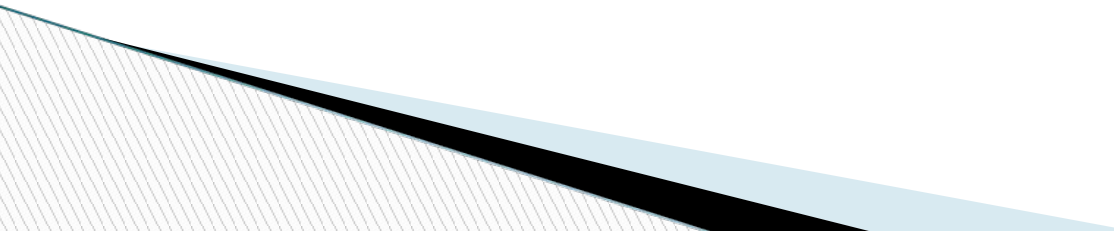


Unit 22
***Some Disorders of The
Alimentary System***

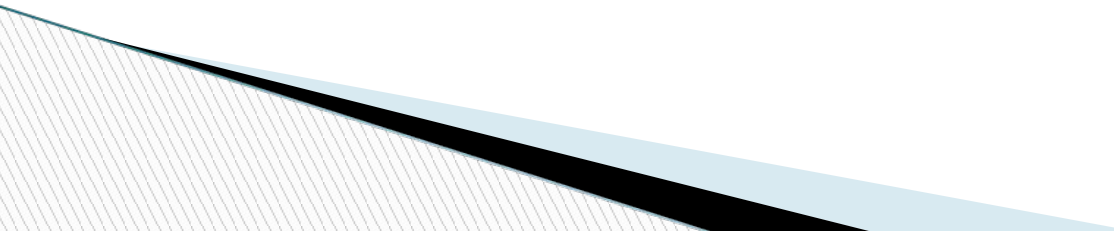
By Prof. Rekha Sharma Sen



Objectives

- ❑ **Recognize symptoms of disturbance in the alimentary system**
 - ❑ **Deal with simple upsets of digestive system**
 - ❑ **Treat simple constipation and diarrhoea**
 - ❑ **Recognize symptoms of cholera, dysentery and typhoid**
 - ❑ **Know when to refer the child to the doctor**
 - ❑ **Recognize symptoms of worm infestation and amoebic infections explain to the parents how to prevent illness of alimentary system**
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The three most common illness encountered in children are:

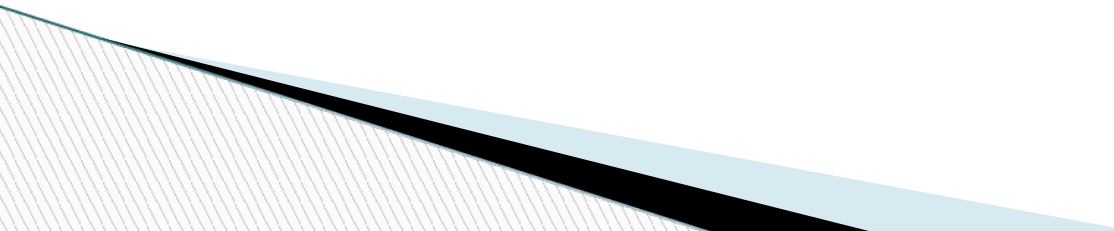
- **Gastro-intestinal disorders i.e., disturbances of the alimentary system**
 - **Respiratory infections, and**
 - **Skin infections**
 - **In this unit we will focus on the first type-**
 - **Which is the major cause of illness in children**
 - **Most common factor is infection- through contaminated food or water**
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Signs and Symptoms of Disturbance/Illness of the Alimentary System

As you know, the alimentary system comprises the mouth, oesophagus, stomach, small intestine, large intestines, pancreas, spleen and the liver. The stomach, intestine, liver, pancreas and spleen are contained in the abdomen.

The following signs and symptoms indicate that the child is suffering from some problem of the alimentary system.

- 1. Prominent abdomen-could be enlarged liver, advanced constipation, heavy infestation of worms, or in malnourished child- lack of muscle tone**
- 2. Pain all over the abdome**
- 3. Acute pain- appendicitis**

- **Blood in stools- dysentery , cholera**
 - **Itching around anus**
 - **Diarrhoea (from inferior physical environment)**
 - **Swelling or lumps- blockage of intestines/enlarged liver/constipation**
 - **Vomiting- indigestion, diarrhoea, worm infestation**
- 

Common infections

Constipation

Constipation is a condition, when a person (adult or child) cannot or does not evacuate her/his bowels regularly. This may be either the cause or the result of more serious disturbances in the system.

Signs and symptoms

Headache, drowsiness, coated tongue, loss of appetite, prominent abdomen, internal gas

Causes

Inadequate intake of food with roughage- fibre rich food such as grains , fruits and vegetables

Also sometimes children do not have the habit of regular evacuation- parents have to get a routine established

Sometimes child ignores call of nature due to play

Treatment

Laxatives can be habit forming so to be avoided

Small quantity of oil to be given

Refer to the doctor

Preventive measures

Fibre rich food....avoid refined foods

Also get the child to form the habit of going to the toilet

Diarrhoea

Because diarrhoea is a frequent phenomenon, especially in the summer months, we tend to think little of it.

In fact, diarrhoea is one of the main causes of illness in children, particularly in the very young.

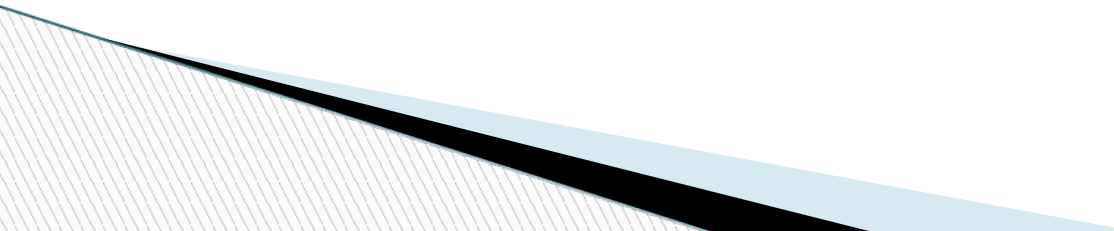
They easily become dehydrated, and severe dehydration, without treatment, leads to death.

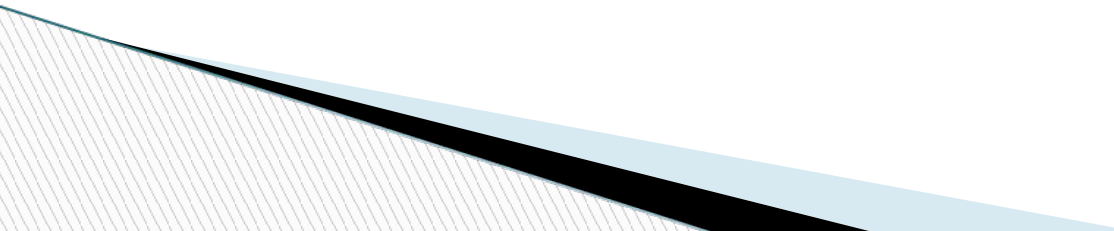
It is a symptom of deeper illness of Alimentary system

Less threatening diseases are gastroenteritis

More serious are cholera, dysentery, typhoid

Symptoms

- **Loss of fluid from the body due to expulsion of semi liquid wastes in the form of stools**
 - **Leads to dehydration**
 - **Assess degree of dehydration**
 - 1. Mild dehydration- thirsty, irritable but normal skin resiliency and pulse rate, tongue moist, hand feet warm**
 - 2. Moderate dehydration**
Restless child, eyes sunken and dull, loss of skin resiliency, mouth dry, pulse rapid
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- ❑ **Severe dehydration**
 - ❑ **Only partially conscious, unable to respond, eyes cloudy, severe loss of skin resiliency, tongue dry, hands cold, pulse both rapid and weak**
 - ❑ **Urine output, breathing and body weight get impacted in all 3 types**
 - ❑ **Loss of body weight-2 to 5%, 5-10%, 15-20 %**
 - ❑ **Tabel given in unit**
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Causes

Contaminated water and spoiled food.

Infection by bacteria, virus present in food and water

Oily spicy food

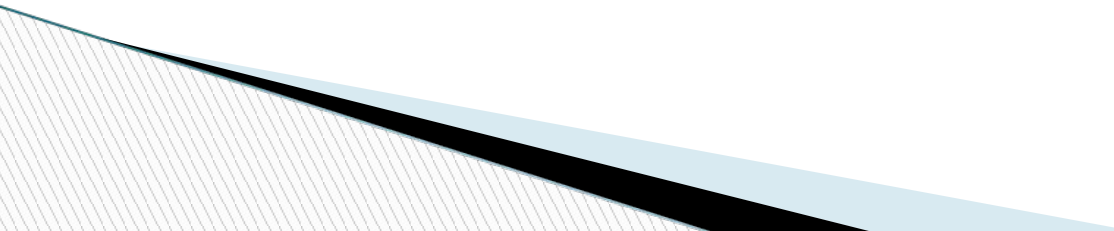
Allergic reaction to milk- sometimes only during diarrhoea

Lack of personal hygiene

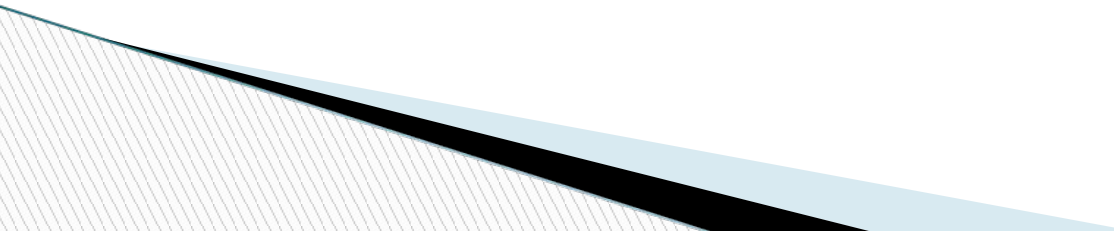
Treatment: The most important aspect of the treatment is rehydration, whatever be the cause of diarrhoea.

This must begin as soon as the child shows diarrhoea.

Do not wait for the doctor to tell you to begin rehydration as there is loss of water and electrolytes

- ❑ **Give fluids orally – dal water, rice water, coconut water, butter milk, thin clear soup, juices**
 - ❑ **WHO has premixed solution of salts and sugar- ORS . Required quantity of water needs to be added**
 - ❑ **Simple diarrhoea this will help . No medicine**
 - ❑ **Moderate and severe forms- refer to doctor- need intravenous drip so solution directly reaches blood stream**
 - ❑ **Severe cases- secondary infections- TB, brain may get affected**
 - ❑ **Simple and bland diet to recover**
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Prevention

- ❑ **Clean environment**
 - ❑ **Insects and rodents spread infection**
 - ❑ **Wastes- stools, vomitus are all infectious**
 - ❑ **Washing of hands**
 - ❑ **Encourage breast feeding- hygienic, also mothers antibodies are passed on**
 - ❑ **If bottle fed- care of nipple and bottle imp**
 - ❑ **Better to use spoon and katori**
 - ❑ **Toys to be washed frequently**
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Cholera

- **Signs – diarrhoea and vomiting cause severe dehydration**
- **Rice water stools**
- **Child may become very sick, semi conscious**
- **Causes – same as diarrhoea**
- **Treatment-**
- **Isolate the child and rehydrate**
- **Refer to doctor**

- **Prevention – same as diarrhoea.**

Dysentery

- **Diarrhoea is the symptom**
- **Blood and mucus in stools**
- **Initially constipation , then blood in stools, pain and finally diarrhoea**
- **Also fever, dullness, restlessness, headache, coated tongue**
- **Causes 2 major causes**
- **1. bacteria enters intestines through contaminated food /water**
- **2. parasite amoeba**
- **Treatment – medication in hospital**
- **Prevention – same as diarrhoea**

Typhoid

- ❑ **Caused by a bacteria**
- ❑ **Symptoms**
- ❑ **Low grade fever for more than 5 days**
- ❑ **Diarrhoea may manifest.**
- ❑ **Later high fever**
- ❑ **Loss of appetite, dehydration**
- ❑ **Causes**
- ❑ **Bacteria through contaminated food and water**
- ❑ **Treatment- refer to doctor**
- ❑ **Prevention- immunization gives short term protection, safe and clean water and food helps prevent typhoid**

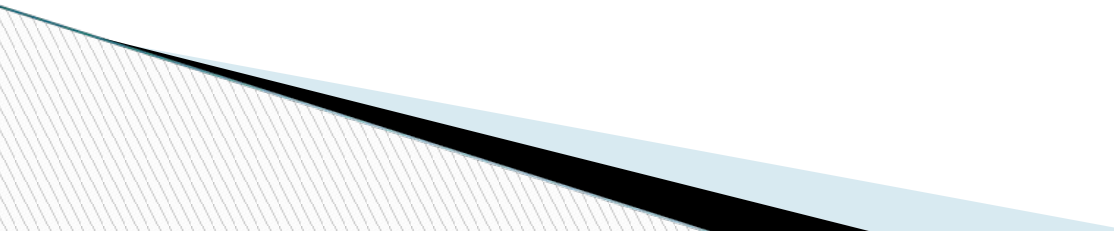
Parasites in The Alimentary System

In this section we will deal with disturbances caused by parasites in the alimentary system. These parasites are of two kinds;

- a) Worms that are visible to the eye and
- b) Microscopic amoebae, which are invisible to the naked eye.

Amoebic Infections

Amoeba are microscopic, single-cell organisms that infect a body when their eggs are swallowed in water. The hard outer casing of the egg is dissolved in the digestive process, and the larvae then penetrate into the intestines, where they continue to grow. The amoeba can also travel to other parts of the body, such as the brain or liver where they may cause abscesses i.e., swollen and inflamed areas of tissue often containing pus.



Thank You