

#### **Research Paper**

# **Medical Science**

### "Belching, Bloating, Flatulence-Causes and Simple Cures"

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#### **ABSTRACT**

Belching, Bloating and Flatulence is the result of excess swallowed air, however some conditions like Small Bowel, Bacterial Overgrowth or Gastroparesis can aggravate the symptoms. Excess intestinal gas may be caused by incomplete/ poor digestion of some sugars such as Lactose, Sorbital, Fructose, and Starches found in whole grains. Certain Medical tests are available to find out sugars which cause problem of the digestive system. Also a variety of digestive enzymes is available which can help solve this problem. It is recommended to eat smaller and frequent meals. Use of straws, gum chewing and smoking should be avoided.

## KEYWORDS: Belching, Bloating, Flatulence, Gas, Digestion

We all have gas in our intestinal tract. The gas is generally a combination of swallowed air and gas produced by the action of colon bacteria on undigested carbohydrates. This accumulated gas in the stomach can either be belched back or can be passed out of the stomach into the small intestine and be subsequently passed as rectal gas (flatus). Bloating refers to a sense of fullness in the upper abdomen. Flatulence refers to the passage of rectal gas. Some people can be more sensitive to even normal amounts of gas and have repeated belching or flatulence.

Sometimes the accumulated Gas in alimentary canal can cause pain. The accumulation in the right upper portion of the colon can lead to pain which could seem like gallbladder pain, while accumulates in the left upper portion of the colon can radiate up to the chest and seem like cardiac pain.

Gases that play an important role in the symptoms of belching, bloating and passing flatulence include: oxygen, nitrogen, carbon dioxide, hydrogen, methane, hydrogen sulphide

Causes; air gets swallowed during eating or by sucking hard candies or chewing gum ,also drinking carbonated beverages such as soda or beer can also generate excess gastric air. In addition to this individuals who experience anxiety may swallow air excessively in addition to this small bowel in 24 hours which can lead to belching, bloating or flatulence.

Moreover in certain foods such as bran, cabbage, cauliflower, broccoli, and beans, carbohydrates cannot be digested by the enzymes in the small intestine and reach the colon where bacteria metabolize them to hydrogen and carbon dioxide gasses.

Milk, certain cheeses or ice cream can cause bloating and flatulence in some patients, because they lack the enzyme (lactase) which is required to digest milk sugars (lactose). It has also been reported that underlying constipation and excess amount of normal bacteria in small intestine can cause bloating and flatulence.

Too much gas is produced due to Poor/incomplete Digestion of Sugars. Chronic inflammation as a result of Bacterial food poisoning, viral /parasitic infection of the gut can also cause incomplete digestion of

Sometimes Gastroparesis is developed after an intestinal infection. Poor sugar digestion can aggravate symptoms of Gastroparesis. The increased sensitivity to normal volumes of gas may result in pain. For some who suffer with pain (that has no known cause), it is believed that abnormal motility and sensitivity may be the source of pain.

Some Studies (Passos et al., 2005, Maxton et al., 1991, Camilleri et al.,2008, Azpiroz et al.,2005, Agrahwal et al.,2008)have emphasised that many symptoms emanate from the small intestine and not the

Splenic flexure syndrome is a chronic abdominal pain disorder triggered by trapped gas at the left flexure (bend) of the large colon. Trapped gas in this location can cause pain to be felt in the chest region, Called 'referred pain,' it can mimic heart disease. Gas trapped in the right flexure can mimic pain of gall bladder disease or appendi-

To test the specific carbohydrate for poor digestion ,the samples of expired air are collected over two hours after drinking that carbohydrate which is to be tested, and Hydrogen Breath Test is performed .Individuals with delayed stomach emptying (Gastroparesis) and small bowel dysmotilities may take longer to complete this test.

Sugars which can cause problem are Lactose( milk and milk products) ,Fructose(fruits, onions, and artichokes),Sorbitol(prunes, pears, peaches and grapes), Starches( whole grains, bran or wheat cereals ) An individual may be sensitive only to one particular sugar and digest the other sugars without difficulty.

Crohn's disease, Coeliac disease, Helicobacter pylori, Hiatal Hernia, Food allergies, high fibre foods (Bolin and Stanton ,1999), Pancreatic insufficiency, Gall bladder insufficiency, Achalasia are the additional conditions which can promote gas production

wheat sensitivity in certain patients without coeliac disease(Biesiekierski ,et al,2011), (Carroccio , et al. 2012)due to a disturbance of the autonomic nervous function on the gut, causes them more sensitive to gaseous distension.

REMEDIES Some foaming agents (that helps to bind-up gas bubbles), activated charcoal, Digestive enzymes, peppermint can help reduce the symptoms of gas, bloating and belching. These preparations should be taken before eating regular meals.

CONCLUSION High fibre foods and medications have impact on gastrointestinal motility. Gastroparesis is diagnosed with a gastric emptying study to exclude gastric outlet obstruction. There is change in pelvic muscle activity with the passage of age and after the surgery, it controls the process of holding and passing gas.

To control this gas problem, eat more slowly and smaller meals, Avoid lying down after eating, wear loose fitting clothing. also certain digestive enzymes are available which helps in proper digestion.

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