



Trends in Scientific Publications on Food Safety Management in TÜRKİYE

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INTRODUCTION

Türkiye lacks a coordinated foodborne disease surveillance system (1). However, foodborne outbreak data from Turkish news reports and research papers (1, 2), foodborne disease occurrence data from hospital (3, 4) and forensics medicine directorate databases (5), indicate issues with how food businesses manage food safety. This is coupled with the fact that accreditation is not mandatory for third-party certification bodies that conduct food safety audits in Türkiye (6). Thus, there is a need to better understand food safety management practices in food production companies and scientific publications can offer baseline data regarding current knowledge.

PURPOSE

The aim is to understand to what extent existing scientific publications are able to provide an understanding of food safety management practices in the food production sector in Türkiye and identify how future research could expand that understanding.

METHODS

Literature search

- International databases: ScienceDirect, Wiley, Emerald, SpringerLink, Taylor&Francis, Web of Science, GoogleScholar
- National databases: Dergipark, Council of Higher Education Thesis Center

Key words (used in English and Turkish):

- Food safety management systems (FSMS), HACCP, ISO 22000, BRC, IFS
- Production, food safety certification, microbial hygiene
- Food safety knowledge, awareness, practices
- Turkey, Türkiye (used as both key word and affiliation search)

RESULTS

85 STUDIES in ENGLISH and TURKISH:

International Journals – 17

- Surveys - 10
- Microbiological hygiene – 6
- Theoretical studies – 1
- PhD thesis – 2
- Microbiological hygiene – 2

Turkish National Journals - 66

- Surveys - 11
- Microbiological hygiene – 24
- Theoretical studies – 23
- Case studies to HACCP and CCPs - 6
- Interviews and audits on FSMS – 2

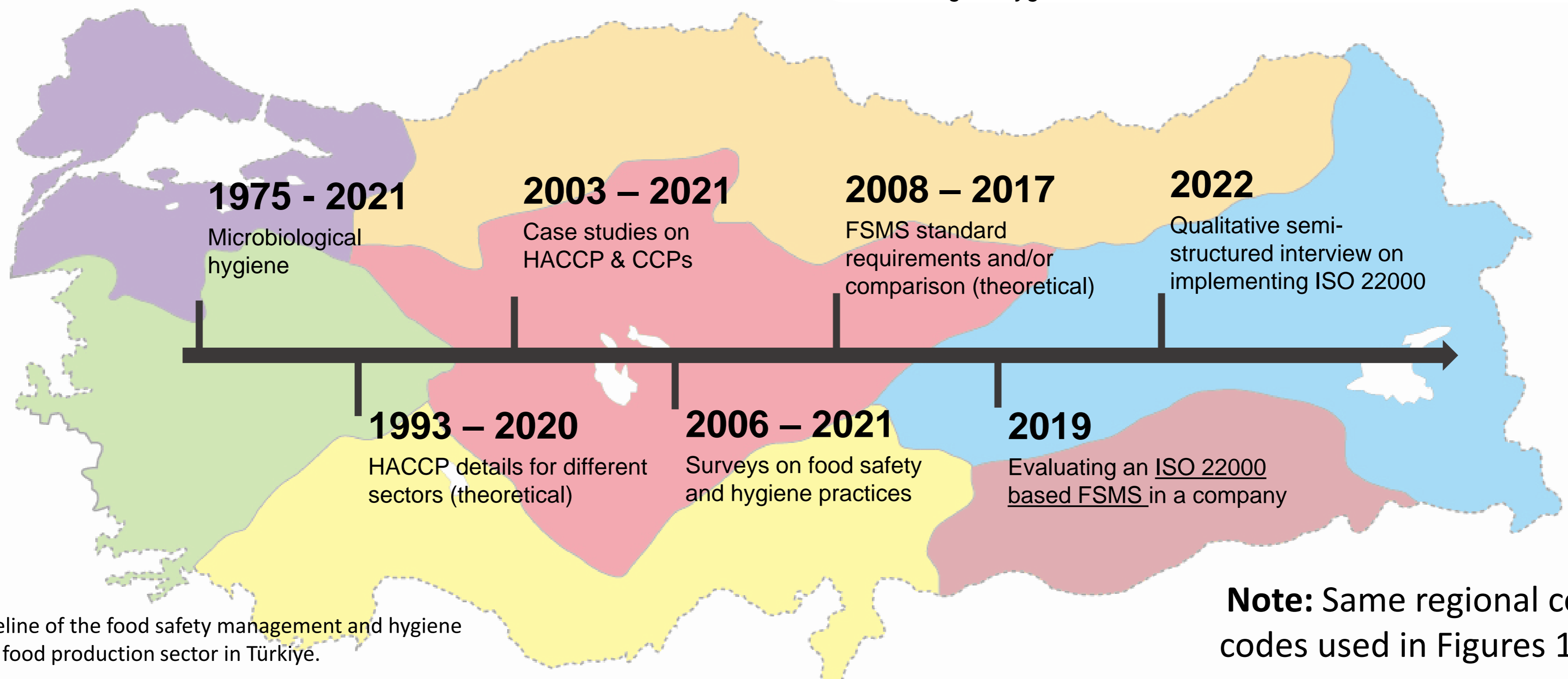


Figure 1. Timeline of the food safety management and hygiene studies in the food production sector in Türkiye.

Note: Same regional colour codes used in Figures 1 & 2.

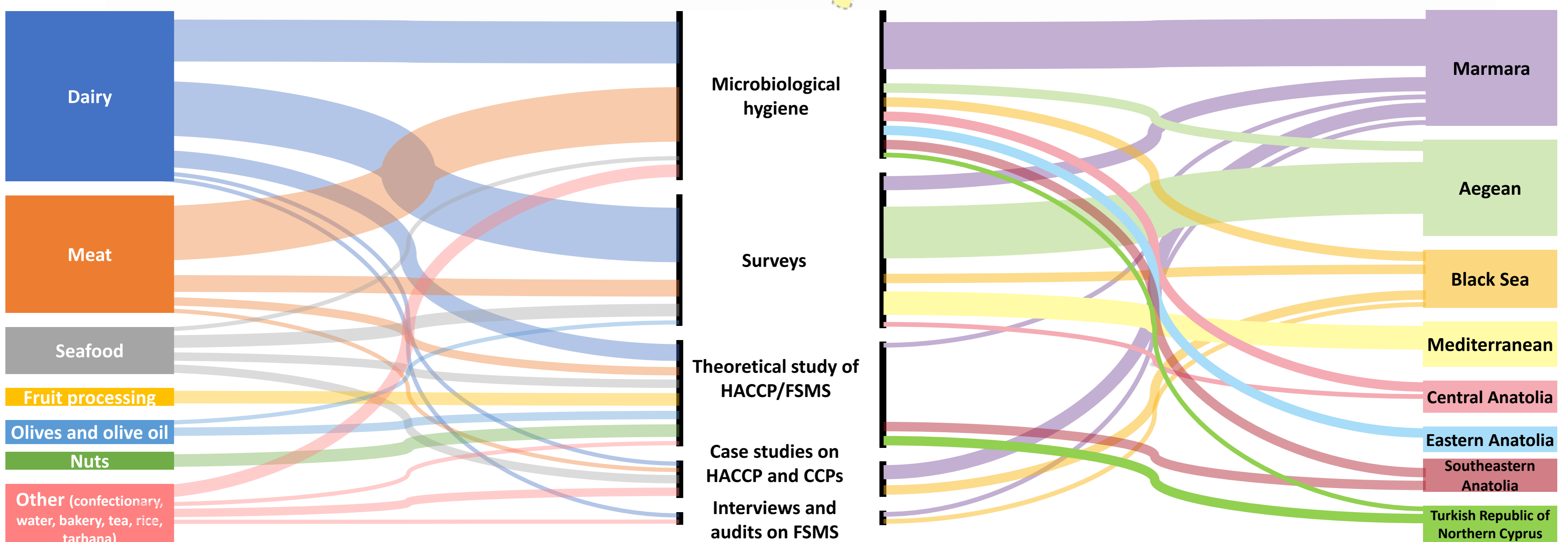


Figure 2. Distribution of research methodology (middle) based on food sectors (left) and regions of Türkiye (right). The height of lines and boxes are proportional with the amount of research conducted within these areas.

KEY TAKEAWAYS

- Research has focused on hygiene, HACCP and CCPs. Recently 2 empirical studies evaluating FSMS have emerged (Figure 1). Future research could consider extending FSMS-related research and including food safety culture, shifting to a management- and people/behaviour-orientated approach.
- Qualitative semi-structured interviews are not a common practice in this field of research in Türkiye, but may be important in future research.
- Research has focused on using surveys in the dairy sector of the Aegean region and microbiological hygiene evaluations mainly in the dairy and meat sector of the Marmara region (Figure 2). These results question whether existing studies give a deep enough insight on food sectors and regions and suggest that more work is needed throughout Turkish food industries.

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