

▶ Chronic hiccups

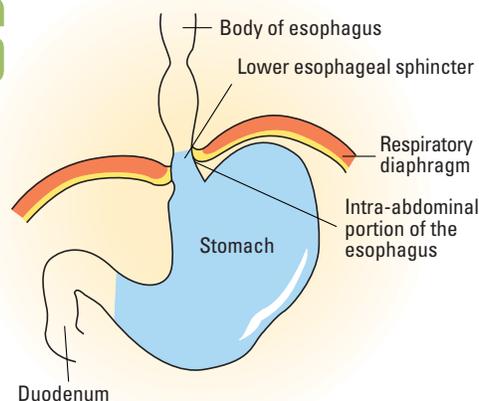
Charles Osborne of Anthon, IA, hiccupped continuously for more than 60 years without any known cause, and he still holds the world record for chronic hiccups. Although hiccups have many causes, including overeating, eating rapidly, drinking alcoholic or carbonated beverages, smoking, sudden temperature change, inadvertently swallowing air, and sudden surprise or stress, the reason hiccups occur remains a mystery.

It is generally believed that these short, sharp, sudden spasms serve no useful purpose. However, it has been suggested that hiccups signify a fundamental intrauterine reflex to prepare a fetus for breathing after birth. This implies that hiccups in adults are a primitive reflex. Other researchers have concluded that a hiccup is a digestive reflex for a fetus because it prevents the aspiration of amniotic fluid. Another opinion is that the function of the hiccup is to clear food or saliva through the esophagus.

The medical term for hiccups is *singultus*, and it is thought to have originated from the Latin *singult*, which translates roughly as “the act of catching one’s breath while sobbing.” Hiccups are simply repetitive spasmodic contractions of the diaphragm. These contractions cause the glottis—a structure in the larynx that controls the production of vocal sounds—to snap shut, which then causes the distinguishing hiccup sound. Most of the time, hiccups are harmless and disappear in a few minutes or hours, either on their own or with simple home remedies. Although rare, there are cases in which hiccups last for days or weeks, an indication that a complete medical evaluation is needed.

Illnesses that include persistent hiccups as a symptom are pleurisy of the diaphragm, pneumonia, uremia, alcoholism, and disorders of the stomach, esophagus, or gastrointestinal tract—particularly gastrointestinal reflux, achalasia, and esophageal or small-bowel obstruction. Hiccups might also be associated with pancreatitis, pregnancy, bladder irritation, liver cancer, and hepatitis, as well as taking drugs such as corticosteroids, benzodiazepines, methyl dopa, and antibiotics. A study published in the *European Respiratory Journal* revealed that 76% of 72 patients with persistent or intractable hiccups of no apparent cause had gastroesophageal disease.

Some people develop long-lasting hiccups after receiving anesthesia, which can affect the vagus nerves in the diaphragm. Hernias of the diaphragm, called hiatus hernias, also are a cause of chronic hiccups. But according to the results of a University of Alabama at Birmingham clinical study, reflux of stomach acid into the esophagus accounts for two-thirds of cases of chronic hiccups. The most common reflux disorder is heartburn, which occurs when the valve that separates the stomach from the esophagus fails to



Hiccups are caused by spasmodic contractions of the diaphragm.

close properly, allowing acid in the stomach to flow into the esophagus and irritate its sensitive lining. Cases of persistent hiccups are also linked to conditions that affect the central and peripheral nervous system, gastrointestinal tract, and diaphragm.

For people with chronic hiccups without any identifiable cause, several drugs are available, including antiseizure medications such as Valium and phenobarbital; muscle relaxers, including Flexeril and Soma; antidepressants like Prozac, Paxil, and Zoloft; and tranquilizers and sedatives. However, studies have shown that the antispasmodic drug baclofen has achieved the best results. Baclofen (Atrofen, Lioresal) is used to help block the transmission of certain nerve impulses, reducing the intensity and number of spasms, pain, and muscle stiffness.

Thankfully, few hiccup sufferers have to seek medical attention. For common, everyday hiccups, most people resort to simple home remedies. Although no reliable scientific studies exist that prove the effectiveness of any of these methods, the age-old techniques often seem to work. Many of these home hiccup strategies are designed to stimulate the back of the throat and thereby the vagus nerve—sipping ice water, swallowing granulated sugar, or biting on a lemon. Other techniques temporarily interrupt normal breathing, such as holding your breath, coughing, sneezing, breathing into a paper bag, and reacting to sudden pain or fright.

—FELICIA M. WILLIS

For more information

Gueland, C.; et al. Baclofen therapy for chronic hiccup. *Eur. Resp. J.* **1995**, *8*, 235–237.
University of Alabama at Birmingham Health System; www.health.uab.edu.

Hiccups “cure”

1. Pour a tall glass of water.
2. Hold your breath.
3. Pinch your nose closed.
4. Slowly take 15–20 swallows of the water while holding your breath and pinching your nose closed.
5. When you can’t stand it anymore, take a deep breath and relax.