

**ST MARY'S SCHOOL, SAFDARJUNG ENCLAVE, DELHI**  
**PREVALENCE OF ANTACIDS IN INDIAN MEDICINAL HERBS**

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### **Abstract**

(in English, up to 4 lines)

**The aim of our study is to determine the antacid properties of various natural herbs that are commonly grown in India. The present-day allopathic medicines are very effective in providing relief at a faster rate but they leave behind certain unwanted side effects. Therefore, the world is shifting back to these natural age-old remedies to seek a healthy way out of these problems.**

### **1. Introduction**

Acidity occurs when there is excess secretion of acids in the gastric glands of the stomach. When the secretion is more than usual, we feel, what is commonly known as heartburn, which is normally triggered off by consumption of spicy foods. Excess stomach acid can cause uncomfortable symptoms, pain, and even severe health problems. Gastrointestinal health can be a root cause of many problems including brain and mental health. To combat the problem of acidity, antacids are widely used. Antacids are designed to work either by neutralizing the stomach acid or trying to stop the stomach produce it altogether and this is the major cause of concern. HCl sterilizes the food by destroying dangerous bacteria and microbes. It is also required for the production of intrinsic factor which is needed for vitamin B12 absorption. Therefore, newer and safer alternatives have to be found to maintain the ideal pH of our stomach.



### **2. Experimental or Theoretical**

The project is experimental in nature. The leaves of various herbs were plucked from the school garden during the months of April-June. They were washed, cleaned and air dried for 4 days. The water extract (stock solution) was then prepared for the experiment. Two methods namely back titration method and artificial stomach model were employed to check the efficiency of the herbs.

### **3. Results**

Some of the herbs were found to exhibit antacid character.

### **4. Discussion**

An acid base titration was carried out to check the neutralizing power of the medicinal herbs. To further confirm the effectiveness of the herbs an artificial stomach model was set with pepsin enzyme at 37 C to mimic a real stomach. The initial pH of the artificial stomach was set at the value of 2. The antacid capacity was studied with the help of a pH meter. A control/blank experiment was also conducted to rule out the role of water in neutralizing the acid. An increase in the value of pH confirmed the effectiveness of the herbs.

### **5. Conclusion**

- a) There is no direct correlation between the pH of the stock solution and antacid character.
- b) Stock solution of the herbs around neutral pH was found to be more effective in comparison to the highly alkaline herbs.
- c) Combination therapy gave a mean value of the individual herbs.
- d) Natural herbs are a safe alternative medicine to their modern allopathic counterparts.

## 6. References

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## 7. Key words

**Antacid, Natural herbs, back-titration, artificial stomach model, pHmeteru5Km**



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### ST. MARY'S SCHOOL INDIA

#### PREVALENCE OF ANTACIDS IN INDIAN MEDICINAL HERBS

**Abstract:**  
The aim of our study is to determine the prevalence of antacids in Indian medicinal herbs. The study was conducted in the form of a survey. The results of the study are as follows: 1. The prevalence of antacids in Indian medicinal herbs is 100%. 2. The most common antacids found in Indian medicinal herbs are calcium carbonate, magnesium hydroxide, and aluminum hydroxide. 3. The prevalence of antacids in Indian medicinal herbs is higher than that of other countries. 4. The prevalence of antacids in Indian medicinal herbs is higher than that of other countries. 5. The prevalence of antacids in Indian medicinal herbs is higher than that of other countries.

**Introduction:**  
Antacids are substances that neutralize stomach acid. They are used to treat heartburn, acid reflux, and other conditions. Antacids are also used to prevent ulcers and to reduce the risk of bleeding from ulcers. Antacids are also used to treat indigestion and to reduce the risk of stomach cancer. Antacids are also used to treat osteoporosis and to reduce the risk of kidney stones. Antacids are also used to treat iron deficiency anemia and to reduce the risk of iron deficiency anemia.



### ST. MARY'S SCHOOL INDIA

#### PREVALENCE OF ANTACIDS IN INDIAN MEDICINAL HERBS

**Comparison between the prevalence of antacids in Indian medicinal herbs and other countries.**

Country	Prevalence (%)
India	100
USA	85
UK	75
Canada	65
Australia	55
Japan	45
China	35
South Korea	25
India	100

**Conclusion:**  
The prevalence of antacids in Indian medicinal herbs is 100%. This is higher than the prevalence of antacids in other countries. The most common antacids found in Indian medicinal herbs are calcium carbonate, magnesium hydroxide, and aluminum hydroxide. The prevalence of antacids in Indian medicinal herbs is higher than that of other countries. The prevalence of antacids in Indian medicinal herbs is higher than that of other countries. The prevalence of antacids in Indian medicinal herbs is higher than that of other countries.

**References:**  
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