Human body has a proper mechanism to maintain its breathing rate. It is controlled by breathing center in the brainstem. Medulla controls the muscles involved in respiration thus controls the force of respiration whereas pons controls the rate of respiration. There are many chemoreceptors in the brainstem and in the blood vessels for maintenance of respiratory rate. The chemoreceptors in the aortic and carotid bodies detect the pH of blood whereas the chemoreceptor in the breathing center of brain detects the level of carbon dioxide in the blood. As carbon dioxide is not able to cross blood brain barrier, so it is first converted into bicarbonate ions, passes the blood brain barrier, and then is again converted into carbon dioxide to produce its effects over the chemoreceptor of breathing center. Breathing rate lesser than 12 breaths per minute is called hypoventilation, whereas the breathing rate above 20 breaths per minute is called hyperventilation.

The causes for hyperventilation include asthma, COPD, blood clots like deep vein thrombosis or pulmonary embolism, heart failure, pulmonary edema, lung diseases, panic disorders, hyperthyroidism, fever or high altitude sickness. The causes for hypoventilation include COPD, emphysema, and obesity, neuromuscular disorders like myasthenia gravis or hypothyroidism. Breathing rate is also altered by the levels of blood pH. The blood pH is determined by relative levels of carbon dioxide and bicarbonate ions. So depending upon the causes which lead to variation in the levels of these ions, pH disorders are classified as

1. Respiratory alkalosis
2. Respiratory acidosis
3. Metabolic alkalosis
4. Metabolic acidosis

If the problem is respiratory one, body treats metabolically and if it is metabolic disorder, it is treated by hyper or hypoventilation. During respiration, CO₂ is exported out of the body so ultimately it leads to increase pH levels after continuous hyperventilation, leading to respiratory alkalosis. And if there is fall in bicarbonates level in the body (Metabolic acidosis), body treats it by hyperventilation [1, 2].

After water, tea is the cheapest humans consuming beverage used in the whole world. Tea was referred as a health regulating beverage in the ancient times and science gave evidence for this belief because it contains such ingredients which have great medicinal advantages. Camellia Sinensis is a tea plant which has been used for several years in the world. Classification of tea is based on the processing fresh leaves of Camellia Sinensis i.e. fermented, semi-fermented and non-fermented. Fermented tea is known as Black tea, semi-fermented tea is known as Oolong tea and non-fermented tea is known as Green tea. Both Black and Green tea have such polyphenolic compounds which can prevent human beings from cancer. Besides this, it also prevents us from various cardiovascular diseases and metabolic disorders and promotes our health by reducing body weight. It is symbol of relief for the persons who suffer hectic routine daily.

Most of the people love to take tea because they become addict of it. In western countries, fermented tea (Black tea) is mostly used due to its strong activity but Asians love to take semi-fermented tea commonly. Tea itself is a good thing for our health because it refreshes our mind but as we know that excess of everything is bad. That’s why; we should not exceed our limits while taking tea so that our health remains healthy and safe.

The objective of the present study was to link tea likeliness and normal breathing rate.

### Materials and Methods

A group of undergraduates took part in this research and the normal breathing rate of each person was analyzed turn by turn by the following protocol i.e. First of all, we approached the subject by...
right side and introduced ourselves to the person. We got permission to analyze his/her normal breathing rate and gave instructions to the person that breathes normally. Then, count the normal breathing rate for one minute by noticing the movement of his/her chest. In this way, we analyzed the normal breathing rate of the different students. We correlated tea likeliness and normal breathing rate by making a questionnaire to determine the likeliness and dislikeliness of the students for tea with respect to their normal breathing rate.

**Statistical Analysis**

Statistical analysis was done by using SASS software in which t-Test was applied to determine the relation of tea likeliness and normal breathing rate and \( p \)-value less than 0.1 was taken as a standard value.

**Results and Discussion**

According to t-Test, Relation of tea likeliness and normal breathing rate is given in table 1, in which probability of the likeliness and dislikeliness of variable with respect to normal breathing rate has been described i.e. \( p \)-value is less than 0.1 which was referred as a standard value. It means there is no relation of tea likeliness and normal breathing rate.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Tea Likeliness</th>
<th>Tea Dislikeliness</th>
<th>( p )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>26.75±17.35</td>
<td>22.83±6.33</td>
<td>0.40</td>
</tr>
<tr>
<td>Females</td>
<td>19.77±4.78</td>
<td>21.44±5.48</td>
<td>0.10</td>
</tr>
<tr>
<td>Both</td>
<td>21.09±8.97</td>
<td>21.63±5.54</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Results were non-significant (\( p<0.1 \)).

This research gave advancement to the scientific era because no research was done regarding relation of tea likeliness and normal breathing rate before this [3-8]. In this research, we determined the relation of variable with normal breathing rate in humans statistically.

**Conclusion**

It was deduced from the present study that there is no relation of tea likeliness and normal breathing rate in humans.

**References**