Overview
Heartburn, acid regurgitation, excess of burping/belching, increased abdominal bloating, nausea, a feeling of abnormal or slow digestion, or early satiety are all symptoms that can be described by the term "dyspepsia". The cause of dyspepsia is unknown but is usually aggravated by eating and symptoms may suddenly disappear without an obvious remedy.

Having dyspepsia can have a significant impact on life at home and work. People with chronic upper gastrointestinal disorders have absenteeism rates nine times higher than healthy people. In addition, the productivity when individuals suffering from symptoms of dyspepsia are at work is eight times lower than those who are unaffected.

What causes dyspepsia?
The most common cause of heartburn and dyspepsia is gastroesophageal reflux disease (GERD). This is a condition in which the acid that is normally present in the stomach to help digest our food flows back up the swallowing tube (esophagus). In some persons this causes heartburn and regurgitation, and in others it may cause these symptoms as well as also cause inflammation (redness and swelling) or sores (erosions) in the esophagus. A small number of persons suffering from dyspepsia may have an ulcer in the stomach (gastric ulcer) or in the first part of the intestine (duodenal ulcer).

The gastric or duodenal ulcer may be caused by an infection in the stomach (Helicobacter pylori), or by taking aspirin or arthritis-treating medications (non-steroidal anti-inflammatory drugs). Other persons with dyspepsia will not have any identifiable disease in the esophagus, stomach or duodenum. These persons are said to have "functional dyspepsia" or "non-ulcer dyspepsia".

When should I see a doctor?
Most patients who have dyspepsia as a result of stomach cancer will have worrisome symptoms in addition to simply having dyspepsia. These are called "alarm symptoms" and include persistent vomiting, evidence of bleeding (red or black stools), low blood, anemia, unexplained weight loss, difficulty swallowing, or a mass in the abdomen found by the physician.

If you have any of these alarm symptoms or if you are older and have new symptoms, you should not ignore your dyspepsia but should promptly seek medical attention. Based on your history and what the physician finds when he/she examines you, it may be necessary for you to have one or more tests to determine what the cause of your dyspepsia is. It should be stressed, however, that most persons with dyspepsia do not need investigations, and their dyspepsia can be quite appropriately and adequately treated by a family physician/general practitioner.
Tests for dyspepsia

A variety of tests may be undertaken to try to determine the cause of dyspepsia. In some cases however, the doctor may choose to treat patients on the basis of his/her clinical assessment of symptoms before ordering tests.

Certain symptoms such as bleeding, weight loss, trouble swallowing, persistent vomiting or new symptoms in older patients will usually indicate a need for tests.

1) Barium X-ray (upper GI series)
This is an X-ray test that outlines the esophagus, the stomach and the duodenum. For many years this was one of the only tests available to investigate these types of symptoms and is still used as a screening test. However, in the majority of cases more accurate tests are now used.

2) Tests for Helicobacter pylori
Tests for the bacteria can sometimes be done in the doctor's office. These would include blood tests that determine previous exposure to the bacteria but do not determine the actual presence of the bacteria. For the most part these tests have been replaced by the urea breath test (UBT). This test can be done in the doctor's office or at the hospital. The patient drinks a chemical and if the bacteria are present in the stomach, this chemical is broken apart by the bacteria. The by-products are released in the patient's breath which are collected and tested. A positive test indicates that the bacteria are actually present at that time. This test can be done to confirm that the bacteria are present, or that they have been eliminated after treatment.

A second group of tests for this bacteria can be done at the time of endoscopy with biopsies (tissue samples). Small pieces of stomach can be subjected to the same chemical reaction as noted above for the breath test or the tissue can be examined under a microscope to look for the bacteria.

3) Gastroscopy (upper GI endoscopy)
This test is commonly done for patients with dyspepsia as it is a very accurate way of finding or ruling out the presence of injury to the lining in the upper GI tract. A tube through which the stomach can be seen is passed through the mouth.

This test can be done in the doctor's office in some cases, but is usually done in the hospital.

4) 24-Hour pH study
While endoscopy is able to determine the presence of injury to the lining of the gut from reflux, many patients may have reflux without such visible injury. The 24-hour pH test is done to try and correlate the patient's symptoms with the actual presence of acid in the esophagus. This test involves passing a thin tube through the nose into the esophagus. The tube is left in place and continuously records the acid level in the esophagus for a period of 24 hours. A computer program then correlates the patient's symptoms with the presence of acid in the esophagus.

Treatment options

1) Lifestyle modification
Sometimes symptoms can be helped by changes in lifestyle. Losing weight, stopping smoking and raising the head of the bed may help some patients who have mostly reflux. It is always appropriate to pay attention to one's general health, considering factors such as exercise, ideal body weight and discontinuation of smoking. It is useful for the patient to consider any correlation of symptoms with certain types of foods such as spicy foods, and alcohol. Certain drugs such as aspirin and arthritis medication as well as pain killers (except acetominophen) may worsen injury to the stomach, and discontinuation or change of these medications may sometimes help.

Stress does not usually cause dyspepsia but can worsen GI symptoms and heighten our awareness of those symptoms. In some cases, appropriate strategies to cope with stress can be helpful.

2) Medications
Medications are listed below in general order of potency but the order does not necessarily reflect the order in which the doctor may choose to begin treatment.

Antacids
Antacids are useful as short-term therapy but are usually used for infrequent or "breakthrough" symptoms that
may occur when the patient experiences symptoms while on other medications. In general, antacids would not be used as a regular form of therapy.

H$_2$-receptor antagonists (H$_2$-RA$s$)
This class of drugs has been available for over 25 years and was the first truly effective form of acid-reducing medicine. These pills provide a moderate decrease in acid produced by the stomach and are helpful for milder cases of reflux. They are effective in healing ulcers, although at a somewhat slower rate than the proton pump inhibitor class of drugs (see below). These drugs are very safe. Rare side effects may include skin rash, diarrhea, liver test abnormalities, and kidney problems. These medicines are accepted as safe for long-term therapy if necessary.

Proton Pump Inhibitors (PPI$s$)
This class of drugs has been available for over 10 years and provides the most effective acid suppression currently available. These are the most effective pills for more severe reflux symptoms and are effective at healing ulcers somewhat more rapidly than H$_2$-RAs. In general, the best medicine is the one that adequately controls symptoms. These pills are also considered safe for long-term treatment if necessary. Use of this type of drug is often combined with antibiotics to treat Helicobacter pylori. Side effects with this class of medication are also infrequent and may include skin rash, diarrhea and a variety of other minor side effects. Rarely, interference with other drugs has to be considered by the doctor.

Helicobacter pylori Therapy
The most common type of therapy used now includes two antibiotics plus a PPI drug. It is important that all the pills be taken as scheduled in order to obtain the greatest chance of eliminating the bacteria.

More information
For more information about protecting and enhancing your digestive health, please visit [www.CDHF.ca](http://www.CDHF.ca)
YES! I want to donate to the Canadian Digestive Health Foundation

Please accept my donation to support:
[ ] Canadian Digestive Health Foundation Programs as needed
[ ] Canadian Digestive Health Foundation Endowment Fund

My donation is:
[ ] Personal  [ ] In honour of [ ] In memory of
_____________________________________________________ (person’s name)

[ ] Yes, please send notification of my gift to:
  Full name: ____________________________________________
  Email: _______________________________________________!
  Mailing address: _______________________________________
  Personal message: ______________________________________
  ___________________________________________________________________

Donate by Cheque:
[ ] I have enclosed a cheque for $________
[ ] I have enclosed a blank cheque marked “VOID” and authorize
  the Canadian Digestive Health Foundation to deduct $_______
  from my account on the 28th day of each month

Signature: _____________________________ Date: ____ /____ /_____ (dd/mm/yy)

Donate by Credit Card:
I would like to make a donation using my credit card. Please charge my
[ ] VISA  [ ] MasterCard
[ ] $ 100  [ ] $ 250  [ ] $ 500  [ ] $ 1000  [ ] Other $________.

I want to support the Canadian Digestive Health Foundation with
a monthly donation charged to my credit card on the 28th day of
each month. My signature below is authorization for this transaction.
[ ] $ 250  [ ] $ 100  [ ] $ 75  [ ] Other $_______ per month

Card #: _________________________________________________
CCV2 ________ Exp. _____ / _____ mm/yy

Signature: ________________________________________________
Tel: (______) _______ - ______________________
Name: _________________________________________________
Email: _________________________________________________
Address: _______________________________________________
Cty: ____________________ Prov: ____ PC: ____________

[ ] Please send me information about protecting and improving
  my digestive health.

Ch.Reg.No.: 88996 8269 RR0001

ABOUT US

Over 20 million Canadians suffer from digestive disorders every year. The Canadian Digestive Health Foundation believes this is unnecessary and unacceptable.

We reduce suffering and improve quality of life by empowering Canadians with trusted, up to date, science-based information about digestive health and disease.

As the Foundation of the Canadian Association of Gastroenterology, we work directly with leading physicians, scientists, and other health care professionals to help you understand and take control of your digestive health with confidence and optimism.

Through research and public education, we aim to:

REDUCE
the incidence and prevalence of digestive disorders

IMPROVE
understanding of digestive health issues

SUPPORT
those suffering from digestive disorders

ENHANCE
quality of life for those living with digestive disorders

Request for support
The Canadian Digestive Health Foundation is
a national charity governed by a volunteer
board of directors. We rely on donations from
the public and the generosity of our partners
to develop and deliver our programs. Please
consider including our Foundation as one of
your chosen charities.

Contact us/Donate to
Canadian Digestive Health Foundation
2525 Old Bronte Road
Oakville, ON L6M 4J2
Tel: 905.847.2002
info@CDHF.ca

www.CDHF.ca