

# Comparative Study on Sensory Acceptability of Normal, Bio-Fortified and Organic Wheat Flour Based Chappatis

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## ABSTRACT

**Introduction:** Chapatis, a staple flat bread in Indian cuisine, vary in quality based on wheat flour type. There is a need to explore sensory differences among standard, bio-fortified, and organic wheat flours to identify optimal options for freshness and storage.

**Aim:** The study was undertaken to develop chappatis using different types of wheat flours, namely standard wheat flour, bio-fortified wheat flour and organic wheat flour by measuring the same amount of wheat flour and also checking the water absorption rate of each and assessed using (9-point) hedonic scale for sensory attributes.

**Materials and Methods:** The study was done in different phases, including procurement of raw materials, methods of preparation, recipes and procedure. The sensory evaluation and statistical analysis revealed that sample c, which was organic wheat flour was more acceptable than the other samples.

**Results:** On comparing the standard wheat flour with the organic one, there was a noticeable change in both. Initially, standard was preferred more than the organic one in terms of attributes like (taste, texture, aroma, tearing property, colour; however, after leaving the chappatis for 4 hours, it was noticed that the organic wheat chapati stood out to be the most preferred, meanwhile bio-fortified wheat chapati did retain some of the attributes and also declined in some of them.

**Conclusion:** It can be concluded that sample C, which is organic wheat flour is the most effective after 4 hours in all the attributes and can be consumed by every individual who used to go to work or anywhere where the chapatis need to be consumed after 4 hours.

**Keywords:** Attributes, Bio-fortified wheat flour, Sensory evaluation, Tearing property

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