

Management and Prevention of Bacterial Zoonotic Infections in Tayyeb Foods

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Abstract

Introduction

According to the report of the World Health Organization, more than 2 million people die every year due to the use of contaminated food and water, and most of these victims are children because their immune system is weaker than that of adults. The most important sources of food contamination are uncooked meat. We must know how food could be contaminated, the best storage methods for keeping food safe, and the principles of fighting against germs and pathogenic agents. We should promote public education about ways to prevent food-borne diseases. Also, we must increase coordination and participation of private and government sectors for laboratory diagnosis. This article aims to investigate meat's most critical bacterial infections.

Material and Methods

The best ways to prevent these pathogens must be analyzed to reduce massive destruction. Three databases (Google Scholar, PubMed and Scopus) were searched for published articles on zoonotic bacterial infections in Tayyeb foods in Iran from 2000 to 2020. fifteen related articles with complete abstracts were included in this study. All data were analyzed with R version 4.2.1 artificial intelligence software.

Findings

Microbiologists are being challenged as foodborne outbreaks are increasingly being observed worldwide. Most of these outbreaks are associated with bacterial pathogens such as *Campylobacter*, *Salmonella*, and *Escherichia coli*. Although the food production factories follow the food health control standards, everyone involved in food storage and distribution must strictly follow the health principles. We should prepare a suitable method for food processing, including fully cooked food and consuming it as soon as possible, carefully storing cooked food, avoiding contact with raw food, and heating it thoroughly when using it again.

Conclusion

Meat inspection and personal hygiene should be taken seriously, especially for those involved in food preparation (transportation, processing and cooking). It is also better to get food from reputable centers. Food must be cooked completely to prevent the growth and proliferation of bacteria. After cooking, hygiene principles and proper food storage methods must be observed to avoid re-contamination.

Keywords: Bacterial, Zoonosis, Prevention, Meat

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