

HOW DOES THE DIGESTIVE SYSTEM WORK?

The digestive system is composed of a series of hollow organs that form a tube from the mouth to the anus.

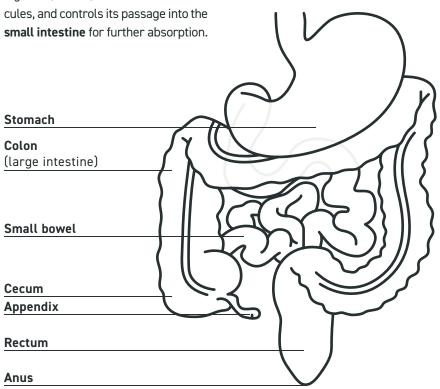
Every section of the digestive system has a specific, important function in food absorption and digestion.

The **esophagus** helps to transport food from the mouth to the stomach.

The **stomach** accumulates food, digests (breaks) it into small molecules, and controls its passage into the

The **pancreas** and liver secrete substances that facilitate food absorption in the small intestine.

The final segment of the digestive system is the **colon (large intestine)**. Its primary function is to absorb water and undigested foods as well to evacuate the waste products of digestion.



WHAT IS GASTROPARESIS?

Gastroparesis, also known as delayed gastric emptying, is a disorder in which the stomach's contents exit the body too slowly. Gastroparesis occurs when nerves in the stomach are damaged or do not function properly, which can cause bloating, nausea, vomiting or a feeling of fulness after eating only a very tiny amount of food. Loss of appetite and weight loss can also occur over time.

Diabetes is often the cause of gastroparesis. Other conditions, such as multiple sclerosis and Parkinson's disease, or circumstances, such as having stomach surgery, an infection or taking medications such as narcotics or antidepressants, can also trigger gastroparesis.

Sometimes the cause is not known. Speak to your physician for further information.

HOW IS GASTROPARESIS DIAGNOSED?

The first step is to meet a physician who will ask you questions about your symptoms. Sometimes a gastroscopy (camera inserted into the stomach) or an X-ray exam will be performed to ensure there is nothing blocking the flow of food from the stomach to the intestine.

In some cases, the physician may request a gastric emptying test in nuclear medicine. You will be required to eatfoods laced with a marker. Images will be taken with a specialized device to locate the ingested food.

The nuclear medicine expert will then be able to measure the emptying of your stomach 1, 2, 3, and 4 hours after ingestion.

Other methods which your physician can use, if deemed necessary, are also available to measure stomach emptying velocity.

HOW IS GASTROPARESIS TREATED?

Treatment depends on the severity of symptoms and is adapted to each person. There are three methods:



Dietary changes

Information about dietary changes is contained in this folder. You physician can refer you to a nutritionist when required.



Medications

Medications that can accelerate the emptying of the stomach are available. Your physician will indicate which ones do so as well as their potential side effects.



Surgery

Your physician will discuss this subject with you when required.

Your physician might also advise you to stop taking certain medications that can slow down the emptying of the stomach. Included among them are:

- Narcotics: hydropmorphone (e.g., Dilaudid®), morphine (e.g., Statex®), oxycodone (e.g., Percocet®), fentanyl (e.g., Duragesic®), etc.
- Anticholinergics such as amitriptyline (e.g., Elavil®)
- Fibre supplements (e.g., Metamucil®, Benefiber®)

Finally, if you have diabetes, it is important that you monitor and control your blood-sugar level (glycemia).

WHAT SHOULD YOU EAT?

Here is some general advice that can help you to better manage your gastric emptying velocity. It is important that you meet your energy requirements to prevent malnutrition and its consequences. In some cases, a meeting with a nutritionist may be recommended for further information and advice.

Avoid foods that are high in fat

Fat delays the emptying of the stomach.

Avoid foods that are high in fibre

Foods high in fibre delay the emptying of the stomach. Examples of such foods include: legumes, lentils, whole-wheat cereal, seeds and nuts, certain fruit, dried fruit, certain vegetables (cabbage, lettuce, broccoli), popcorn, etc.

Chew your food properly

Solid foods are emptied from your stomach more slowly than liquid or soft foods.

Drink liquids during your meals

Avoid soft drinks as they might increase the bloating sensation.

Adopt a good posture

Sit properly when eating. Do not lie down within the hour following your meal; remain seated or go out for a walk. Doing so can help to empty your stomach.

Avoid alcohol and tobacco

Alcohol and tobacco can delay the emptying of the stomach.

Recommended foods

Some foods are better tolerated if you have gastroparesia. For example:

- Rice cereal, white bread, crackers
- · Peeled fruit, blended if necessary

Minced or pureed meat

• Juice and dairy products (if tolerated)

 Cooked vegetables, blended if necessary

WHAT SHOULD YOU DO IF THE PROBLEM PERSISTS?

As a last resort, it might be recommended that you modify the texture of your food by eating liquid or pureed food that is sufficiently rich in calories (energy) to ensure your body functions properly. At this stage, the intervention of a nutritionist is important.

Here are a few (rather) liquid food ideas:

Milk

- Pudding, compote
- Shakes (milk shakes, smoothies)
- Soup

Yoaurt

Other mashed or pureed foods

Soy or almond beverage

In order to meet your nutritional requirements, you must add nutritional supplements to your diet such as Ensure® or Boost®. Blending your solid foods might also be recommended.

If you have any questions or concerns, speak to your nurse or physician.

Name Coordinates

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