

# THE STUDY OF THE EFFECTS OF TEMPERATURE AND SWEETNESS ON THE DRINKING QUALITY AND PREFERENCE OF GREEN TEA

## ABSTRACT

Tea is one of the most popular and inexpensive beverage in the world. It is enjoyed by several types of people ranging throughout all age groups and all levels of society. Around three billion cups of tea are consumed daily worldwide. There have been many different views on the topic of brewing and processing tea procedures but not much has been done about how the temperature and sweetness affect the perception and preference of tea. The aim of this study was to experiment with green tea at three different temperatures: hot, cold, and room temperature (60°C, 23°C, and 5°C) and two types of sweetness (added 6% sugar and no sugar added) to study the effects of temperature and sweetness on the preference scores of consumers.

In this experiment a consumer test was performed on 120 consumers who had to taste 12 treatments over two sessions (6 samples per session) and score them on a 9 point hedonic scale, they were not informed of the aim of the experiment as to avoid bias. The results were then analyzed based on 7 of the following attributes: Overall liking, Color, Aroma, Sweetness, Bitterness, Flavors, and Astringency. It was found that all treatments were preferred almost equally except for the astringency which affects preference scores at different temperatures. And sweetness has shown to have no effect to preference and there is no significant interaction effect between temperature and sweetness.

**KEY WORDS:** Green tea / Preference / Temperature / Sweetness / Consumer testing