



***HEALTH***

***EDUCATION***

**UNIT-II**

***DR. SRAVAN KUMAR YADAV,  
ASSISTANT PROFESSOR,  
DEPARTMENT OF PHYSICAL  
EDUCATION,  
CSJMU, KANPUR (UP)***

Dr.Sravan Yadav Asstt.  
Professor

# Communicable and Non-communicable Diseases




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Professor

# COMMUNICABLE DISEASES

Communicable diseases are those diseases which spread directly (by touching infected person or object) or indirectly (through air and water).

Caused by direct or indirect spread of pathogens (bad germs) from a person or thing to another.



An illness that is transmitted by contact with body fluids

- **directly transmitted**

acquired from a person or vector (mosquitoes, or other animal)

- **indirectly transmitted**

by contact with contaminated objects.

# HOW DISEASES ARE SPREAD

- Direct contact - touching infected area of person
- Indirect - sneezing, coughing, sharing personal items
- Contact with vectors (animals and insects) - bites
- Other contact - eating contaminated foods



# WHERE DISEASES ENTER THE BODY

- Mouth
- Eyes
- Nose
- A break in skin (cuts)
- Genitals

# COMMON TYPES OF PATHOGENS

- Bacteria
- Virus
- Fungi
- Protozoan

# Modes of Transmission

- Direct Contact: Exposure to infected body fluids such as blood or saliva.



- Vectors/Reservoirs: Germs are spread by an animal or insect, usually through a bite.





# Cont..

- Food and Water: Food and water can become contaminated with germs and people can get sick when they eat or drink them.



- Airborne: Germs are spread through the air, for example when someone coughs or sneezes.



Indirect contact: Pathogens remain on surfaces that were in contact with an infected person

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# Examples :

- Chicken pox
- Diphtheria
- Filariasis
- AIDS
- Poliomyelitis
- Malaria
- Measeles
- Tuberculosis
- Tetanus
- Rabies
- Sexually transmitted diseases



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# Chicken pox



- Chicken pox is a common disease caused by the varicella zoster virus (VZV) which is a member of the herpes virus family. (Herpes-Related to skin disease)
- Usually occurs during childhood (normally 5-9) , but you can get it at any time in your life.

## Symptoms:

Not interested in any things

- small fever, body aches and loss of appetite.
- Within 1or 2 day, the rash appears, begins as red spots which then form blisters and spreads to the rest of the body.



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# Prevention

- There are no actual cures for it ,but you can get a vaccine shot to help prevent it.
- Baths with uncooked oatmeal, baking soda, or cornstarch can help relieve itching.
- Tylenol is used for fever or pain relief. (Aspirin should be avoided.)  
Pain killer
- Antiviral drugs such as Acyclovir may be prescribed.
- You can put Calamine lotion on the pocks to help stop the itching.



# Diphtheria

- It is caused by bacteria *Corynebacterium diphtheriae*.

Symptoms: Sore throat, Low fever, Swollen neck glands, Airway obstruction and breathing difficulty, Shock.

## Modes of Transmission:

- Solely among humans, spread by droplets
- Secretions, direct contact, Poor nutrition
- Low vaccine coverage among infants & children.





# Prevention

- Sanitary: Reduce carrier rate by use of vaccine.
- Immunological: A vaccine (DPT) prepared from an alkaline formaldehyde inactivated toxin (i.e. toxoid) is required. Passive immunization with antitoxin can be used for patients.
- Chemotherapeutic: Penicillin, erythromycin or gentamicin are drugs of choice.



# Filariasis

Infection caused by 3 closely related Nematodes-

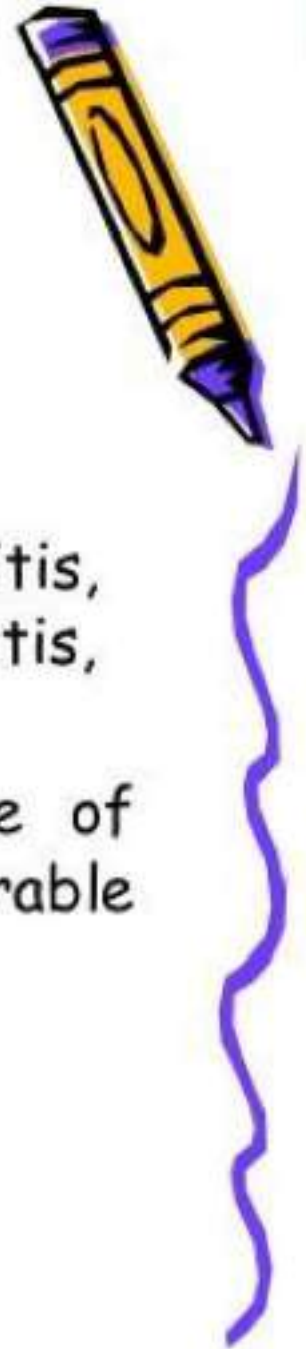
- "*Wuchereria bancrofti*"
- "*Brugia malayi*"
- "*Brugia timori*"

Symptoms: Filarial fever, Lymphangitis, Lymphadenitis, Elephantiasis of genitals/legs/arm, Filarial arthritis, Chyluria.

Mode of transmission: Transmitted by the bite of infected mosquito responsible for considerable sufferings.



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# Prevention

- Treating the infection by Cooling the leg, drying, exercise.
- Treatment and prevention of Lymphoedema.
- Drugs effective against filarial parasites-
  1. Diethyl Carbamazine citrate (DEC)
  2. Ivermectin
  3. Albendazole
  4. Coumarins compound





# AIDS

- Acquired Immunodeficiency Syndrome"
- HIV (Human immunodeficiency virus) is the virus that causes AIDS
- Disease limits the body's ability to fight infection due to markedly reduced helper T cells.
- Patients have a very weak immune system (defense mechanism)

Symptoms: Fever, Headache, neuropathy, Sores, Rashes, Nausea, Vomiting.

Mode of Transmission: Sharing Needles, Unsterilized blades, Unprotected Intercourse, Mother to Baby.



# Prevention

Some ways to protect urself-

- Monogamous Relationship.
- Protected Sex.
- Sterile needles.
- New shaving/cutting blades.

Anti-retroviral drugs are used-

- AZT (Zidovudine).
- Viramune (Nevirapine).
- Norvir (Ritonavir).



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# Malaria

It is caused by four *Plasmodium* species-

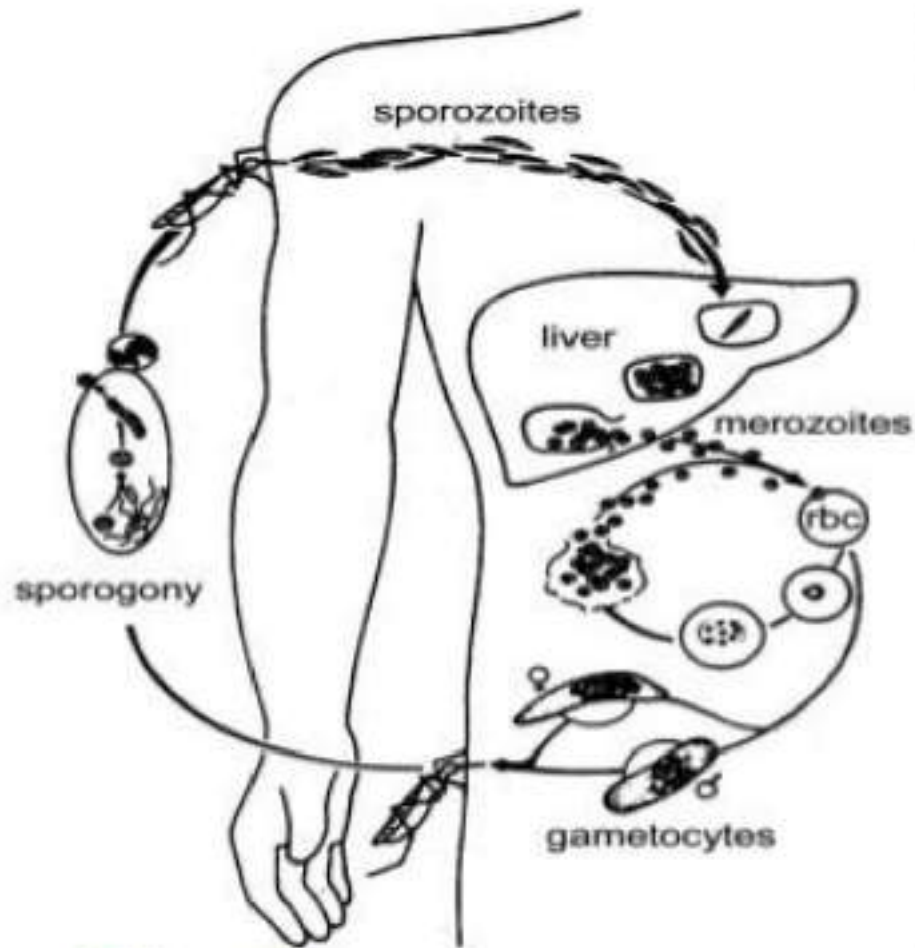
- *P. falciparum*
- *P. vivax*
- *P. malariae*
- *P. ovale*

Symptoms: Chills, Fever, Internal fever, Body ache.

Mode of transmission: It is transmitted by female anopheles mosquito, sporozoites injected with saliva & enter circulation then infected person.



# Life cycle of malaria parasite



- sporozoites injected during mosquito feeding.
- invade liver cells.
- exoerythrocytic schizogony.
- merozoites invade RBCs.
- gametocytes infective for mosquito.
- fusion of gametes in gut.
- sporozoites invade salivary glands.

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# Prevention

- Use a spray containing permethrin on clothing.
- Apply insect repellents regularly in cream, spray or gel form that contain diethyltoluamide (DEET).
- Use coils and mats impregnated with insecticide in closed rooms to repel the mosquitoes.
- Malaria prophylaxis are taken.
- Anti-malarial drugs are used such as chloroquine.





# Measeles

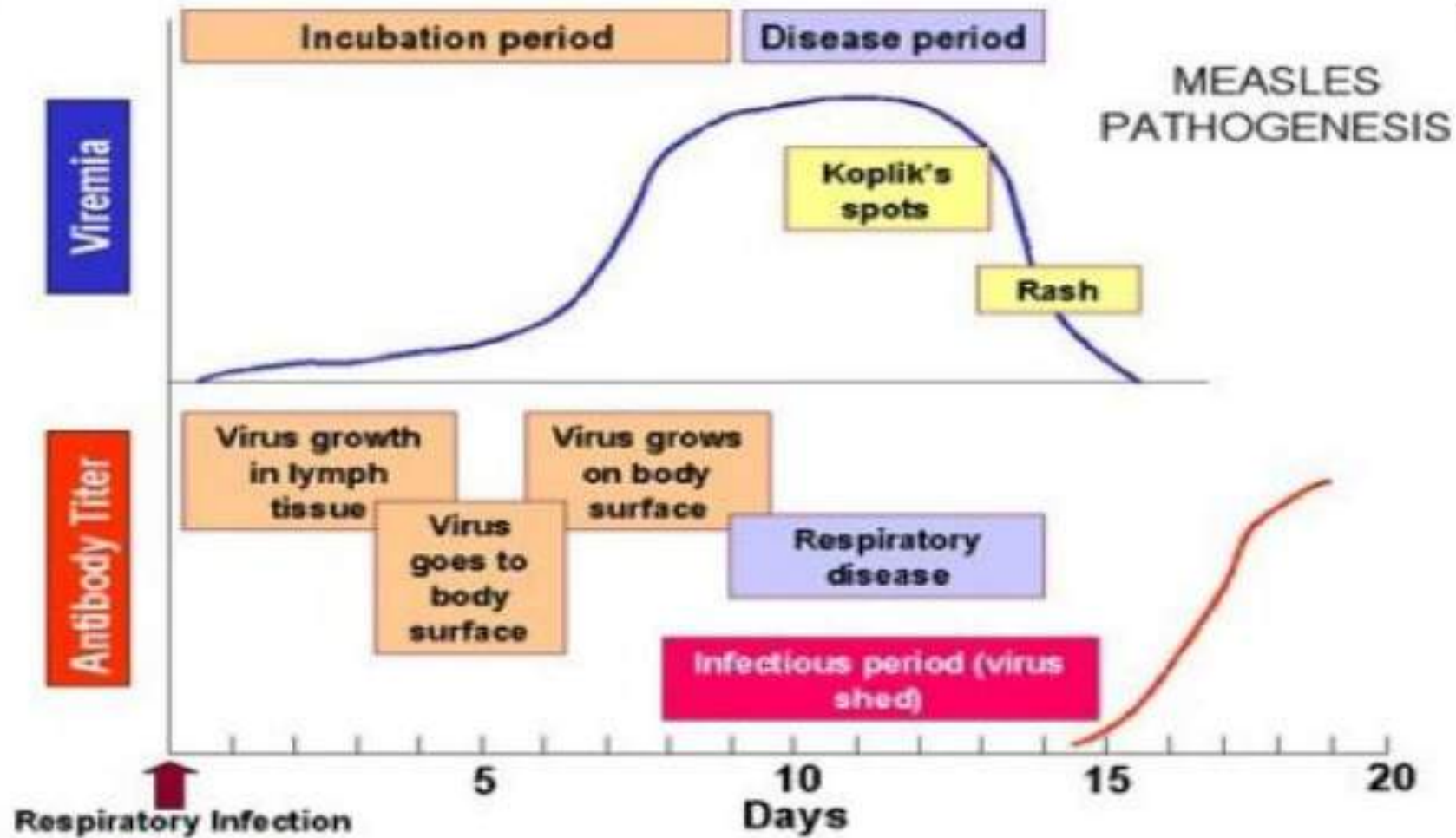
- It is caused by agent- RNA virus (Paramyxovirus family, genus Morbillivirus )
- Symptoms: Diarrhea, Pneumonia, Convulsions, SSPE (sub acute sclerosing panencephalitis).
- Modes of transmission: Transmitted by Droplet infection 4 days before and 4 days after rash.



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# Measeles

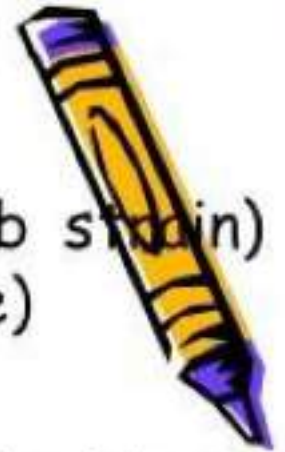


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# Prevention

- Live attenuated measles virus (Edmonston-zagreb strain)  
Propagated on human diploid cell. (0.5 ml of vaccine)
- Measles vaccine has to be given at 9 months.
- If Measles vaccine is given a 3 months gap is advisable to give MMR vaccine.
- The vaccine should be reconstituted with the diluent supplied (Sterile water for injection) using a sterile Auto disabled syringe with needle.
- After reconstitution the vaccine should be used immediately.
- If the vaccine is not used immediately then it should be stored in the dark at  $2^{\circ} - 8^{\circ}\text{C}$  for no longer than 8 hours.



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# Tuberculosis

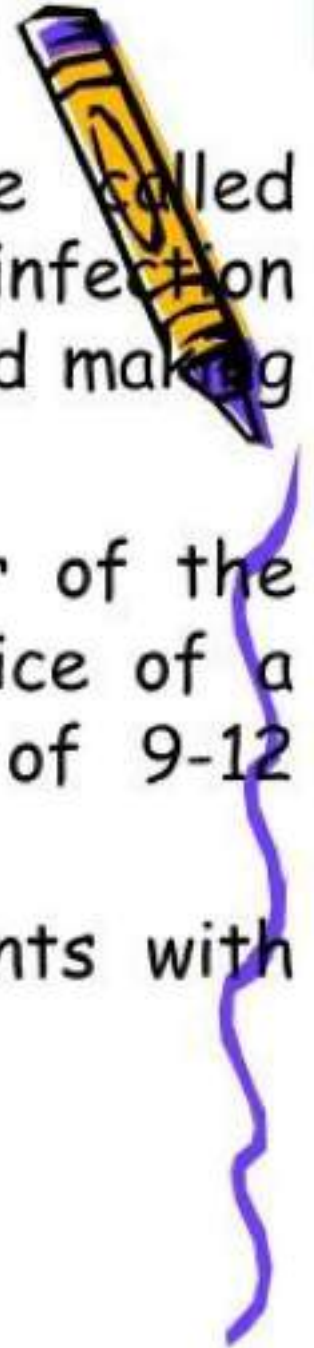
- "Tuberculosis is defined as an infectious disease caused by a bacterium *Mycobacterium T.B.* ; that most commonly affects the lungs."
- Symptoms: Slight fever, night sweats, weight loss fatigue.
- Modes of transmission: tuberculosis is an airborne disease able to be passed from one person to another.



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# Prevention

- Your doctor may prescribe a medicine called *isoniazid* to prevent the tuberculosis infection from developing into the active disease and making you feel sick.
- If you contract TB of the abdominal or of the extra-pulmonary you may have the choice of a mainstay therapy that takes a course of 9-12 months in order to complete.
- Surgery is generally reserved for patients with obstruction of vital organs.





# Tetanus

- A Neurological disease characterised by increased muscle tone & spasms Caused by CLOSTRIDIUM TETANI.
- It is found worldwide in soil, in inanimate environment, in animal faeces & occasionally human faeces.





# Cont.

- Symptoms: muscle rigidity, dysphagia, rigidity, spasm, trismus, hyperpyrexia.
- Mode of transmission: Infection is acquired by contamination of wounds with tetanus spores.



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# Prevention

- Goal is to eliminate the source of toxin, neutralize the unbound toxin & prevent muscle spasm & providing support - support
- Admit in a quiet room in ICU
- Continuous careful observation & cardiopulmonary monitoring.
- Minimize stimulation.
- Protect airway.
- 2 preparations : combined vaccine : DPT.  
monovalent vaccine : plain / formol  
toxoid tetanus vaccine.



# Rabies

- Rabies is a viral disease that causes acute encephalitis in warm blooded animals, it can be transmitted to humans from other species.
- The rabies virus infects the CNS, cause disease in brain & death.

- Symptoms:

Partial paralysis, anxiety, insomnia, confusion, agitation, abnormal behavior, terror, and hallucinations, progressing to delirium.





# Contd.

- Modes of transmission:

Rabies may also spread through exposure to infected domestic animals, groundhogs, bears, raccoons and other wild carnivorans.

Small rodents such as squirrels

hamsters, guinea pigs, gerbils, chipmunks

rats and mice.





# Prevention

- Vaccinating dogs, cats, rabbits, and ferrets against rabies.
- Keeping pets under supervision.
- Not handling wild animals or strays.
- Contacting an animal control officer upon observing a wild animal or a stray, especially if the animal is acting strangely.
- If bitten by an animal, washing the wound with soap and water for 10 to 15 minutes and contacting a healthcare provider to determine if post-exposure prophylaxis is required.



# Sexually transmitted disease

- STDs are diseases and infections which are capable of being spread from person to person through
  - sexual intercourse
  - oral-genital contact or in non-sexual ways.
  - IV drug
- Some STD's are:
  - ✓ Chlamydia.
  - ✓ Gonorrhoea.
  - ✓ Syphilis.
  - ✓ Candidiasis - Yeast Fungus.



# Contd.

- Symptoms:

1. Sores.
2. Blood in urine.
3. Burning sensation when urinating.
4. Rashes.
5. Itching.
6. Warts.
7. Unusual discharge.

- Modes of transmission:

- ✓ sexual intercourse
- ✓ oral-genital contact or in non-sexual ways.
- ✓ IV drug



# Prevention

- Abstinence.
- Know your partner
- Limit your partners.
- Visit your doctor.
- Always look.
- Keep clean.



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# NCD IS A MEDICAL CONDITION OR DISEASE

- ◉ which is not infectious
- ◉ with long duration
- ◉ relatively slow in progress
- ◉ which a person is unaware of the disease unless or otherwise examined
- ◉ a silent killer of people



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# NON-COMMUNICABLE DISEASES

- Diseases that CANNOT be spread from one person/thing to another
- Diseases that are not caused by pathogens (bad germs)
- Can affect any system in the body (circulatory, nervous, respiratory)
- Can be treated but not usually cured

# CAUSES OF NON-COMMUNICABLE DISEASES

- 1. Hereditary- passed from parent to child
- 2. Environmental
  - Where you live –or work
  - For example: Nuclear power plant
- 3. Lifestyle
  - Poor health habits – Smoking, drinking, poor diet, lack of exercise and emotional stress.



# PREVENTING NON-COMMUNICABLE DISEASE

- Have a balanced diet
- Get regular exercise
- Avoid tobacco, alcohol, and other drugs
- Regular check-ups can identify early warning signs





# COMMON NON-COMMUNICABLE DISEASES

- Cancer
- Cardiovascular disease
  - Heart Attack
  - Stroke



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# PREVENTION FOR COMMUNICABLE DISEASES

1. Wash hands
2. Cover mouth when sneezing or coughing
3. Proper care of food, don't share food
4. Eat healthy and exercise to improve immune system
5. Shower daily

# MAJOR NCDS

- ◉ Cardiovascular diseases- (heart attacks and strokes)
- ◉ Cancer
- ◉ Diabetes
- ◉ Chronic respiratory diseases - (asthma)



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# WHY ... IMPORTANT TO KNOW ABOUT NCDS ??

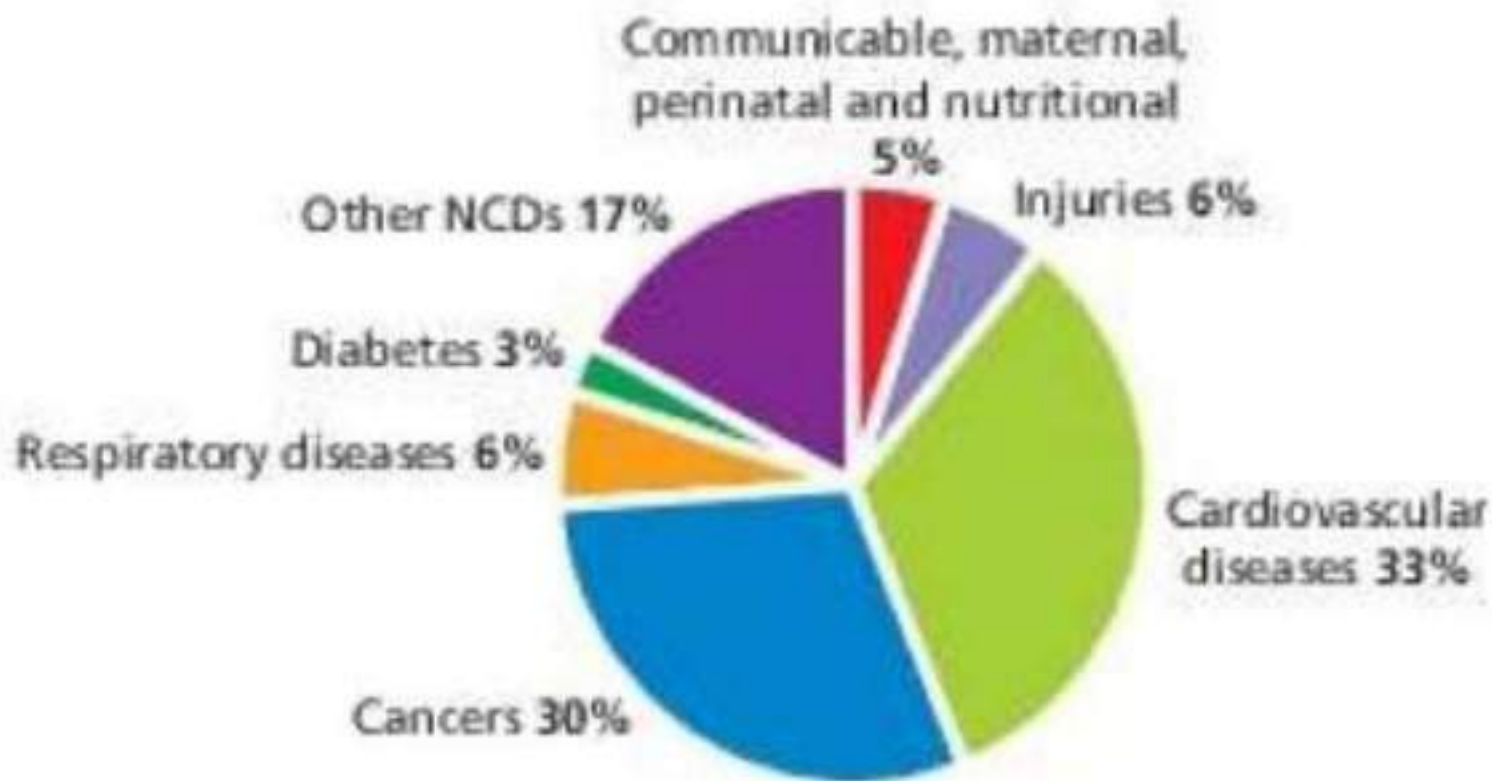
- The number one cause of death in the world. (more than 36 million people)
  - Cardiovascular diseases- 48%
  - Cancer- 21%
  - Diabetes- 3%
  - Chronic respiratory diseases - 12%
- More than 9 million deaths are premature (under 60 years of age) and could be prevented

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# STATUS OF NCDS IN CANADA

Mortality by cause of death (% of all deaths), 2008



<http://www.commonwealthofnations.org/wp-content/uploads/2013/08/mod-canada-CHP13.jpg>  
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## CHARACTERISTICS OF NCDS :

- ⦿ Not caused by an acute infection
- ⦿ Have common risk factors
- ⦿ Cause long-term harm
- ⦿ Need a long-term (or even life-long) treatment
- ⦿ Cause both men and women equally
- ⦿ Sometimes, cause disability

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## CAUSES FOR NCDS (RISK FACTORS)



- ◉ Unhealthy diet
- ◉ Tobacco usage
- ◉ Physical inactivity
- ◉ Stress factors
- ◉ Overweighed (obese)
- ◉ Genetics
- ◉ Harmful use of alcohol
- ◉ Environmental factors



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## IF YOU ...

- Have a person in your family ever had one of the NCDs
- Have High blood pressure
- Have High cholesterol level
- Are obese (over weight)
- Are exposed to air pollution
- Have raised blood glucose level
- Are exposed to Environmental factors



- **YOU ARE AT RISK !!!!!!!!!!!**

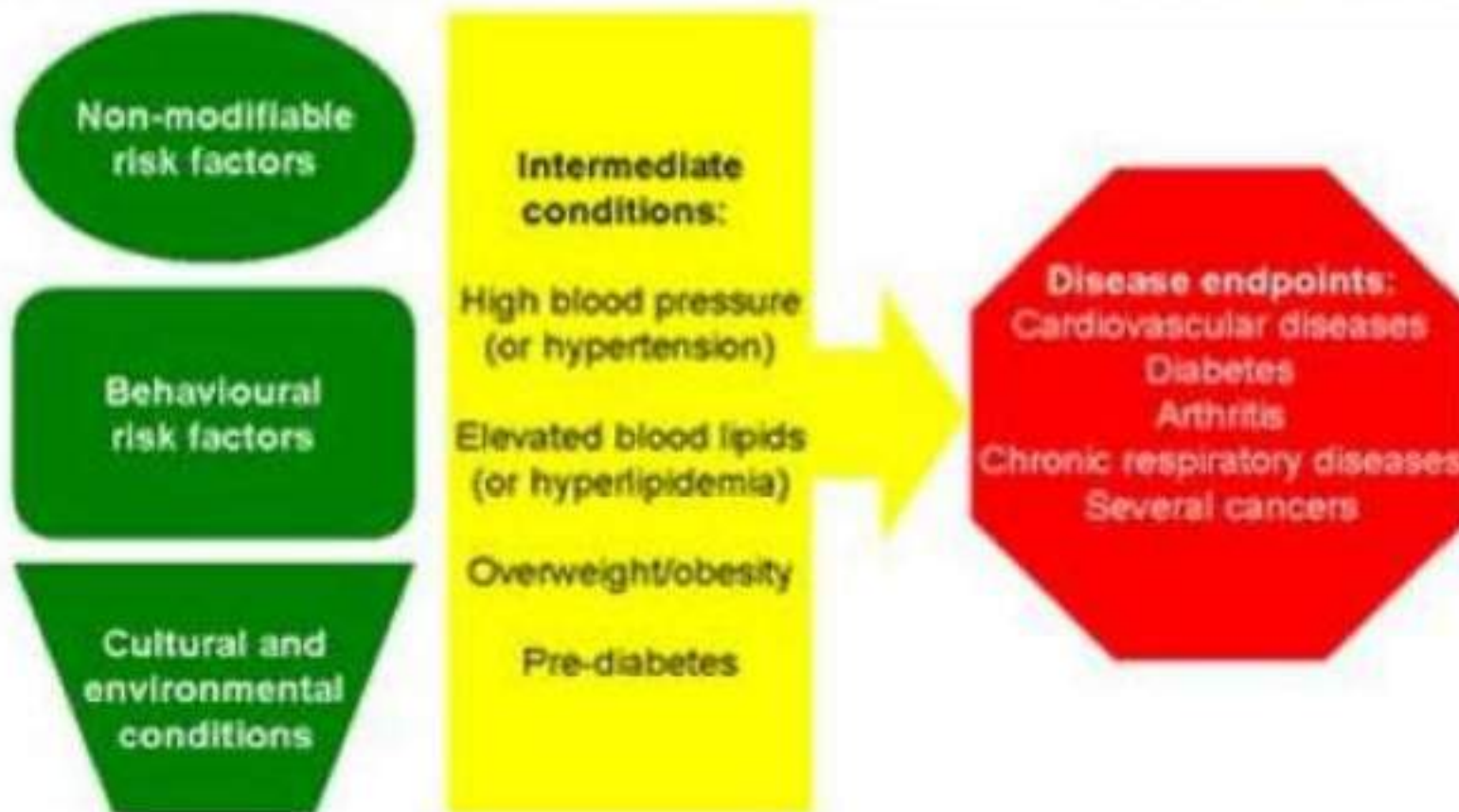
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# CLASSIFICATION OF RISK FACTORS

- ◉ Background risk factors- age, sex, level of education and genetic composition  
-cannot be changed
- ◉ Behavioral risk factors- tobacco and alcohol use, unhealthy diet and physical inactivity  
-can be modified
- ◉ Intermediate risk factors- elevated blood lipids, diabetes, high blood pressure and overweight/obesity  
-can be controlled

# Chronic diseases share common risk factors and conditions



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# IF... MAJOR RISK FACTORS ARE CONTROLLED

- ⦿ Around three-quarters of heart diseases,
- ⦿ Stroke
- ⦿ Type 2 diabetes
- ⦿ 40% of cancer



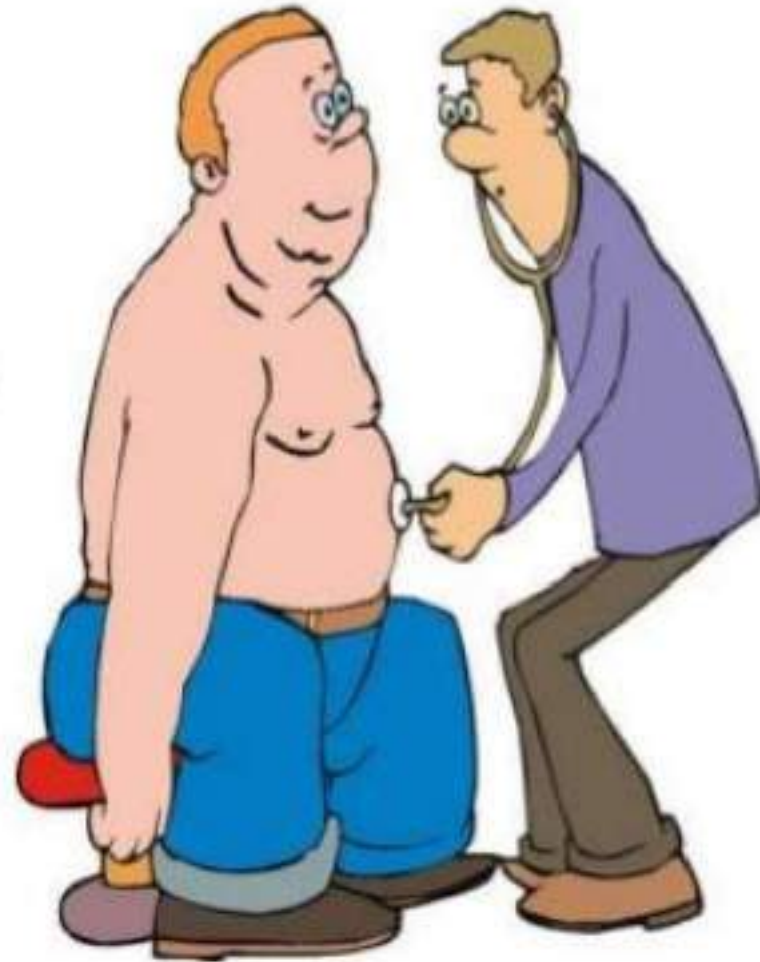
would be prevented

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# HOW TO MINIMIZE THE RISK ?

- ◉ Healthy diet
- ◉ Regular exercise
- ◉ Change the environment
- ◉ Modify the habits
- ◉ Regular medical check-ups



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# CONCLUSION

- ◉ The NCDs may not be able to cure completely

**BUT**

- ◉ Can be controlled

**AND**

- ◉ **are preventable** through effective interventions that tackle risk factors



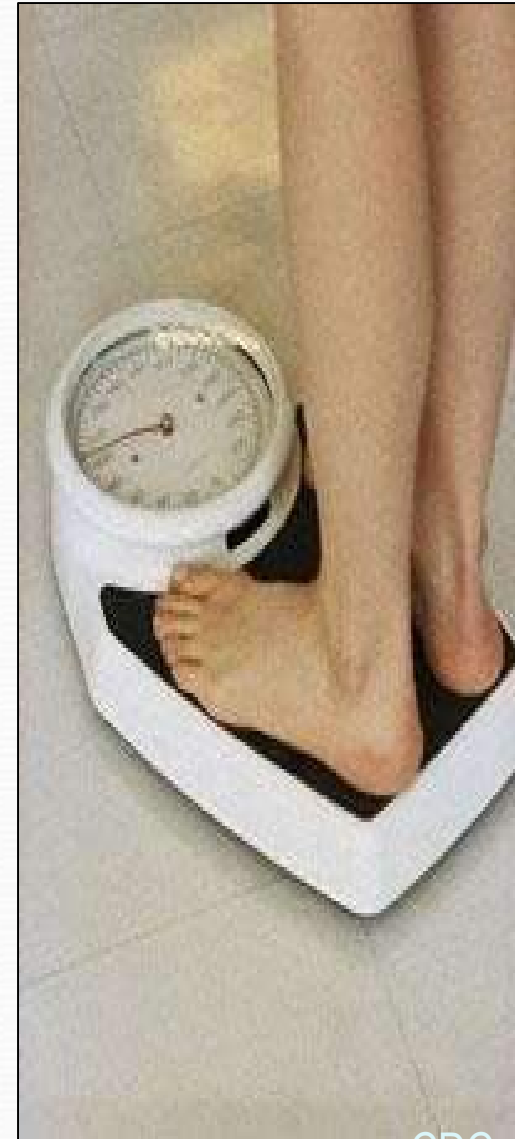
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# Distinguish between communicable and non-communicable diseases

- Non-Communicable disease
  - Also called non-infectious diseases
  - For example: Heart disease
- Communicable diseases
  - Also called infectious diseases.
  - Passed through direct/indirect contact

# ***OBESITY***

- Overweight and obesity are both chronic conditions that are the result of imbalance in calorie intake and energy expenditure over a period of time.
- The cause of this energy imbalance can be due to a combination of several different factors and varies from one person to another.



# ENERGY IMBALANCE

## WHAT IS IT?



Calories Consumed  $>$  Calories Used

Calories Consumed  $<$  Calories Used

*No Weight Change*

Calories Consumed  $=$  Calories Used



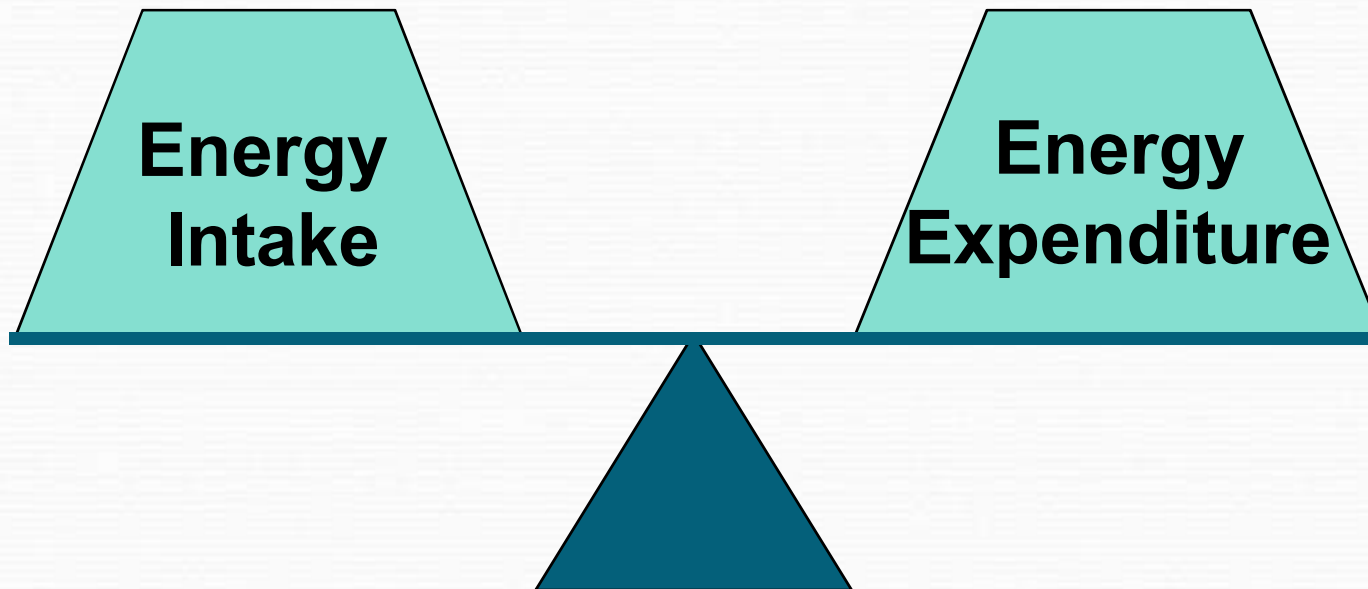


*Energy balance* can be compared to a scale.

An *energy imbalance* arises when the number of calories consumed is *not equal* to the number of calories used by the body.

*Weight gain* usually involves the combination of consuming too many calories and not expending enough through physical activity.

# ENERGY BALANCE



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# Weight Classifications

## A Review

Body mass index (BMI) is a mathematical ratio which is calculated as weight (kg)/ height squared ( $m^2$ ). It is used to describe an individuals relative weight for height, and is significantly correlated with total body fat content. BMI is intended for those 20 years of age and older.

# BODY MASS INDEX NORMS

<i>With a BMI of:</i>	<i>You are considered:</i>
<b>Below 18.5</b>	<b>Underweight</b>
<i>18.5 - 24.9</i>	<i>Healthy Weight</i>
<b>25.0 - 29.9</b>	<b>Overweight</b>
<b>30 or higher</b>	<b>Obese</b>

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# MORTALITY

## EXCESS BODY WEIGHT



- Mortality associated with excess body weight increases as the degree of obesity and overweight increases.
- It is estimated that 280,000 to 325,000 deaths a year can be attributed to obesity in the United States, more than 80% of these deaths occur among individuals with a BMI greater than 30 kg/m<sup>2</sup>.

# RISK FACTORS OF OBESITY

Individuals who are obese are at a greater risk of developing:

- Obstructive sleep
- Osteoarthritis
- Cardiovascular disorders
- Gastrointestinal disorders (Related to digestion)
- Metabolic disorders
- Breast cancers
- Complications of pregnancy
- Menstrual irregularities
- Psychological disorders

# IN CONCLUSION

The following conditions have been found to be associated with obesity:

- Diabetes
- Hypertension
- Gallbladder Disease
- Liver Disease
- Cancer
- Coronary Artery Disease
- Endocrine Changes
- Psychosocial Function
- Obstructive Sleep
- Osteoarthritis




# ADULTERATION IN FOOD

"Adulteration" is a legal term meaning that a food product fails to meet the state of standards. Adulteration is an addition of another substance to a food item in order to increase the quantity of the food item in raw form or prepared form, which may result in the loss of actual quality of food item.

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These substances may be other available food items or non-food items. Among meat and meat products some of the items used to adulterate are water or ice, carcasses (dead bodies) of animals other than the animal meant to be consumed.

# *Reducing the purity of food by the addition of a foreign or inferior substance*

- Addition of sand to brown sugar and rice to make heavier
- Addition of colors to disguise (Change in size and shape poor quality
- Snails added to milk to make more “frothy”
- Added water can be an adulterant

The Federal Food, Drug, and Cosmetic (FD&C) Act 2888) provides that food is "adulterated" if it meets any one of the following criteria:

- (1) It contains any "poisonous or harmful substance" which may be injurious to health;
- (2) its container is composed, in whole or in part, of any poisonous substance which may be responsible that is injurious to health.

(3)it bears or contains a pesticide chemical residue that is unsafe.

(4)it is, or it bears or contains, an unsafe food additive;

(5)it is, or it bears or contains, an unsafe colour additive;

(6)it consists, in whole or in part, of "any filthy (very poor), decomposed substance" or is otherwise unfit for food.

(7)it has been prepared, packed, or held under unsanitary conditions (insect, rodent, or bird infestation).



# ENVIRONMENTAL SANITATION

Maintaining the well-being of people by activities of improving or maintaining the standard of basic environmental conditions.

Activities aimed at improving or maintaining the standard of basic environmental conditions affecting the well-being of people.

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## These conditions include

- (1) clean and safe water supply
- (2) clean and safe air
- (3) efficient and safe animal, human, and industrial waste disposal,
- (4) protection of food from biological and chemical contaminants
- (5) adequate housing in clean and safe surroundings. Also called environmental hygiene.

# COMPONENTS OF ENVIRONMENTAL SANITATION

- Water Sanitation
- Food Sanitation
- Sewage Disposal
- Refuse Disposal
- Vector Control
- Housing
- Air Sanitation

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# EXPLOSIVE POPULATION



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# EXPLOSIVE POPULATION

Explosive population refers to the rapid and dramatic rise in world population that has occurred over the last few hundred years. Between 1959 and 2000, the world's population increased from 2.5 billion to 6.1 billion people. According to United Nations projections, the world population will be between 7.9 billion to 10.9 billion by 2050.

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**An increase of people on the world increases the depletion of natural resources and produces more waste and pollution is the population explosion.**



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# Human impact on the environment

How does human activity affect the environment?

Reduce the land available for plants and animals

More waste is produced which (if not handled properly) may pollute air, water & land

Raw materials (inc. non-renewable) resources are being used up



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# Personal And Environmental


## Hygiene For School

Word hygiene is derived from the Greek word “hygies” (Hygieia- Goddess of Health) Meaning “Healthy, Sound”

- Personal hygiene- Personal hygiene may be described as the principle of maintaining cleanliness of the body.

- Regular Routine of personal care washing of Hair, Face and Skin, Teeth, Ears, Hands, Nails and feet.



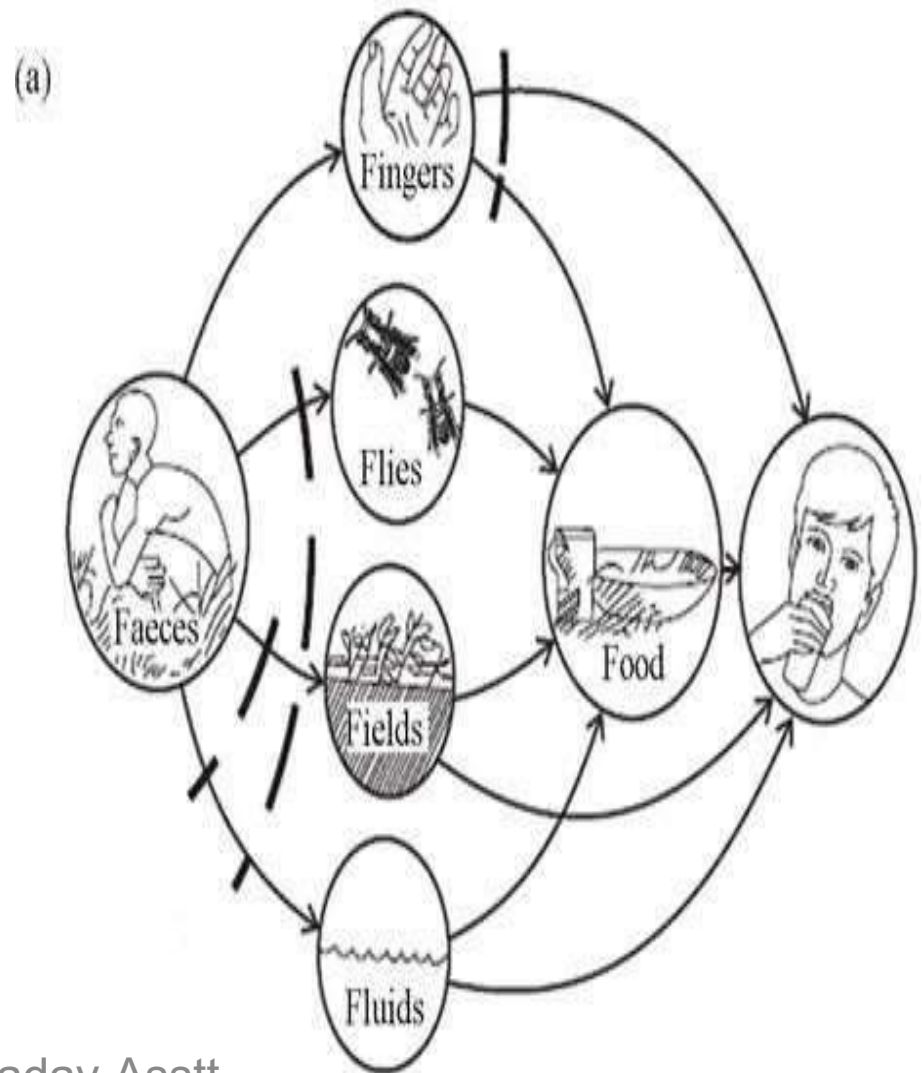


Personal hygiene refers to personal care, sanitation, habits, cleanse such as care of mouth, eye, nose, skin, nails and hair of school children to minimize the chances of various communicable disease.

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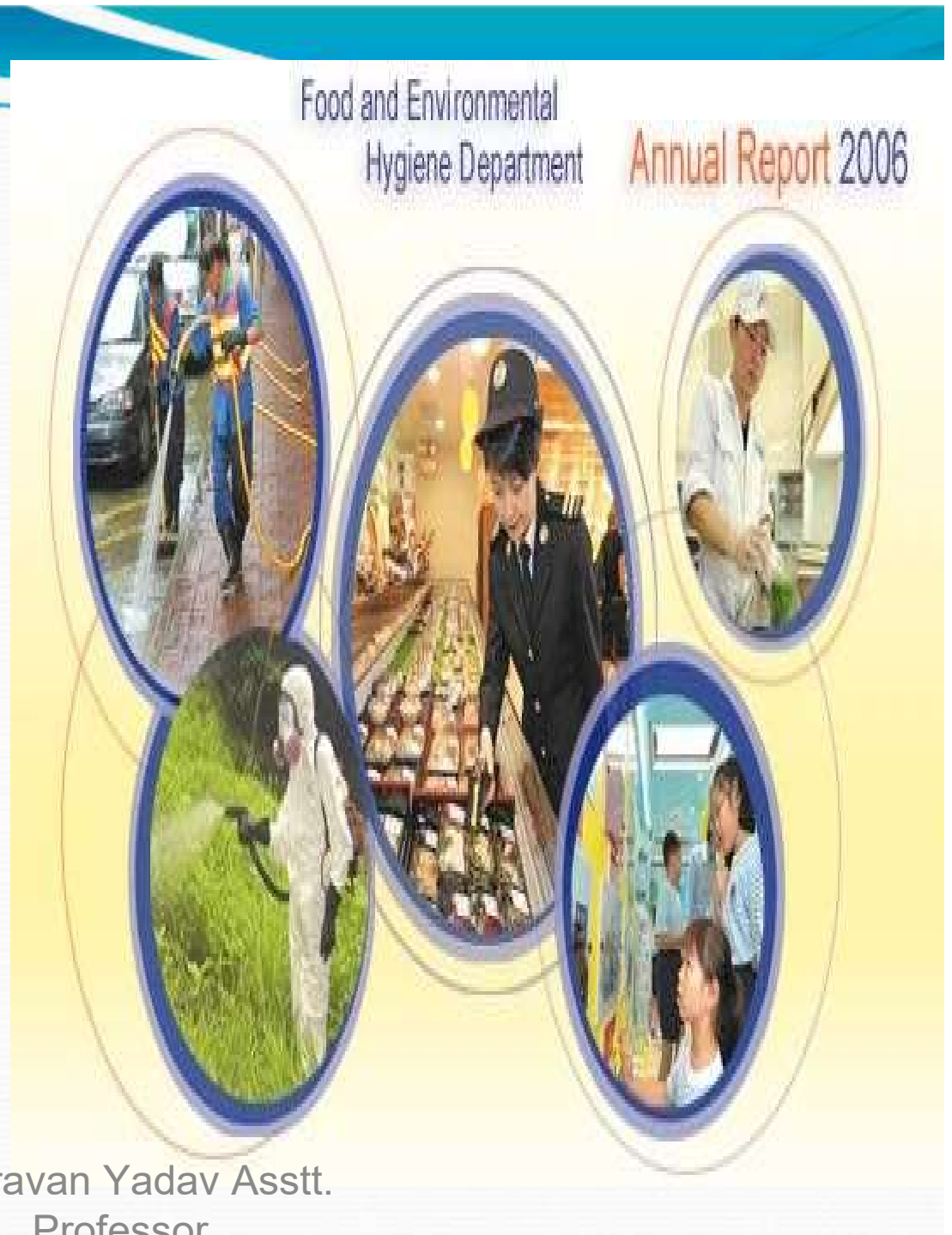
# ENVIRONMENTAL HYGIENE

Environmental hygiene refers to the sound and safe environment, surroundings and climates of school.



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Environmental hygiene is important for the prevention of transmission of infectious diseases within healthcare settings.



Environmental hygiene, the concept is associated with preservation of sanitary conditions of the environment to avoid harm the health of persons.



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Environmental hygiene is effective method of cleaning of surroundings by using appropriate products, decontamination of equipment and devices used in school, safe and appropriate handling of various types of diseases.



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# MALNUTRITION

Malnutrition is condition that results from eating a diet in which nutrients are either not enough or are too much such that the diet causes health problems. It may involve calories, protein, carbohydrates, vitamins or minerals. Not enough nutrients is called under nutrition or undernourishment while too much is called over nutrition.

Malnutrition is a broad term which refers to both under nutrition (sub nutrition) and over nutrition.


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Individuals are malnourished, or suffer from under nutrition if their diet does not provide them with adequate calories and protein for maintenance and growth, or they cannot fully utilize the food they eat due to illness.

People are also malnourished, or suffer from over nutrition if they consume too many calories.

Malnutrition can also be defined as the insufficient, excessive or imbalanced consumption of nutrients.






If a person does not eat enough food, or if what they eat does not provide them with the nutrients they require for good health, they suffer from malnutrition.

Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and nutrients.



# SYMPTOMS OF MALNUTRITION

- Loss of fat ( adipose tissue)
- Breathing difficulties, a higher risk of respiratory failure
- Depression
- Higher risk of hypothermia- abnormally low body temperature
- The total number of some types of white blood cells falls, consequently, the immune system is weakened, increasing the risk of infections.

- 
- Higher susceptibility (related to feelings) to feeling cold
  - longer healing times for wounds
  - Longer recover times from infections
  - Longer recovery from illnesses
  - Lower sex drive
  - Problems with fertility
  - Reduced muscle mass
  - Tiredness, fatigue,
  - Irritability

# CAUSES OF MALNUTRITION

1. Poor diet
2. Mental health problems
3. Digestive disorders and stomach conditions
4. Alcoholism
5. Food Shortages
6. Food distribution
7. Lack of breastfeeding
8. Eating disorders

# SCHOOL HEALTH SERVICES

School health refers to a state of complete, physical, mental, social and spiritual well-being and not merely the absence of disease or infirmity among pupils, teachers and other school personnel.

( K.K. Gilani School)

School health services is an important aspect of community health. It is possible to increase the health level of community and achieve growth in the health of future generations through school health services.

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# **AIM OF SCHOOL HEALTH SERVICES**

The ultimate aim of school health services is to promote, protect and maintain health of school children and reduce mortality in them.

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# **OBJECTIVES OF SCHOOL HEALTH SERVICES**

1. The promotion of positive health.
2. To motivate school personnel in the matter of health
3. The prevention of disease
4. Early diagnosis, treatment and follow up of defects.
5. Health consciousness among the children.
6. The provision of healthful environment.


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# Role of Health Education In Schools

1. Health education builds students' knowledge, skills, and positive attitudes about health.
2. Health education teaches about physical, mental, emotional and social health.
3. It motivates students to improve and maintain their health, prevention from diseases, and reduce risky behaviors.
4. Health education curriculam and instruction help students learn skills they will use to make healthy choices throughout their lifetime.

Dr.Sravan Yadav Asstt.  
Professor

- 
5. Effective and healthy habits result in positive health changes in behavior
  6. It helps to prevent students from various communicable and non communicable disease
  7. It helps to early diagnosis and treatment of various health related issue
  8. It helps to develop healthy habits and healthy attitude of school personnel



# Health Services

## Care of Skin

1. Avoid prolonged exposure to bright sunlight.
2. When you are in the sun, wear sunscreen with a SPF (sun protection factor).
3. You should also wear long sleeves.
4. It is essential to keep the skin clean and dry as it prevents entry of many pathogenic organisms in to our body.

2. Take bath twice a day.
3. Take well balanced diet containing vitamin A, B,C and protein.
4. Use Massage that increases skin blood circulation.
5. Take warm bath to increase blood circulation.
6. Take enough amount of water
7. Regular exercise.
8. Use moisturizer or lotions to keep skin smooth and healthy

# Care of Hair

1. Use a good quality of shampoo and moisturizing conditioner.
2. Always use natural shampoo.
3. Never use chemical made shampoo and moisturizer.
4. Neat and healthy hair makes a good impression on others.
5. Wash hair daily
6. well balanced diet help in healthy hair growth.
7. You may decide to wear a head cover your hair grows back.

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8. Regular massage stimulates hair growth.

9. Shampooing helps to keep the hair and scalp (upper layer of skin) clean and relieve dandruff.

10. Avoid scratching with finger on the scalp.

11. Use soft brush on the hair

12. Talk with your doctor if you have problems related to hair.



# Care of Nails

1. Your nails may have ridges that indicate stopped nails growth.
2. Avoid cutting the cuticle when trimming your nails.
3. For people who wear nail polish, a remover that contains oil is recommended to prevent over-drying.
4. Use nail brushes to clean the nails, wash hands before and after food and toileting.

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5. Avoid using low quality/harm full chemical made nail polish and nail polish remover .

6. To cut the nails never use blade, always use nail cutter and other safety majors.

7. Should not use blades or any sharp objects to remove nail polish.

8. Avoid nail biting

# Care of eye

1. Find out if you are at higher risk to eye disease- Heredity problem, Environmental conditions, aging factor

3. Look for warning signs of changes in your vision- If you start noticing changes in your vision, consult to your eye doctor immediately.

4. Exercise more regularly- some studies suggests that regular exercise such as walking can reduce risk of age-related eye problem

5. Protect your eyes from harmful UV rays.

6. Eat a healthy and balanced diet

7. Regular eye checkup

8. Don't smoke

9. Avoid stress and frustration

10. Make reading easier

11. Font of the book should be readable



12. Good light in study room

13. Make learning more enjoyable

14. Wash your eyes and face frequently

In the case of some vision conditions, early detection and treatment is the only way to prevent loss of sight in the afflicted eye

# NUTRITION SERVICE

**Nutrition** is the process of taking food into the body and absorbing the nutrients in those foods.

The substances that you take into your body as food and the way that they influence your health.

# Nutrition service

Nutrition service provide a quality of school meal program and ensure that students have only appealing, healthy food.



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# Objectives of Nutrition Services



**Promote and  
participation  
in healthy  
school meals**



**Management  
foods with  
*Dietary  
Guidelines for  
Children***



**Make all foods  
nutritious and  
healthy**

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Professor



# SCHOOL NUTRITION PROGRAMME

**It include local preferences try new products**



**Trained staff and “new” ideas and preparation**



**Promote healthy food program**



**Check student acceptance**



**Keep it going- get all levels of staff  
involved-Wellness of Committees**



**Use resources- whatever available**

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# The Facts – promote the good food

- Fresh fruits and veggies
- Whole grains
- Reduced/zero TransFats
- Salads
- Lowfat dairy
- Baked items rather than fried
- Healthy cooking
- Add Protein foods



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# Child Nutrition Programs

- National School Lunch Program (NSLP)
- School Breakfast Program (SBP)
- Special Milk Program for Children (SMP)
- Child and Adult Care Food Program (CACFP)
  - At-Risk Afterschool Meals
- Summer Food Service Program (SFSP)
- Fresh Fruit and Vegetable Program (FFVP)
- Mid day meal
- Balwadi program

# HEALTH APPRAISAL

Health appraisal refers to a series of procedures to assess or determine the **health** status of the students through the use of teacher's observations, screening tests, **health** histories or medical records, medical and dental inspections and psychological tests.

A **health appraisal**, or **health** risk assessment, is a tool that allows **health** providers to gather information about an individual's physical **health** and lifestyle.

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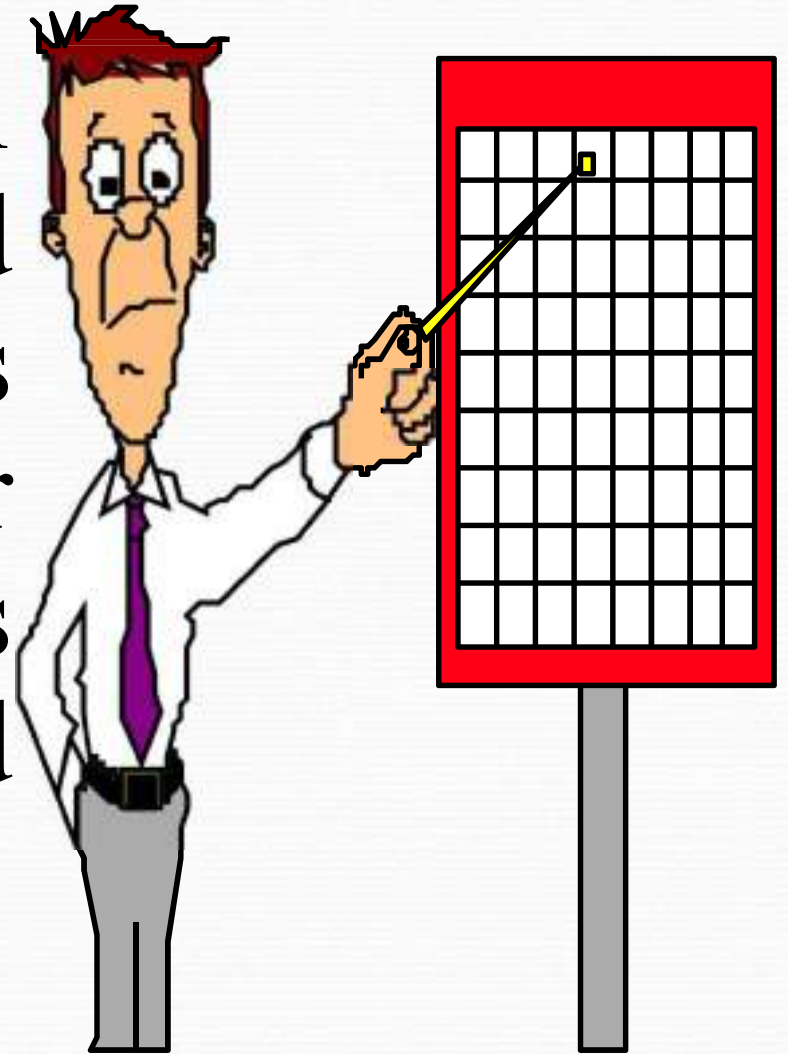
# School Health Record

School health record means a document containing all information about a student's health, which includes student's name, gender, birthdate, immunizations, results of testing and screenings, medical diagnoses, any medical issued or prescribed medications and treatments, student athlete.

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## SCHOOL HEALTH RECORD:

Each school administration should have his students health record, for registration of events and activities related to health.



# Contents of Record:

- Name
- Date of birth
- Parents name and family background
- Parents health related issue
- Results of health appraisal.
- Immunizations date
- results of testing
- Screenings date
- medical diagnoses
- medical issued
- prescribed medications and treatments,

# A Healthful and Safe School Environment

Protecting the Health and Safety of Students, Faculty, and Staff from various disease and accidental issues called healthful and safe school environment

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# School Environment

Environment – “The multitude of dynamic conditions that are external to a person.”

Two types:

Supportive: creates healthful choices or protects the well being of the student.

Non-supportive: detracts (decrease) from commitment for healthful behavior.

Schools are responsible for providing a healthful and safe school environment that optimizes opportunities for learning and growth.

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# Components of healthy and safe school environment

1. School size (Classroom size)
2. Lighting
3. Color choices
4. Temperature/ventilation
5. Noise control
6. Sanitation/Cleanliness
7. Comfortable benches
8. Proper playing field

## 9. Proper Immunization

10. Healthy diet for students

11. Pure drinking water

12. Proper sanitation

13. Teachers and other staffs behaviour

14. A natural and healthful environment

15. Garden and children park

16. Facilities of health service and health record

# FIRST AID AND EMERGENCY CARE

Emergency care or treatment given to an ill or injured person before regular medical aid can be obtained



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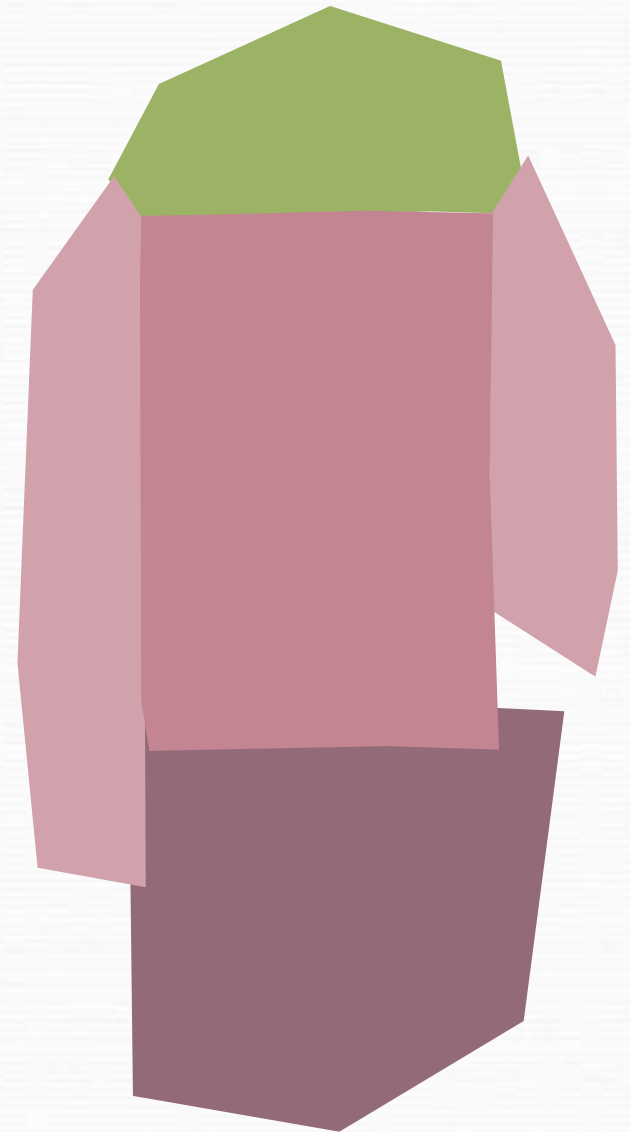
**First aid** is the assistance given to any person suffering a sudden illness or injury, with care provided to preserve life (save life), prevent the condition from worsening (condition become critical), and promote recovery.

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Professor

# Aim of First aid and emergency care

The aim of first aid is the immediate treatment or care given to someone suffering from an injury or illness until more advanced care is accessed or they recover.

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# OBJECTIVES OF FIRST AID (6

## P's of First aid

1. Preserve life
2. Prevent further harm
3. prevent the condition from worsening, or danger of further injury,
4. Promote recovery
5. Possibility to relieve pain
6. protect the unconscious.

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# Principles of First Aid

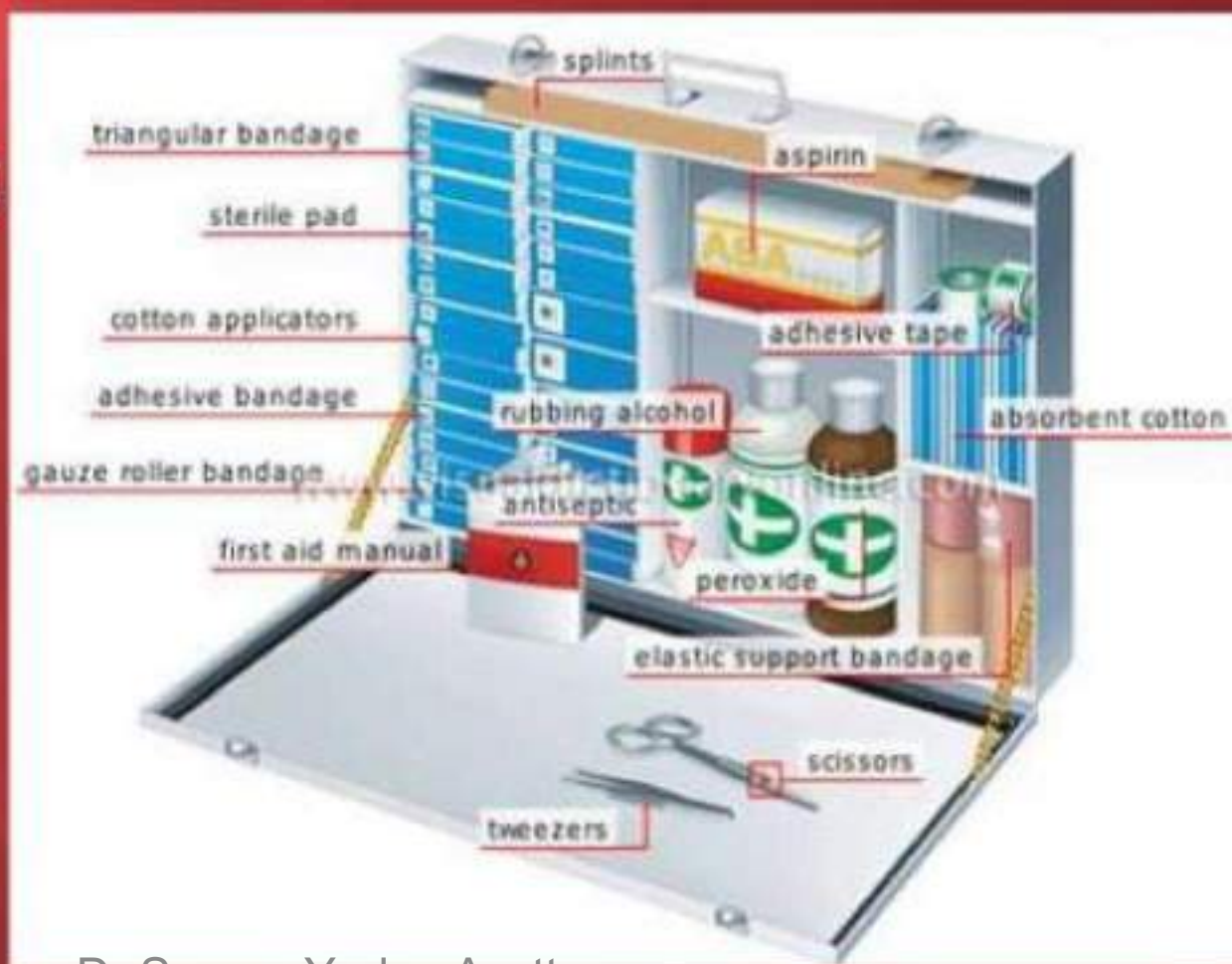
1. Take a break (Rest)
2. Talk about the incident with peers
3. Try to relax as much as possible
4. Clean up the scene
5. Clean up any equipment used
6. Restock your first aid kit:
  - replace all items used
  - look for any unopened items that will need to be replaced
7. Complete any documentation
8. Securely file documentation



# First Aid Kit

Following are the contents of a First Aid Kit :

- Cotton wool
- Adhesive tape
- Crepe bandage
- Sterile Dressing
- Bandage
- Thermometer
- Scissors
- Glove
- Soap
- Pain reliever
- Antacid
- ORS Packets



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### Step 1

#### **Danger**

Are you or the casualty in danger? If not and it is safe, approach the casualty.



### Step 2

#### **Response**

Does the casualty respond to a command or gentle shake? i.e are they conscious or unconscious?



### Step 3

#### **Airway**

If the casualty does not respond open their airway. Put one hand on their forehead, two fingers on their jaw and tilt their head back whilst lifting their chin.



### Step 4

#### **Breathing**

Look, listen and feel for breathing. If the casualty is unconscious and breathing normally, put them into the recovery position, check for injuries and dial 999 for an ambulance.