

## **FOOD-BOURNE DISEASES IN CHILDREN**

Food-borne diseases are defined as diseases, usually either infectious or toxic in nature, caused by agents that enter the body through the ingestion of food. Every person is at risk of food-borne diseases.

Children have unique exposure pathways. They can be exposed in utero to toxic environmental agents that cross the placenta. Such exposures can be biological (viral, bacterial, parasitic) or chemical (pesticides, toxins). They can also be exposed to pollutants that pass into their mother's milk. Neither of these routes of exposure occurs in adults or older children.

Children also have pathways of exposure that differ from those of adults due to their size and developmental stage. For example, young children engage in normal exploratory behaviours including hand-to-mouth and object-to-mouth behaviours, and non-nutritive ingestion which may dramatically increase exposure over that in adults.

The amount of food that children consume per kilogram of body weight is higher than that of the adult because children not only need to maintain homeostasis, as adults do, but are growing. The average infant consumes 5 oz. of formula per kilogram of body weight (for the average male adult, this is equivalent to drinking 30 12 oz. cans of liquid a day.) If the food or liquid contains a contaminant, children may receive more of it relative to their size than adults.

In addition, children consume different types of food. The diet of many newborn babies is exclusively breast milk. The diet of children usually contains more milk products and certain fruits and vegetables than the typical adult diet.

### **Symptoms of food born diseases**

The symptoms of food-borne disease vary depending on the agent causing illness.

Symptoms may include diarrhoea, vomiting, nausea, abdominal pain, and fever.

Symptoms can take anywhere between a few hours, a few days, or even several weeks to develop. Symptoms usually last for a few days, but can last longer. Dehydration can be a complication in young children and the elderly.

### **How the food-borne disease spread**

There are a number of opportunities for food to become contaminated as it is produced, processed, prepared and handled.

Usually people are infected after eating inadequately cooked food or by cross contamination.

Agents that cause food-borne disease can also be spread directly from animals to humans or from person-to-person.

Inadequate cooking Food-borne disease can be spread from eating poorly cooked foods. Raw or undercooked eggs, meat and poultry are particularly high risk foods.

## **Cross contamination**

Cross contamination occurs when germs are spread to food from other food, surfaces, hands or equipment.

## **Who is at risk of infection?**

Anyone can be infected but some people are more susceptible. These include infants, elderly, people with suppressed immune systems and pregnant women.

## **How is it diagnosed?**

Food-borne disease is usually diagnosed based on a person's symptoms, although laboratory confirmation from testing faecal samples is important during outbreaks.

## **What treatment is available?**

Most people usually recover with rest and extra fluids. Antibiotics are not usually required but may be recommended by doctors in some cases.

## **How is it prevented?**

### **Hand washing:**

Hand washing is a very effective way of preventing cross contamination and person- to- person spread of food-borne disease agents.

Hands should be washed with soap and running water for between 10 and 15 seconds:

- before preparing food;
- before handling raw and ready-to-eat food;
- before eating;
- after going to the toilet or changing nappies;
- after handling pets;
- and after working in the garden.

### **Safe food handling and storage:**

Adopting safe food handling and storage techniques can effectively prevent the spread of food-borne illness. Remember to follow these food safety rules:

- Keep food preparation areas and utensils clean.

- Use separate cutting boards and utensils when preparing raw foods and ready-to-eat foods.
- Thoroughly cook all raw food.
- Avoid using cracked or dirty eggs.
- In the fridge, keep raw foods on a lower shelf than ready-to-eat foods to avoid cross-contamination.
- Keep food below 5°C or above 60°C.
- Reheat food until it is steaming (internal temperature at least 75°C ).
- Wash raw fruit and vegetables before eating them.
- Only defrost food in a fridge or by using a microwave.
- Dry dishes with a different dish cloth to that used for wiping hands or kitchen surfaces and wash dish cloths regularly.

Thanks for reading, drop your comment/ questions down below we will get back to you