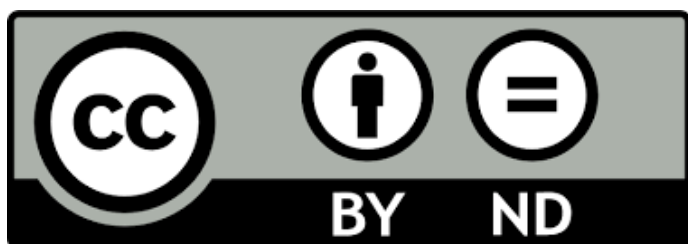




INFOGRAPHIC

ĐÁNH GIÁ CHẤT LƯỢNG VI SINH VÀ MỘT SỐ CHỈ TIÊU HOÁ LÝ CỦA BÚN TƯƠI VÀ BÁNH PHỞ TƯƠI TRONG QUÁ TRÌNH BẢO QUẢN TẠI KHU VỰC HUYỆN HÓC MÔN CŨ, TPHCM

Tác giả: Nguyễn Tường Dung
Đơn vị: Khoa Khoa học Ứng dụng & Công nghệ
Năm xuất bản: 2026



Đánh giá chất lượng vi sinh và một số chỉ tiêu hoá lý của bún tươi và bánh phở tươi trong quá trình bảo quản tại khu vực huyện Hóc Môn cũ, TPHCM © 2026 bởi **Nguyễn Tường Dung** được cấp phép theo **CC BY-ND 4.0**.

ASSESSMENT OF MICROBIOLOGICAL QUALITY AND SELECTED PHYSICOCHEMICAL PROPERTIES OF FRESH RICE VERMICELLI AND FRESH PHO NOODLES DURING STORAGE



ABSTRACT

This study evaluated the microbiological quality and selected physicochemical properties of fresh rice vermicelli and fresh pho noodles during storage. A total of 40 samples (20 fresh rice vermicelli and 20 fresh pho noodles) were collected, including 30 market/retail samples and 10 production-facility samples. Initial analysis included APC, Coliforms, E. coli, yeasts and molds, presumptive HEA colonies, pH, and moisture content. Samples were stored at room temperature and under cold storage (~5°C) and monitored on Day 0, Day 3, and Day 6. The results provide an overview of the microbiological quality and factors affecting the safety and shelf life of these products.



INTRODUCTION

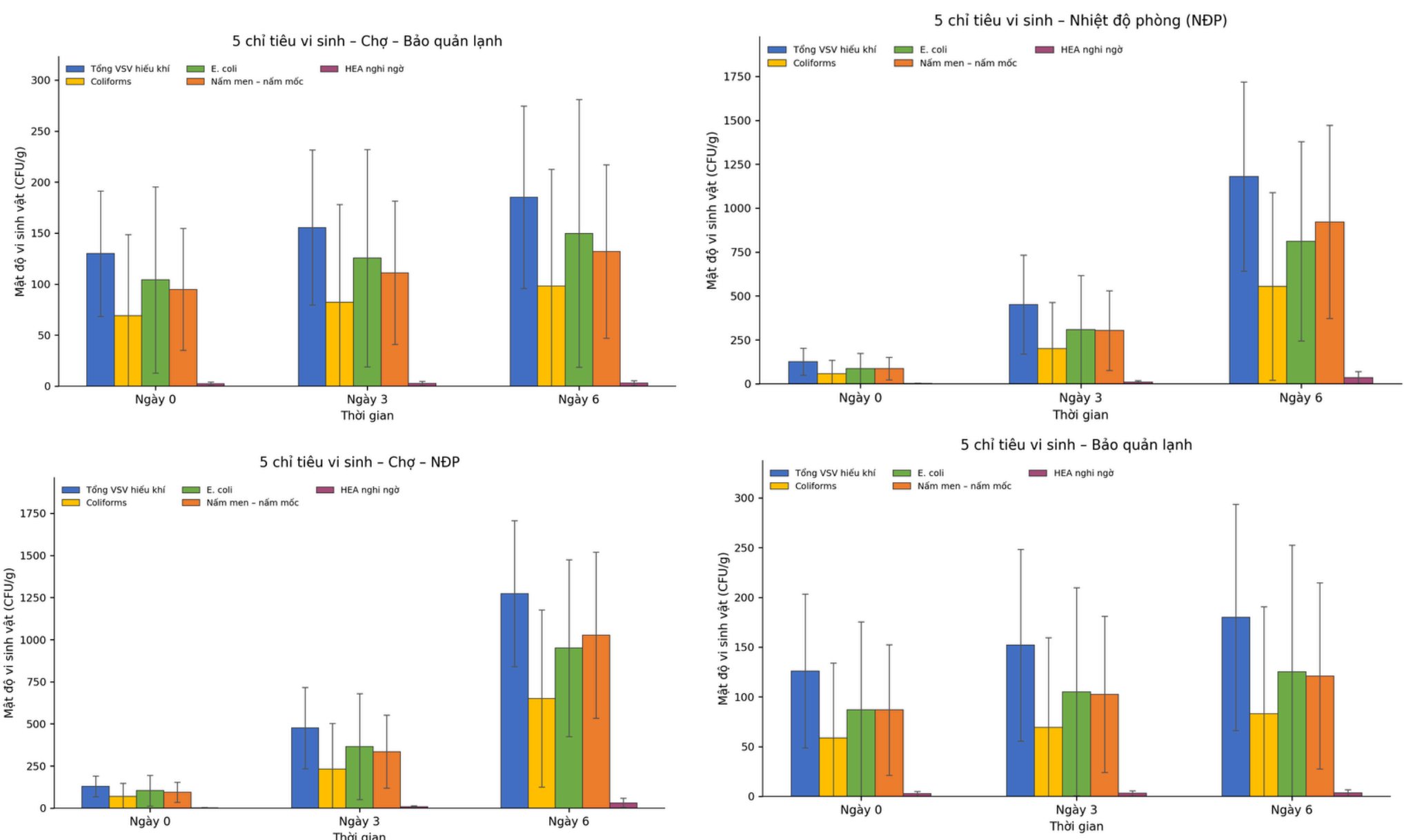
Fresh rice vermicelli and fresh pho noodles are high-moisture rice-based foods with a short shelf life. Post-processing contamination may occur through handling, water, utensils, contact surfaces, packaging, and the surrounding environment. Therefore, microbiological quality should be evaluated together with physicochemical properties such as pH and moisture, especially during storage.



METHODS AND MATERIALS

- Samples: 40 total (20 fresh rice vermicelli, 20 fresh pho noodles).
- Sampling source: 30 market/retail samples and 10 production-facility samples.
- Initial analysis: APC, Coliforms, E. coli, yeasts and molds, presumptive HEA colonies, pH, moisture.
- Storage conditions: room temperature and cold storage (~5°C).
- Monitoring time: Day 0, Day 3, Day 6.

RESULTS AND DISCUSSION



CONCLUSION & RECOMMENDATIONS

- Microbial quality of fresh rice vermicelli and fresh pho noodles was strongly affected by storage temperature, sampling source, and storage time.
- Microbial counts generally increased during storage, with a more pronounced increase at room temperature than under cold storage.
- Samples collected from markets and production facilities showed differences in microbial contamination, indicating variability in processing, handling, and hygienic conditions.
- Cold storage effectively slowed microbial growth and contributed to better preservation of product quality during storage.
- Proper hygiene during production and distribution, together with continuous refrigerated storage, is recommended to improve the microbiological safety and shelf life of fresh rice-based noodles.

Keywords: fresh rice vermicelli, fresh pho noodles, microbial quality, storage temperature, cold storage.

