

CHAPTR TWENTY FOUR

MICROBES, DISEASES AND FOOD

MICROBES:

These are microscopic organisms that are found everywhere in nature, and examples are bacteria, virus and fungi. There are three main kinds of microbes and these are useful microbes, microbes of decay and harmful microbes.

USEFUL MICROBES:

These are microbes which are of benefit to man. An example is penicilium which is a microbe used in the production of the drug called penicillin. Another microbe called yeast is used in alcohol production and for banking.

MICROBES OF DECAY:

During decay, certain microbes called decomposers breakdown dead plants and animals remains into nutrients, which also serve as food for these microbes. Green plants also make use of these nutrients.

CONDITIONS NECESSARY FOR DECAY:

These conditions are:

- (1) The presence of oxygen.
- (2) A warm environment.
- (3) The presence of moisture.

HARMFUL MICROBES:

These are those microbes which are dangerous to man, since they cause many diseases in man.

DISEASE:

This is any change in the body of an organism which causes sickness.

SYMPTOMS:

These are those signs which show up in the body of an organism, to indicate that it is sick.

VECTORS OR GERM CARRRIER:

These are insects which carry and transmit germs which cause certain diseases. Examples are housefly, the mosquito and the tsetse fly.

ANTIBODY:

This is a substance produced by the body to destroy any germ, or any harmful toxin or poison which enters the body.

PATHOGENS:

These are disease causing organisms which includes bacteria, virus and fungi.

ANTISEPTIC:

This is any substance that kills or stops the growth of pathogens, but is not poisonous to the body's cells.

IMMUNITY:

This is the ability of the body to resist infection, by producing antibodies.

There are two types and these are:

(a) NATURAL IMMUNITY:

This occurs when an immune state is produced by natural means.

(b) ACQUIRED IMMUNITY:

This can be due to any of the following:

- (i) By having the disease.
- (ii) By the introduction of the weakened micro – organisms into the person, in order to produce antibodies.
- (iii) By injecting antibodies from one person into another.

VACCINATION:

This is the process in which a mild or dead form of disease germs, are introduced into the body so as to stimulate the production of antibodies.

IMMUNIZATION:

This is the process in which an organism is made resistant to infection.

DISEASES, PREVENTED BY IMMUNIZATION:

Some of the diseases controlled by immunization are:

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| (1) Diphtheria. | (2) Polio. |
| (3) Tuberculosis. | (4) Cholera. |
| (5) Tetanus. | (6) Measles. |

CAUSES OF DISEASES IN MAN:

Some of the causes of diseases are:

- (1) Improper disposal of waste.
- (2) By coming into contact with an infected person.
- (3) Poor feeding.
- (4) Environmental pollution.

WAYS OF PREVENTING DISEASES:

Diseases can be prevented by the following means:

- (1) By having a good drainage and sewage system.
- (2) Through immunization and vaccination.
- (3) The proper disposal of waste and sewage.
- (4) Through the maintenance of good personal hygiene.
- (5) By isolating people with infectious diseases.
- (6) By preventing flies from coming into contact with food.

GROUPS OF DISEASES:

Some of these groups are:

(1) INFECTIOUS DISEASES:

These are also referred to as communicable diseases.