Quantitative Methods and Analytical Techniques in Food Microbiology
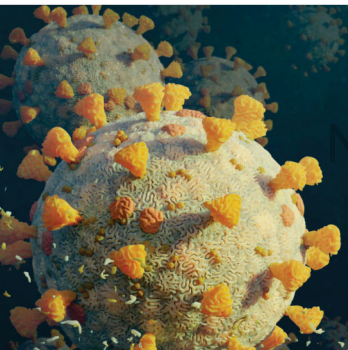
Challenges and Health Implications

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Editors

CRC Press
Taylor & Francis Group

APPLE ACADEMIC PRESS

CHAPTER 15

Trends, Analytical Approaches, and Applications of the VITEK System for Identification and Classification of Bacteria and Yeasts

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15.4   CONCLUDING REMARKS

The VITEK II compact is an automated identification and classification method for microorganisms like bacteria and fungi. Outcomes of the published studies suggest that VITEK II produces very rapid, accurate, and reproducible scores. VITEK II compact demonstrates state-of-the-art phenotypic identification technology with its colorimetric reagent card, hardware, and software. It is successfully used to identify and classify numerous types of bacteria and yeast strains with compared to accuracy of various biochemical tests and genomic tools. Very limited research had been performed using this new system and hence demands further well-structured and planned investigations in future. Furthermore, database build up is also extremely required for comparison with other well-established methods and technologies particularly from microbiological perspective. However, it can be concluded that at clinical level the use of such novel strategy will reduce time than other diagnostic methods currently used in laboratories to identify pathogenic or virulent strains.

KEYWORDS

- **analytical technique**
- **antimicrobial sensitivity**
- **bacteria**
- **clostridium difficile**
- **identification methods**
- **VITEK II**
- **yeasts**

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