

## **The Factors Which Increase The Risk Of Acid Reflux**

The food and lifestyle of city dwellers have changed significantly over the past 30-40 years. That change has been a significant reason for the epidemic of Acid- Reflux disease. Risk factors include:

### **1. Foods Which Increase Acidity and Acid Reflux**

Most natural plant foods with few exceptions are alkaline in nature. On the other hand, commercial factory-made foods and animal products such as meat and milk/dairy products are acidic. The foods which increase the risk of acidity include:

- Tomato sauces and tomato-based curries.
- Onion and garlic based curries.
- Greasy foods rich in refined commercial oils and saturated fats -Fried and baked goods made with factory-refined palm and seed oils, and saturated fats present in meat and milk products- milk sweets. The widely popular 100 gram Paneer preparation from whole milk has 20 gm of acidic protein casein and 20 gm of saturated fat. Both of these promote acidity and reflux.
- Citrus fruits and juices --Orange juice fresh as well as boxed variety are the big culprits in causing acidity.
- The carbonated drinks and sodas- These cause stomach distension and are acidic, both of which promote acid reflux. Drinking soda or soda bicarb will relieve acidity briefly but will cause rebound acidity.
- Caffeinated drinks – overcooked tea prepared with lots of milk and tea leaves, and coffee made with overroasted beans are acidic and take a long time to digest because of high milk content.
- Peppermint preparations – These preparations help with indigestion but may make acidity worse.
- Spicy foods – Foods rich in garam masala, red chili powder, and store-bought stale spice powders cause acidity. To minimize acidity, use whole garam masala and freshly ground spices.

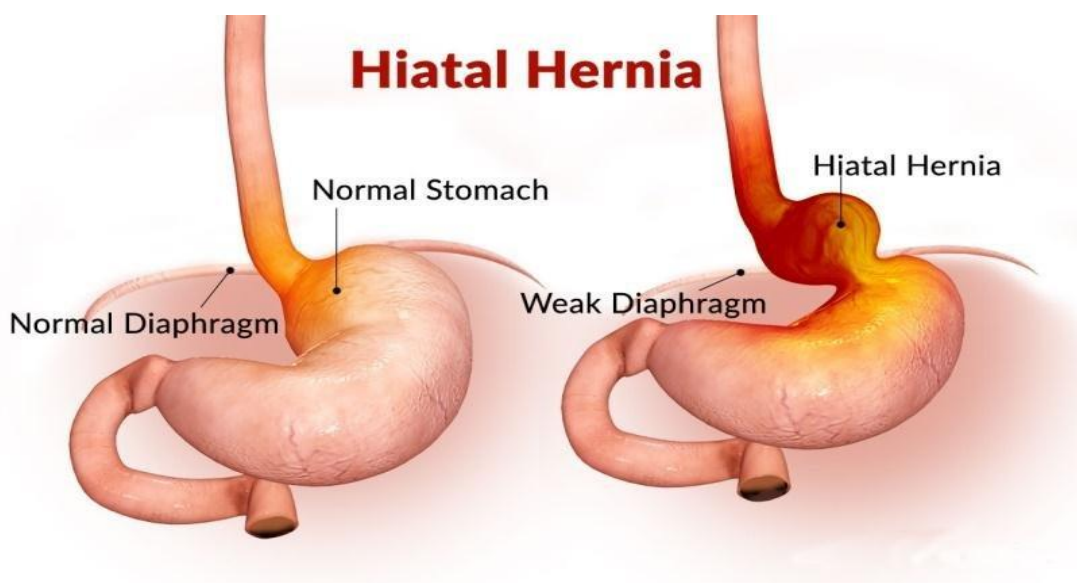
- Chocolate and its preparation
- Alcoholic beverages
- Smoking



## 2. Unbalanced Lifestyle

The lifestyle habits which increase the risk of acid reflux include:

- **Late-night eating** - There should be a time interval of 3 hours between dinner and sleep time. That time frame allows stomach contents to empty before lying down for sleep.
  - **Frequent eating** That does not give any time to the stomach to empty and get rest from its digestive duties.
  - **Overeating or heavy meals at night** – Fast eaters are typically overeaters. Also, eating foods at night that are rich in fats delays stomach emptying for several hours, increasing the risk of acid reflux.
3. **Obesity** - Obesity especially abdominal obesity results from increased fat deposition in the abdominal cavity. That increases pressure on the stomach. Additionally, abdominal obesity weakens the diaphragm- a muscle that separates the lungs from abdominal organs. The healthy diaphragm muscle strengthens the muscle ring at the lower end of the food pipe. It acts as a barrier against the back flow of stomach contents. Diaphragm laxity from obesity can lead to a condition called hiatal hernia, where the upper end of the stomach slips into the chest cavity, and the barrier against the backflow of stomach contents is lost.



4. ***Slow stomach emptying*** - Acid reflux typically occurs one to two hours after meals at a time when the stomach is full of food, and acidic digestive juices of the stomach are at the peak. The slow emptying of the stomach, therefore, prolongs the duration for which acid reflux can occur. The conditions which cause delayed emptying of the stomach are:
- ***A sizeable late dinner*** – The dinner meal that is late and is rich in fat, spices, and animal fats (meat and dairy products) or acidic foods (see the above list of acidic foods).
  - ***Type2 diabetes*** - During the advanced stage of diabetes, stomach emptying becomes slow due to the weakness of stomach muscles. This condition is called gastroparesis.
  - ***Effect of medications*** – Several medications slow down stomach emptying or irritate the stomach lining with pain and discomfort. These medications include pain medications such as morphine and Ibuprofen, tricyclic antidepressant drugs, certain blood pressure medications called Calcium Channel Blockers, and drug remedies for treating Parkinsonism.
5. **Smoking**—Nicotine present in cigarette smoke weakens the muscle ring at the lower end of the food pipe, increasing the risk of backflow of stomach contents.
6. **Emotional stress**- It is a common observation that symptoms of acid reflux become worse before a stressful event such as a job interview or an examination. Work-related stress can increase the likelihood of acid reflux symptoms. The scientific work shows that emotional stress does not increase the secretion of acid by stomach, but it makes an individual more sensitive to the symptoms of acid reflux. There are two possible reasons for an increased perception of pain and discomfort:
- Under emotional stress, an individual becomes more sensitive to pain and discomfort.

- The emotional stress reduces the production of a protective substance called prostaglandin, which protects the stomach from the effect of acid.

So the stress does not increase acid production in the stomach. However, it heightens a person's response to pain and discomfort of acid reflux.