

## **FOOD BORNE DISEASES**

- Foodborne illness means all type of illness caused due to consumption of contaminated food.
- The contaminant may be a pathogenic (disease causing microbes) organism or a toxin (harmful chemical or poison) present in food.

Food may transmit disease in the following way :-

1. If handled unhygienically. Disease such as tuberculosis, typhoid, tonsillitis can be transmitted.
2. Food can also serve as an ideal medium for growth of microorganism. Disease such as salmonella food infection , staph food poisoning occur.
3. By toxic chemicals , poisonous plants ,insecticide and pesticide . for e.g. aji-no-moto is used in Chinese cooking to improve the flavour but if it is used excessively it can cause burning sensation in face and neck , nausea , vomiting.

Food illness are mainly divided into two types :-

1. Food Poisoning
2. Food Infection

### **FOOD POISONING:-**

Food poisoning or food intoxication is an illness caused by toxin present in contaminated food. The toxin may be a poisonous chemical which is accidentally or intentionally added to food.

For e.g. a naturally occurring toxin in food such as solanine in green potato.

- Some common food poisoning bacteria are salmonella, E.coli , Botulism.

Symptoms of food poisoning are:-

- Fever
- an upset stomach
- Diarrhea which may contain blood
- Stomach cramps

### **FOOD INFECTION:-**

- Food infection is caused by microorganism.
- It is caused due to the consumption of food that contain living bacteria which are multiplying and capable of producing disease.
- Food infection is caused by bacteria such as campylobacter ,listeria and virus such as norvirus , and parasite such as giardiasis , ameobiasis.

### **Difference between food poisoning and food infection**

	<b>FOOD POISONING</b>	<b>FOOD INFECTION</b>
*Caused by	* toxin present in food	* living organism
*incubation time	* 1-6 hours	*12-36 hours
*symptoms	*nausea,vomiting, Diarrhea, usually no Fever	*diarrhea, fever , abdominal pain , vomiting
*duration	* 1 day sometime Longer	* 1to7 days sometime longer

## **Preventive measures to be taken to control food borne diseases**

1. Food should be handled in a hygienic manner by all food handlers.
2. Frozen food should be thawed carefully at temperature between 10 and 15c and frozen food should be cooked till it has thawed. food once thawed should not be refrozen unless it has been cooked well after thawing.
3. Food should be prepared in quantities required and quantities for which adequate refrigerated storage space available.this will prevent perishable or high risk item from spoiling.
4. Cross contamination from raw to cooked food can be prevented by washing hand and all equipment and surface contact with raw food.
5. The time gap between preparation and service of food should be reduced to avoid long storage in warm environment.
6. Large masses of food which have to be reheated later should be cooled quickly to 15 c and refrigerate immediately.
7. Food should be reheated thoroughly so that centre of food get heated enough to destroy bacteria.
8. Cooked food which are to be served hot should be served hot and should be stored above 63 c.avoid cooling and heating repeatedly.
9. Leftover food should be discarded immediately.
- 10.The kitchen and cooking equipment should be clean daily and regular pest control measures to be taken.