HYPERACIDITY

How does our digestive system break food into small parts my body can use?

- Mouth The digestive process starts in your mouth when you chew. Your salivary glands make saliva, a digestive juice, which moistens food, so it moves more easily through your esophagus into your stomach. Saliva also has an enzyme that begins to break down starches in your food.
- Esophagus After you swallow, peristalsis pushes the food down your esophagus into your stomach.
- Stomach Glands in your stomach lining make stomach acid and enzymes that break down food. Muscles of your stomach mix the food with these digestive juices.
- Pancreas Your pancreas makes a digestive juice that has enzymes that break down carbohydrates, fats, and proteins. The pancreas delivers the digestive juice to the small intestine through small tubes called ducts.
- Liver Your liver makes a digestive juice called bile that helps digest fats and some vitamins. Bile ducts carry bile from your liver to your gallbladder for storage, or to the small intestine for use.
- Gallbladder Your gallbladder stores bile between meals. When you eat, your gallbladder squeezes bile through the bile ducts into your small intestine.
- Small intestine Your small intestine makes digestive juice, which mixes with bile and pancreatic juice to complete the breakdown of proteins, carbohydrates, and fats. Bacteria in your small intestine make some of the enzymes you need to digest carbohydrates. Your small intestine moves water from your bloodstream into your GI tract to help break down food. Your small intestine also absorbs water with other nutrients.
- Large intestine In your large intestine, more water moves from your GI tract into your bloodstream. Bacteria in your large intestine help break down remaining nutrients and make vitamin K NIH external link. Waste products of digestion, including parts of food that are still too large, become stool.

Reasons

- 1. Reduced or no production of stomach acid.
- 2. Eating large meals or lying down right after a meal
- 3. Being overweight or obese
- 4. Eating a heavy meal and lying on your back or bending over at the waist
- 5. Snacking close to bedtime
- 6. Eating certain foods, such as citrus, tomato, chocolate, mint, garlic, onions, or spicy or fatty foods
- 7. Drinking certain beverages, such as alcohol, carbonated drinks, coffee, or tea
- 8. Smoking
- 9. Being pregnant
- 10. Taking aspirin, ibuprofen, certain muscle relaxers, or blood pressure medications
- 11. long-term use of medications that affect stomach acid levels, such as antacids.
- 12. hypothyroidism
- 13. chronic or recurring infections of the digestive tract
- 14. stomach or pancreatic cancer
- 15. aging
- 16. zinc deficiency
- 17. stomach surgery
- 18. chronic use of antacids and certain prescription medications
- 19. zinc deficiency
- 20. regular high levels of stress
- 21. H. pylori infection of the stomach cells
- 22. History of gastric bypass surgery
- 23. Drinking too much of kadha (herbal concoction of Indian spices. It's ingredients create heat in the body. Thus, excessive consumption can be harmful and cause problems like nose bleeding and persistent acidity. People think that such herbs cannot cause harm to the body. However, in reality, excess consumption of kadha or any herbal concoctions can lead to many side-effects such as excessive bleeding, digestive issues, acidity, problems in urinating, boils in the mouth, bleeding from the nose.
- 24. Eating stale food which may cause acidity or maybe food poisoning.

Symptoms

- Heartburn
- Burning sensation in your stomach or chest after eating a full meal or certain foods.
- Vomiting

- Excess gas
- Burping and Hiccups that don't let up
- Bloating
- Diarrhea
- Intestinal infections
- Nutrient deficiencies, such as iron and vitamin B12
- Hair loss
- Dry cough
- Sore throat
- Difficulty swallowing
- Lmp in the throat
- Regurgitation: a sour or bitter-tasting acid backing up into your throat or mouth
- Bloody or black stools or bloody vomiting
- Dysphagia -- the sensation of food being stuck in your throat
- Nausea
- Weight loss for no known reason

MANAGEMENT OF ACID REFLUX

I. <u>Finding your triggers</u>

Although doctors' debate which foods actually cause reflux symptoms, certain foods have been shown to cause problems for many people. To control your symptoms, you could start by eliminating the following foods from your diet.

• High-fat foods

Fried and fatty foods can cause the LES to relax, allowing more stomach acid to back up into the esophagus. These foods also delay stomach emptying. Eating high-fat foods puts you at greater risk for reflux symptoms, so reducing your total daily fat intake can help. The following foods have a high-fat content. Avoid these or eat them sparingly: french fries and onion rings, full-fat dairy products, such as butter, whole milk, regular cheese, and sour cream, fatty or fried cuts of beef, pork, or lamb, bacon fat, ham fat, and lard, desserts or snacks, such as ice cream and potato chips

cream sauces, gravies, and creamy salad dressings, oily and greasy foods.

• Fruits and vegetables

They are important in a healthy diet. But certain fruits can cause or worsen GERD symptoms, especially highly acidic fruits. If you have frequent acid reflux, you should reduce or eliminate your intake of the following foods: Citrus fruits like oranges, Grapefruit, lemons, limes, pineapple, tomatoes, tomato sauce or foods that use it, such as pizza and chili, salsa.

• Chocolate

Chocolate contains an ingredient called methylxanthine. It has been shown to relax the smooth muscle in the LES and increase reflux.

• Garlic, onions, and spicy foods

Spicy and tangy foods, such as onions and garlic, trigger heartburn symptoms in many people. These foods won't trigger reflux in everyone. But if you eat a lot of onions or garlic, make sure to track your meals carefully in your diary. Some of these foods, along with spicy foods, may bother you more than other foods do.

• Mint

Mint and products with mint flavoring, like chewing gum and breath mints, can also trigger acid reflux symptoms.

• Other foods

While the lists above include common triggers, you may have unique intolerances to other foods. You might consider eliminating the following foods for three to four weeks to see if symptoms improve: dairy, flour-based products like bread and crackers, and whey protein.

To identify your individual triggers, keep a food diary and track the following. Keep the diary for at least a week. It's helpful to track your foods for a longer period if your diet varies. You can use the diary to identify specific foods and drinks that affect your GERD.

- what foods you eat
- what time of day you eat
- what symptoms you experience

II. <u>Eating Foods that may help reduce your symptoms:</u>

First of all, we would like to inform that none of these foods will cure your condition, and your decision to use these specific foods to soothe your symptoms should be based on your own experiences with them.

The foods you eat affect the amount of acid your stomach produces. Eating the right kinds of food is key to controlling acid reflux or gastroesophageal reflux disease (GERD), a severe, chronic form of acid reflux. Research has proven that eating less acidic and more alkaline food helps reduce the backflow of acid into your esophagus. Alkaline foods that neutralize the acidic contents of your stomach also numb the effect of a reflux.

Reflux symptoms may result from stomach acid touching the esophagus and causing irritation and pain. If you have too much acid, you can incorporate these specific foods into your diet to manage symptoms of acid reflux.

1. Cold milk:

Milk is another excellent way to combat acidity. Milk absorbs acid formation in the stomach, stopping any reflux or burning sensation in the gastric system. Anytime you feel an acid formation in the stomach or heartburn coming on, have a glass of plain cold milk without any additives or sugar. Milk and milk products are alkaline in nature due to the amount of calcium found in each serving. The alkalinity of milk works to neutralize stomach acid. Milk has a soothing effect on the stomach and throat that can provide temporary relief but in the long run tends to encourage acid secretion. Dairy products made from cow's milk are one of the most common triggers of acid reflux, both among people who suffer from GERD and people who don't. The link between dairy and GERD has been well-established, and although it doesn't directly cause acid reflux, it may worsen some of your symptoms.

2. Vegetables

Vegetables are naturally low in fat and sugar, and they help reduce stomach acid. Good options include green beans, broccoli, asparagus, cauliflower, leafy greens, potatoes, and cucumbers.

3. Ginger

Ginger has natural anti-inflammatory properties, and it's a natural treatment for heartburn and other gastrointestinal problems. You can add grated or sliced ginger root to recipes or smoothies or drink ginger tea to ease symptoms. Ginger possesses anti-inflammatory properties that may help alleviate stomach inflammation due to low stomach acid. People commonly use ginger as a natural remedy for nausea, stomach pain, and indigestion. Some proponents suggest that ginger may stimulate the production and secretion of essential digestive enzymes and increase movement through the intestines. However, there is not enough scientific evidence to fully support these claims. More high-quality studies are necessary.

4. Oatmeal

Oatmeal is a breakfast favorite, a whole grain, and an excellent source of fiber. A diet high in fiber has been linked with a lower risk of acid reflux. Other fiber options include whole-grain breads and whole-grain rice.

5. Non-citrus fruits

Non-citrus fruits, including melons, bananas, apples, and pears, are less likely to trigger reflux symptoms than acidic fruits.

6. Lean meats and seafood

Lean meats, such as chicken, turkey, fish, and seafood, are low-fat and reduce symptoms of acid reflux. Try them grilled, broiled, baked, or poached.

7. Egg whites

Egg whites are a good option. Stay away from egg yolks, though, which are high in fat and may trigger reflux symptoms.

8. Healthy fats

Sources of healthy fats include avocados, walnuts, flaxseed, olive oil, sesame oil, and sunflower oil. Reduce your intake of saturated fats and trans fats and replace them with these healthier unsaturated fats.

9. Fiber

Increase fiber intake in diet, specifically in the form of fruits and vegetables.

10. Increase zinc intake.

Zinc is an essential mineral present in human cells. The stomach uses zinc to produce HCL. People who do not get enough zinc in their diets and those with poor zinc absorption may have low stomach acid levels. Addressing a zinc deficiency could help increase stomach acidity. People can increase their zinc intake by making dietary changes or taking zinc supplements. However, they should speak with their healthcare provider before starting any new supplements. Some zinc-rich foods a person can add to their diet include: Oysters, lobster, beef, nuts and seed cashews, beans, yogurt, fortified breakfast cereal. It is recommend that adults consume 8–11 milligrams of zinc each day.

11. Take probiotics

Probiotics are microorganisms that support a healthful balance of beneficial bacteria in the gut. There is evidence of an association between low stomach acidity and bacterial overgrowth in the gut. Taking probiotics may inhibit the growth of harmful bacteria and help increase levels of stomach acid. Foods that naturally contain probiotics include: Yogurt, cottage cheese, kefir, sauerkraut, kimchi, tempeh, kombucha, miso.

12. Limit refined carbohydrate intake

Certain dietary changes may help increase stomach acidity. For example, diets that are high in refined carbohydrates (sugars and low fiber, starchy foods) may lead to inflammation in the stomach and other digestive organs. Although some research suggests that the inflammation is directly due to refined carbohydrates and excess sugar, some experts suggest that it may be due to an overgrowth of yeast fungi in the stomach that causes diarrhea, bloating, and constipation. Proponents may suggest trying the candida diet, which involves eliminating gluten, sugar, and certain dairy products. However, there is little scientific evidence to prove that this can prevent an overgrowth of yeast fungi in the gut.

III. Treatment :

Hypochlorhydria treatment usually involves fixing the cause of the symptoms. It also depends on the severity of your symptoms. Hydrochloric acid supplements and enzymes. Your doctor may prescribe supplements such as betaine hydrochloride to restore the pH of your stomach. The other common treatments are as follows.

1. <u>Changes in diet.</u>

Your doctor may recommend that you eat easy-to-digest food that is rich in fiber and nutrients. They may recommend supplements such as iron, zinc, calcium, and vitamin B complex. They might also recommend natural enzyme supplements with papaya and pineapple extracts to boost stomach acid production. Changes in medication. Medicines such as proton pump inhibitors and antacids can reduce your stomach acid levels. Your doctor may decide to change your medications. Herbs such as peppermint and gentian may aid in digestion and help with stomach acid production. Try to keep your stress levels down and get plenty of exercise and sleep. No diet has been proven to prevent GERD. However, certain foods may ease symptoms in some people.

Research shows that increased fiber intake, specifically in the form of fruits and vegetables, may protect against GERD. But scientists aren't yet certain how fiber prevents GERD symptoms.

Increasing your dietary fiber is generally a good idea. In addition to helping with GERD symptoms, fiber also reduces the risk of:

high cholesterol

uncontrolled blood sugar

hemorrhoids and other bowel problems

Talk to your doctor if you have questions about whether certain foods should be a part of your diet. Foods that help improve acid reflux for one person may be problematic for someone else.

2. <u>Modify workouts</u>

Be prepared to adjust your workouts as reflux symptoms present themselves. Even if you have been a life-long runner or skier, once reflux symptoms arise, adjustments must be made to protect your health. Be prepared to work with your doctor to find an alternate way to work out.

Vigorous physical activity will stir up acid in the stomach and cause it to spill into the esophagus. Acid reflux symptoms can increase with the intensity of the exercise and are more common with endurance sports. Symptoms can also get worse with activities that happen after eating.

Activities that are jarring to the body such as jogging and contact sports may result in worsened symptoms. Lower-impact activities such as yoga, swimming and walking may be better choices, especially on days when your reflux symptoms are at their worst.

Avoid eating before exercise. Large meals (or even medium-size meals) before exercise will most likely result in acid reflux. If you need to eat before a workout, make it a small snack, like a protein bar or banana. These homemade bars are reflux-friendly and freeze well.

3. Find what works and stay with it.

Once you've found a workout routine that provides the physical activity you need without aggravating your reflux symptoms, stay with it! People with a high body mass index tend to experience worsened acid reflux symptoms, so staying fit will help keep reflux symptoms at bay. Consistent physical activity is absolutely paramount to optimal health. To avoid acid reflux during exercise, you must find a way to avoid acid reflux at rest. Talk to your doctor about treatment options for your acid reflux and understand how to apply that treatment to improve your exercise regimen. For example, I eat an early breakfast, take my reflux medication, and then exercise about an hour later. This seems to work well for me.

4. Keep water on hand

Having access to water during a workout can be extremely helpful for cooling and hydration. And if you have reflux, water can also help to cleanse the esophagus and may even help relieve symptoms if they do arise.

5. Lifestyle modification

Following things may help in reducing the symptoms.

- Chew thoroughly : Mastication is the technical term for chewing food, and it is the first step in the digestive process. Chewing breaks down food into smaller pieces. These pieces then mix with saliva, which leads to the next step of the digestive process. People who experience symptoms of low stomach acid may want to consider taking smaller bites and chewing their food thoroughly. This may allow for adequate digestion.
- Eat smaller meals more frequently throughout the day and modify the types of foods you are eating.
- Quit smoking.
- Put blocks under the head of your bed to raise it at least 4 inches to 6 inches.
- Eat at least 2 to 3 hours before lying down. Try sleeping in a chair for daytime naps.
- Don't wear tight clothes or tight belts.
- If you're overweight or obese, take steps to lose weight with exercise and diet changes.
- Also, ask your doctor whether any medication could be triggering your heartburn or other symptoms of acid reflux disease.
- In addition to controlling reflux symptoms with diet and nutrition, you can manage symptoms with lifestyle changes. Try these tips:
- Take antacids and other medications that reduce acid production. (Overuse can cause negative side effects.) Buy antacids here.
- Maintain a healthy weight.
- Chew gum that isn't peppermint or spearmint flavored.
- Avoid alcohol.

- Stop smoking.
- Don't overeat and eat slowly.
- Remain upright for at least two hours after eating.
- Avoid tight clothing.
- Don't eat for three to four hours before going to bed.
- Raise the head of your bed four to six inches to reduce reflux symptoms while sleeping.

6. Write it down

A good way to develop a workout routine free from acid reflux is to take notes of how different workouts and medications affect you. Record the workouts that you do, any medications you take and when, and what you ate before the activity. Also record how you felt during the workout. You may begin to see a pattern of what works best for you.

How Is Acid Reflux Disease Diagnosed?

If you have frequent or severe symptoms, your doctor may order tests to confirm a diagnosis and check for other problems. You may need one or more tests such as these:

- Barium swallow (esophagram) can check for ulcers or a narrowing of the esophagus. You first swallow a solution to help structures show up on an X-ray.
- Esophageal manometry can check the function and movement of the esophagus and lower esophageal sphincter.
- pH monitoring can check for acid in your esophagus. The doctor inserts a device into your esophagus and leaves it in place for 1 to 2 days to measure the amount of acid in your esophagus.
- Endoscopycan check for problems in your esophagus or stomach. This test involves inserting a long, flexible, lighted tube with a camera down your throat. First, the doctor will spray the back of your throat with anesthetic and give you a sedative to make you more comfortable.
- A biopsymay be taken during endoscopy to check samples of tissue under a microscope for infection or abnormalities.

GERD CAN LEAD TO SERIOUS HEALTH PROBLEMS -

1. Asthma and Other Respiratory Problems

Asthma and heartburn often go hand-in-hand. Studies have found that about 30% to 80% of patients with asthma also have symptoms of GERD. Whether asthma leads to GERD or vice versa is still unknown. One possible explanation of the connection between GERD and asthma is that acid that backs up from the stomach gets into the airways. It has also been linked to several other respiratory conditions, including:

• Chronic bronchitis

- Chronic cough
- Chronic sinusitis
- Emphysema
- Pulmonary fibrosis (lung scarring)
- Recurrent pneumonia

2. Voice and Throat Problems

Acids from GERD can affect the throat, leading to hoarseness and laryngitis. Some people, particularly those with very severe acid reflux, have reported voice changes. On a positive note, voice and throat problems tend to respond very well to treatment for GERD.

3. Dental Problems Due to Reflux

When harsh acids make their way into the mouth, they can wreak havoc with tooth enamel. Several studies have noted that people with GERD have more dental erosion than normal. The condition can also lead to bad breath and an increase in saliva production.

4. Heartburn Complications in Children

Infants and children can also develop heartburn and other symptoms of GERD. Although they might not be able to express exactly what they're feeling, they can eventually develop many of the same complications as adults if the condition isn't treated. Infants with severe reflux may fail to feed properly. This, in turn, leads to poor growth. If they aspirate stomach acids into the airways, babies can develop recurrent pneumonia. Some researchers have even suggested that sudden infant death syndrome might be related to a blockage of the airways due to reflux.

5. Esophagitis, Barrett's Esophagus, and Esophageal Cancer

When stomach acids repeatedly back up into the esophagus, they can injure its sensitive lining. That injury can lead to painful inflammation called esophagitis. Eventually, the acid wears away at the esophagus, causing bleeding. If the bleeding is heavy enough, blood can pass into the digestive tract and show up as dark, tarry stools. Esophagitis can also cause ulcers -- painful, open sores on the lining of the esophagus. In a small percentage of people, long-term acid exposure from GERD leads to a condition called Barrett's esophagus (BE). In BE, abnormal cells form and take the place of the cells damaged by acid reflux. And these cells have the potential to turn cancerous.

A gastroenterologist can often use a thin scope called an endoscope to look at your esophagus and diagnose your condition. There are also other tests that can help with the diagnosis.

BOTTOM LINE -

Ultimately, a gut-healing diet is synonymous with a generally healthy diet: low in processed foods and red meat, high in whole foods such as fruits, veggies, and whole grains. This style of eating is beneficial for everyone, whether or not you have pesky digestive symptoms. People who experience indigestion that lasts longer than 2 weeks may wish to consider

speaking with a healthcare professional. People should seek immediate medical attention for the following symptoms:

- Blood in the stool or vomit
- Frequent vomiting
- Unintentional weight loss
- Pain or difficulty when swallowing
- Pain in the chest, jaw, neck, or arm
- Severe, constant stomach pain
- Shortness of breath
- Sweating
- Jaundice, or yellowing of the eyes or skin.
- People with GERD can usually manage their symptoms with lifestyle changes and over-the-counter medications. Ask your doc about HCL supplements. People with low levels of stomach acid may benefit from taking HCL supplements. Digestive enzyme supplements that also contain pepsin may be especially beneficial for older adults.
- The most recently approved procedure involves surgically placing a ring known as a LINX device around the outside of the lower end of the esophagus OR another one is surgical procedure called a Fundoplication which involves wrapping the upper part of the stomach around the LES to strengthen it, prevent acid reflux, and repair a hiatal hernia. These procedures are done only as a last resort for treating acid reflux disease after medical treatment has proven to be inadequate.
- Low stomach acid is not a life-threatening condition. However, it can result in chronic stomach inflammation and severely reduce a person's quality of life. Hypochlorhydria is a relatively common condition that can lead to bloating, indigestion, and changes in bowel habits. People can manage its symptoms and increase their levels of stomach acid by making certain dietary and lifestyle changes.
- Also, the diet and nutrition advice here is a starting point to plan your meals. Use this guide in conjunction with your food journal. The goal is to minimize and control your symptoms. Working with a Dietician can help you develop a diet to control or lessen your symptoms and minimize HYPERACIDITY before it goes out of hand.

Contact us at +91- 7337537632 for One-on-One Diet Consultation.