"TOTAL PLATE COUNT (TPC) ANALYSIS OF PACKAGED ZAMZAM WATER SOLD IN THE EMBONG ARAB AREA, MALANG CITY"

*Al Baihaqi Furqon**
Department Program of Pharmaceutical and Food Analysis, Ministry of Health Polytechnic of Malang
**Email: albaihaqifurqon45@gmail.com*

ABSTRACT

Background: *Zamzam water is a natural mineral water believed to have various health benefits and high spiritual value. However, distribution and packaging processes that do not meet standards can lead to microbial contamination of the water. Microbial contamination can be measured by the Total Plate Count (TPC) value.* ***Objective:*** *This study aims to determine the compliance of packaged Zamzam water sold in the Embong Arab area of Malang City with the TPC requirements based on the Indonesian National Standard (SNI) 6242:2023 for natural mineral water.* ***Research Method:*** *This research uses a descriptive method with a microbiological analysis approach using the TPC method. Samples tested were taken from three stores selling packaged Zamzam water.* ***Research Results:*** *The test results showed that the TPC values of all three samples exceeded the maximum permissible limit of 100 colonies/ml, according to the SNI standard. The highest TPC value was found in sample B, with an average of 1.68 × 10^5 CFU/ml, followed by Sample C with an average of 4.9 × 10^3 CFU/ml, while the lowest was in sample A, with an average of 3.4 × 10^3 CFU/ml.* ***Conclusion:*** *This study concludes that all packaged Zamzam water samples tested did not meet the microbiological quality requirements for natural mineral water.*

Kata kunci*: Zamzam Water, Total Plate Count (TPC), SNI 6242:2023.*