

Al Aameed University
College of Nursing
Subject: Health Promotion
Stage: Fourth
Lecture: 6



Risk factors and health promotion

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At the end of the lecture the student will be able to:

1. Defining the risk factors
2. Describing the health impact of each one.

Risk Factor

“Any **attribute, characteristic or exposure** of an individual that increases the likelihood of developing a disease”.

e.g. cigarette smoking is a risk factor

for lung cancer, and obesity is a risk factor for heart disease.



Types of risk factors

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graph TD; A[Types of risk factors] --- B[Non modifiable]; A --- C[Modifiable]
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Non modifiable

Modifiable

1- **Non modifiable risk factors:**

These which you can't change such as:

- Sex
- Age
- Ethnic background and ,
- Family history.

Types of risk factors

2- Modifiable risk factors:

The other risk factors are called modifiable, because you can do something about them.

- Smoking
- Alcohol
- Diet
- Physical activity
- high blood pressure
- Diabetes
- Being overweight
- High blood cholesterol

**Common modifiable risk factors
and their impacts on general
health**

1. Smoking/Tobacco

1. Tobacco use is the leading preventable cause of disease, disability and death.
2. Estimates show smoking increases the risk:
 - For coronary heart disease by 2 to 4 times
 - For stroke by 2 to 4 times
 - For developing lung cancer by 25 times
3. Smoking causes diminished overall health, increased absenteeism, and increased health care utilization and cost.



General Health Impact

1. Vascular Stenosis.
2. Lung Cancer.
3. Cardiovascular diseases .
4. Chronic Obstructive Pulmonary Disease .
5. Smoking during pregnancy causes pre mature delivery and low birth weight .
6. Sudden Infant Death Syndrome.

2. Alcohol

1. Alcohol is considered as one of the independent modifiable risk factors.
2. The National Institute on Alcohol Abuse and Alcoholism says that about 18 million people in the United States struggle with alcohol use disorders.
3. Excessive intake of alcohol is a risk factor for NCDs.



Alcoholism

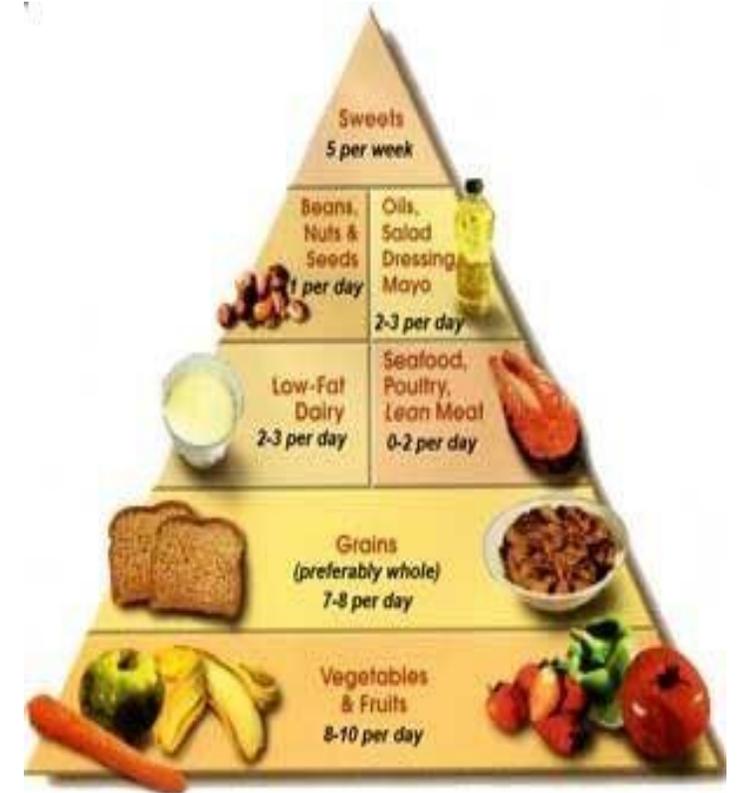
- **Alcoholism** is a drinking of alcohol that results in significant mental or physical health problems. that lead failure to fulfill major role obligations at work, school, or home.
- Nutritional deficiencies associated with heavy drinking can lower the body's natural ability to use **antioxidants** to prevent the formation of cancer.

General Health impact

1. Liver cirrhosis.
2. Hypertension.
3. CVD.
4. Digestive problems.
5. Depression.
6. Anxiety.

3. Diet

- Unhealthy diets are those that have increased fat, sugar and sodium and are low in the intake of fruit and vegetables.
- Eating a high-fiber diet is linked with a reduced risk of colorectal cancer.



- They should use a large amount of monounsaturated and polyunsaturated fatty acids and very limited amounts of saturated fats.
- Too much saturated fat may elevate blood cholesterol there by increasing the risk for CVDs as well as some cancers.
- A study (2001) reported that a reduction or modification of dietary fat intake results in reductions in cardiovascular events.

General Health impact

1. Obesity
2. Cancer
3. CVD
4. Diabetes
5. Hypertension

4. Sugar

- Body uses carbohydrates as source of energy.
- Glucose that increases on the body's need will convert to glycogen and be stored in the liver and muscles.
- When released into the bloodstream, it provides energy for the cells.



Cont.

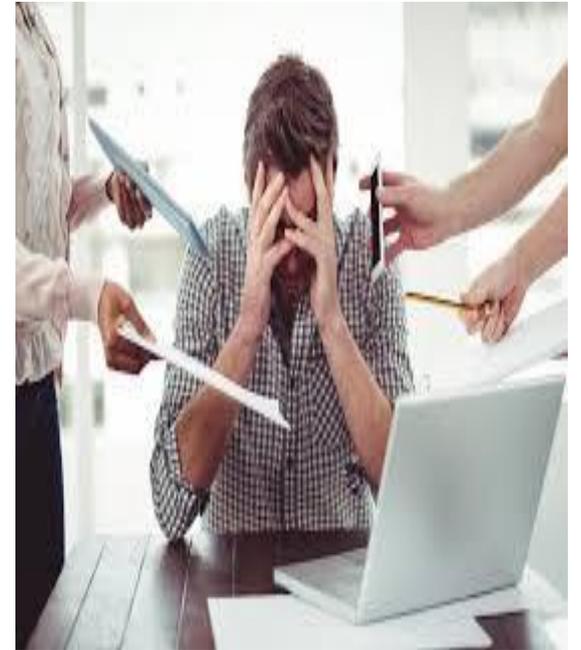
- Insulin from the pancreas helps control the amount of glucose in the body.
- More glucose in the body, the more insulin is released into the bloodstream.
- A consistently elevated glucose level puts individuals at risk for insulin resistant type 2 diabetes and CVD.
- Researchers have found a positive relationship between daily consumption of sugary drinks and an increased risk of cancer.

Impact on general health

1. Weight gain.
2. CVD.
3. Cancer.
4. Diabetes type 2.

5. Stress

Depression is a highly prevalent risk factor for incident coronary heart disease and for cardiovascular morbidity and mortality in patients with established CHD.

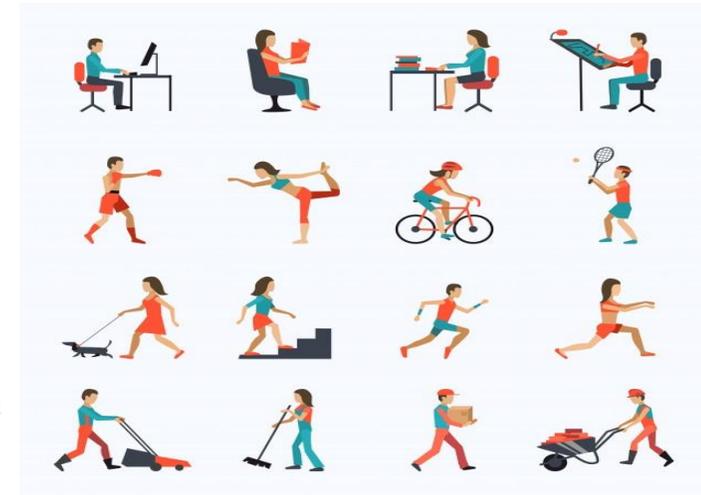


Impact on general health

1. High Blood Pressure.
2. Atherosclerosis.
3. Sleep Problems.
4. Appetite and Weight Changes

5. physical activity

- Physical inactivity is one of the leading risk factors for non communicable diseases (NCDs) and death worldwide. It increases the risk of
 - cancer,
 - heart disease,
 - stroke and diabetes by 20–30%.
 - up to 5 million deaths per year could be averted if the global population was more active.



6. Genetic risk factors

Some diseases, such as cystic fibrosis and muscular dystrophy, result entirely from an individual's genetic make-up whereas many others reflect the interaction between that make-up and environmental factors.



Cont.

- **There are three broad groups of genetic diseases disorders:**
 - 1. single gene (monogenic) disorders**, for example hemophilia;
 - 2. chromosomal abnormalities**, for example Down syndrome; and
 - 3. multifactorial diseases**, such as asthma.

7.Environmental risk factors

The environment often predisposes a person to disease processes. Living conditions may promote illness.

For instance: tuberculosis is more prevalent in crowded living conditions.



Components of environment

1. **physical**: air, water, soil, housing, climate, heat, light, noise, radiation, etc.
2. **Biological**: man, viruses, microbial agents, insects, rodents, animals and plants, etc.
3. **Chemical**: Pesticides, and Heavy metals.
4. **psychosocial**: cultural values, beliefs, habits, attitudes, morals, religion, education, lifestyles, community life, health services.

Environmental factors that Affect Health

- Chemical Safety
- Air Pollution
- Climate Change and Natural Disasters
- Diseases Caused by Microbes
- Lack of Access to Health Care
- Infrastructure Issues
- Poor Water Quality
- Global Environmental Issues

Impact on general health

Environmental pollutants can cause health problems like:

- respiratory diseases,
- heart disease,
- and some types of cancer.
- People with low incomes are more likely to live in polluted areas and have unsafe drinking water.

Thanks for Listening