood pressure is sometimes referred to as *hypertension*. It is the condition in which blood pressure is consistently higher than normal.

Normal - <120/<180

Prehypertension - 120-139/80-89

Prehypertension is a new category that has been recently added. People in this range have higher than normal blood pressure and should start to take precautions to prevent higher blood pressure.

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2. Cancer More than 100 different diseases characterized by the uncontrollable growth of abnormal cells are categorized as cancer. Cancer's uncontrolled cells invade normal cells, steal their nutrition, and interfere with the cells' normal functions.

3. Diabetes When a person's body cannot regulate sugar levels.

Types of Diabetes

Type I - is not a hypokinetic condition. This condition is often hereditary and accounts for about 10% of all diabetics.

Type II - most common kind of diabetes. This is a hypokinetic condition because people who are physically active are less likely to have it. Overfatness is considered to be a major risk factor for Type II diabetes.

4. Obesity A condition in which a person has a high percentage of body fat. Often is the result of inactivity, although many other factors may contribute.



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5. **Osteoporosis** When the structure of the bones deteriorates and the bones become weak. Lack of calcium in the diet, especially when a person is young, contributes to osteoporosis.

Physical Activity Wellness

Physical activity plays an important role in the prevention of hypokinetic diseases and conditions. Therefore, physical activity is important to good health.

- Benefits:**
1. Improved sense of well-being and functioning
 2. Looking your best
 3. Enjoying leisure activities
 4. Wellness and physical activity
 5. Work efficiency
 6. Opportunity for social interaction
 7. Ability to meet emergencies

Hyperkinetic Conditions

People experience *hyperkinetic conditions* health problems caused by doing too much physical activity.

1. **Overuse Injuries** Occur when you do so much physical activity that your bones, muscles, or other tissues are damaged. It is easy to see that overuse injuries for example, stress fractures, shin splints, and blisters are a type of hyperkinetic condition.

Hyperkinetic Conditions (cont)

2. **Activity Neurosis** Neurosis is a condition that occurs when a person is overly concerned or fearful about something. People with activity neurosis are overly concerned about getting enough exercise and are upset if they miss a regular workout.

3. **Body Image Disorder** This disorder occurs when a person tries to achieve an ideal body by doing excessive exercise. The ideal body is unrealistic and distorted.

4. **Eating Disorder** Several kinds of eating disorders result from an extreme desire to be abnormally thin. People with these conditions have dangerous eating habits and often resort to excessive activity to expend calories for fat loss.

3.2 Healthy Back and Good Posture

Back Problems

Backache is considered a hypokinetic condition because weak and short muscles are linked to some types of back problems. **Poor posture** also is associated with muscles that are not strong or long enough.

Lordosis, which is too much arch in the lower back. Lordosis, also called swayback, results when the abdominal muscles are weak and the hip flexor muscles (iliopsoas) are too strong and too short. Lordosis is a problem that can lead to backache.

3.2 Healthy Back and Good Posture (cont)

Posture Problems

Ptosis (Protruding abdomen/Distended Stomach) A distended stomach is a term usually used to refer to distension or swelling of the abdomen and not of the stomach itself.

Kyphosis (Rounded back and shoulders) An exaggerated, forward rounding of the back. It can occur at any age but is most common in older women. Severe kyphosis can cause pain and be disfiguring.

- Back and Posture Improvement and Maintenance**
1. Use the large muscles of the body when lifting.
 2. When lifting, keep your weight (hips) low.
 3. Divide a load to make it easier to carry.
 4. Avoid twisting while lifting.
 5. Push or pull heavy objects rather than lift them.
 6. Avoid a bent-over position when sitting, standing, or lifting.

