

3.1 Health and Wellness Benefits

Hypokinetic Diseases and Conditions

1. **Cardio-vascular Diseases** People get cardiovascular disease for many reasons, each one called a risk factor. The more risk factors you have, the more chance you have of getting a disease.

Primary risk factor are the most important such as sedentary or inactive living, smoking, and high blood pressure.

Secondary risk factor are less important that includes stressful living and excessive alcohol use.

a. **Coronary artery disease** It 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 of the arteries.

b. **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.

3.1 Health and Wellness Benefits (cont)

c. **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** is force of blood against your artery walls.

Systolic blood pressure is the pressure in your arteries immediately after the heart beats and higher readings.

Diastolic blood pressure is 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 blood pressure - 120/80
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.

d. **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.

3.1 Health and Wellness Benefits (cont)

e. **Diabetes** When a person's body cannot regulate sugar levels. A person with diabetes will have excessively high blood sugar unless he or she gets medical assistance. Over time, diabetes can damage the blood vessels, heart, kidneys, and eyes. A very high level of sugar in the blood can cause coma and death.

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.

f. **Obesity** A condition in which a person has a high percentage of body fat. The result of inactivity, although many other factors may contribute.

g. **Osteoporosis** When the structure of the bones deteriorates and the bones become weak. Osteoporosis is most common among older people, but it has its beginning in youth. You develop your greatest *bone mass*—also called your *peak bone mass*—when you are young. Those who exercise regularly develop stronger bones than those who are sedentary.

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 which are 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.
- 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.

Hyperkinetic Conditions (cont)

- 4. Eating Disorders** 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** - 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.

- Posture Problems**
- 1. 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.
 - 2. Kyphosis (Rounded back and shoulders)** - It is an exaggerated, forward rounding of the back. It can occur at any age but is most common in older women.

3.2 Healthy Back and Good Posture (cont)

- 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.