

# Digestive Disorder

*Food, Nutrition and Health (BIT1026)*

*Digital Assignment*

*Kulvir Singh*

*19BCE2074*

*Prof. Alka Mehta*

*Winter Semester 2021*

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## Introduction

### A Brief Note on Digestive System

The human digestive system consists of the gastrointestinal tract plus the accessory organs of digestion. Digestion involves the breakdown of food into smaller and smaller components, until they can be absorbed and assimilated into the body. The process of digestion has three stages: the cephalic phase, the gastric phase, and the intestinal phase.

The organs that are involved in the process of digestion are as follows :

- Salivary glands
- Tongue
- Teeth
- Epiglottis
- Pharynx
- Esophagus
- Diaphragm
- Stomach
- Spleen
- Liver
- Pancreas
- Gastrointestinal Tract

## Overview

In the following few pages deal with :

- digestive disorders,
- 4 main types of disorders,
- its causes
- symptoms
- the cure of each disease and
- a few preventative measures

## Digestive Disorders

When you eat, your body breaks food down to a form it can use to build and nourish cells and provide energy. This process is called digestion. Your digestive system is a series of hollow organs joined in a long, twisting tube. It runs from your mouth to your anus and includes your esophagus, stomach, and small and large intestines. Your liver, gallbladder and pancreas are also involved. They produce juices to help digestion.

Any kind of abnormality developed in the proper functioning of the various organs mentioned above due to bacteria or other infections lead to improper working of the digestive system. This leads to various disease and is therefore classified as digestive disorders.

### 4 Main Types of Digestive Disorders

- a) Gastroesophageal Reflux Disease (GERD)
- b) Chronic Diarrhea
- c) Chronic Constipation
- d) Gastroenteritis

## Gastroesophageal Reflux Disease (GERD)

Gastroesophageal reflux disease, or GERD, is a digestive disorder that affects the ring of muscle between your esophagus and your stomach. This ring is called the lower esophageal sphincter (LES). If you have it, you may get heartburn or acid indigestion. Doctors think that some people may have it because of a condition called hiatal hernia. In most cases, you can ease your GERD symptoms through diet and lifestyle changes. But some people may need medication or surgery.

### Causes

Occasional acid reflux is quite common, often occurring as a result of overeating, lying down after eating, or eating particular foods. In short, GERD occurs when the sphincter at the bottom of the esophagus becomes weak, or opens when it should not.

GERD occurs more commonly in people who are overweight or obese because of increased pressure on the abdomen; pregnant, due to the same increased pressure; taking certain medications, including some asthma medications, calcium channel blockers, antihistamines, sedatives, and antidepressants; smoking, and being exposed to second-hand smoke.

### Symptoms

The main symptom of GERD is heartburn. Heartburn is discomfort felt behind the breastbone as a burning sensation. It tends to get worse if the person lies down or bends over, and also after eating food.

However, not all people with GERD experience heartburn, and there are other possible symptoms:

- i>     nausea or vomiting
- ii>    bad breath
- iii>   respiratory problems
- iv>    difficulty or pain when swallowing

### Cure

- i>     H2 blockers: These are used to help decrease acid production.
- ii>    Antacids: These counteract the acid in the stomach with alkaline chemicals. Side effects can include diarrhea and constipation. Antacids are available to purchase online.
- iii>   Prokinetics: These help the stomach empty faster. Side effects include diarrhea, nausea, and anxiety.

- iv> Erythromycin: This is a type of antibiotic that also helps empty the stomach

## Chronic Diarrhea

Diarrhea is loose, watery stools (bowel movements). You have diarrhea if you have loose stools three or more times in one day. Acute diarrhea is diarrhea that lasts a short time. It is a common problem. It usually lasts about one or two days, but it may last longer. Then it goes away on its own. Diarrhea lasting more than a few days may be a sign of a more serious problem. Chronic diarrhea is diarrhea that lasts at least four weeks.

### Causes

The most common causes of diarrhea include bacteria from contaminated food or water; Viruses such as the flu, norovirus, or rotavirus . Rotavirus is the most common cause of acute diarrhea in children.; Parasites, which are tiny organisms found in contaminated food or water; Medicines such as antibiotics, cancer drugs, and antacids that contain magnesium; Food intolerances and sensitivities, which are problems digesting certain ingredients or foods. An example is lactose intolerance.

Some people also get diarrhea after stomach surgery, because sometimes the surgeries can cause food to move through your digestive system more quickly.

### Symptoms

Possible symptoms of diarrhea include

- i> Loose stools three or more times in one day.
- ii> Cramps or pain in the abdomen
- iii> An urgent need to use the bathroom
- iv> Loss of bowel control

### Cure

- i> Drink plenty of clear liquids and avoid caffeine and alcohol
- ii> Add semisolid and low-fiber foods gradually as your bowel movements return to normal
- iii> Avoid certain foods such as dairy products, fatty foods, high-fiber foods or highly seasoned foods for a few days

- iv> Ask about anti-diarrheal medications. Over-the-counter (OTC) anti-diarrheal medications, such as loperamide and bismuth subsalicylate
- v> Consider taking probiotics.

## Chronic Constipation

Chronic constipation is infrequent bowel movements or difficult passage of stools that persists for several weeks or longer. Constipation is generally described as having fewer than three bowel movements a week. Though occasional constipation is very common, some people experience chronic constipation that can interfere with their ability to go about their daily tasks. Chronic constipation may also cause people to strain excessively in order to have a bowel movement.

### Causes

Constipation most commonly occurs when waste or stool moves too slowly through the digestive tract or cannot be eliminated effectively from the rectum, which may cause the stool to become hard and dry. Chronic constipation has many possible causes.

Blockages in the colon or rectum causes slow or stops movement of stool.; Problems and damage caused to the nerves around the colon and the rectum. Neurological problems can affect the nerves that cause muscles in the colon and rectum to contract and move stool through the intestines.; A lapse of hormonal balance due to other diseases such as diabetes, overactive/underactive parathyroid gland and also pregnancy.

### Symptoms

- i> Passing fewer than three stools a week
- ii> Having lumpy or hard stools
- iii> Straining to have bowel movements
- iv> Feeling as though there's a blockage in your rectum that prevents bowel movements
- v> Feeling as though you can't completely empty the stool from your rectum
- vi> Needing help to empty your rectum, such as using your hands to press on your abdomen and using a finger to remove stool from your rectum

### Cure

- i> Laxatives – some are over the counter while some are available via prescription
- ii> Fiber Supplements or bulk forming laxatives accompanied with plenty of water
- iii> Stimulants cause the muscles in the intestines to contract rhythmically
- iv> Lubricant help the stool move smoothly through the colon.
- v> Osmotics draw water into the colon to hydrate the stool and ease movement. Saline laxatives are a type of osmotic.

## Gastroenteritis (stomach-flu)

Gastroenteritis is inflammation (irritation) of your intestines. People usually call it a “stomach bug” or “stomach flu,” even though it’s not limited to just influenza. Although most people report stomach pain, gastroenteritis can also involve your small intestines and colon. Stomach flu is common. More than 20 million people get sick each year in the U.S. with an intestinal upset. Viruses are the most common cause of stomach flu.

### Causes

You can get sick from bacteria, parasites, toxins and viruses. Viruses are the most common cause of so-called stomach flu. Norovirus is often the culprit for adults, while rotavirus is frequently to blame for stomach flu in children. These viruses mostly infect the lining of the small intestine.

Escherichia coli (E. coli), Salmonella and Campylobacter are the most common causes of bacterial gastroenteritis. Parasitic gastroenteritis is usually caused by Giardia. Viral gastroenteritis is the most frequent cause of gastroenteritis outbreaks, which occur when groups of people are affected at the same time and place. Norovirus outbreaks can affect both children and adults, while rotavirus mainly affects infants and children.

### Symptoms

The main symptom of gastroenteritis is diarrhea, which is when your bowel movements (feces or stools) become watery and you need to go to the toilet frequently and urgently. Although diarrhea is the primary symptom of gastroenteritis, there are many other causes of diarrhea. Additional symptoms and signs of gastroenteritis may include:

- i> Nausea and vomiting
- ii> Abdominal pain and cramping
- iii> Mild fever and chills



- iv> Loss of appetite
- v> Headache and muscle aches
- vi> Tiredness and general body weakness
- vii> Poor feeding in infants.

## **Cure**

- i> Stop eating solid foods to let your stomach settle
- ii> Avoid dairy products, caffeine, alcohol, nicotine
- iii> Avoid sugary, fatty or highly seasoned foods
- iv> Drink plenty of liquid every day, taking small, frequent sips, including clear thin broths or soups and rehydration formulas that are available without prescription from a pharmacy
- v> Ease back into eating slowly with bland easy-to-digest foods such as, crackers, toast, bananas, rice and potatoes
- vi> Make sure that you get plenty of rest

## **Conclusion**

### **Prevention of Digestive Disorders**

Digestive disorders can be very troublesome and if the situation worsens trips to the hospital can be endless. Therefore, its important to understand that we need to prevent the occurrence of any digestive disorder and not be dependent on the cure. Some simple tips to reduce the risk of getting a disorder are mentioned as a conclusion to this assignment.

Eat more frequent meals. Many weight loss proponents advocate eating smaller, more frequent meals to help boost metabolism and keep you from overeating. This rule of thumb can also help prevent digestion problems.

Eat more fiber. You may have heard a lot about fiber for weight loss and heart health. When it comes to digestive health, fiber is also a key component.

Drink plenty of water. Water aids your digestive health by helping to cleanse the entire system. It's particularly helpful in preventing constipation because water helps soften your stools.

Hence to conclude, its fairly important to have a proper diet and drink plenty of water to avoid any digestive upsets.

## References

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World Wide Web

Other biology related text books

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