

# Food Safety Knowledge and Self-Reported Practices of Chemotherapy Patients and Associated Caregivers

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## Introduction

Chemotherapy patients have an increased risk of foodborne illnesses due to immunosuppression<sup>1</sup>. Indeed, cancer patients are reported to have a five-fold increased risk for development of listeriosis<sup>2</sup>.

Therefore, to minimise the risk of foodborne illness it is important that cancer patients consume foods prepared and cooked at home according to food safety recommendations and avoid risk associated food products<sup>3</sup>. Furthermore, specific recommendations relating to time and temperature control of ready-to-eat (RTE) food exist to reduce the risks associated with listeriosis<sup>7,8</sup>.

However, research detailing cancer patients and family caregivers knowledge and self-reported food safety practices during chemotherapy is currently lacking<sup>5</sup>.

Consequently, this study aims to establish what cancer patients and family caregivers know about food safety and how they prepare food at home. Such data will aid the development of future targeted food safety communication approaches to increase implementation of risk-reducing behaviours.

## Purpose

This study aims to determine chemotherapy patients and family-caregivers cognitive influences relating to food safety. Data will be used to inform targeted educational intervention strategies to decrease the risk of foodborne illness for this 'at-risk' consumer group.

## Methods

A self-complete questionnaire (online and paper-based) was completed by chemotherapy patients (70%) and caregivers (30%) responsible for food-preparation ( $n=172$ ) to determine knowledge and self-reported food handling and storage practices. Statistical analyses were conducted using IBM SPSS 20, and Microsoft Office Excel 2007.

## References

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## Results

A total of 172 respondents participated in the self-complete questionnaire. The majority (70%) were patients that had received chemotherapy treatment in the last three years, 30% had been responsible for preparing food for someone that had received chemotherapy, caring for a partner/spouse was most frequently reported (51%), 27% reported caring for a patient under the age of 18, with 6% caring for a child <12 months of age.

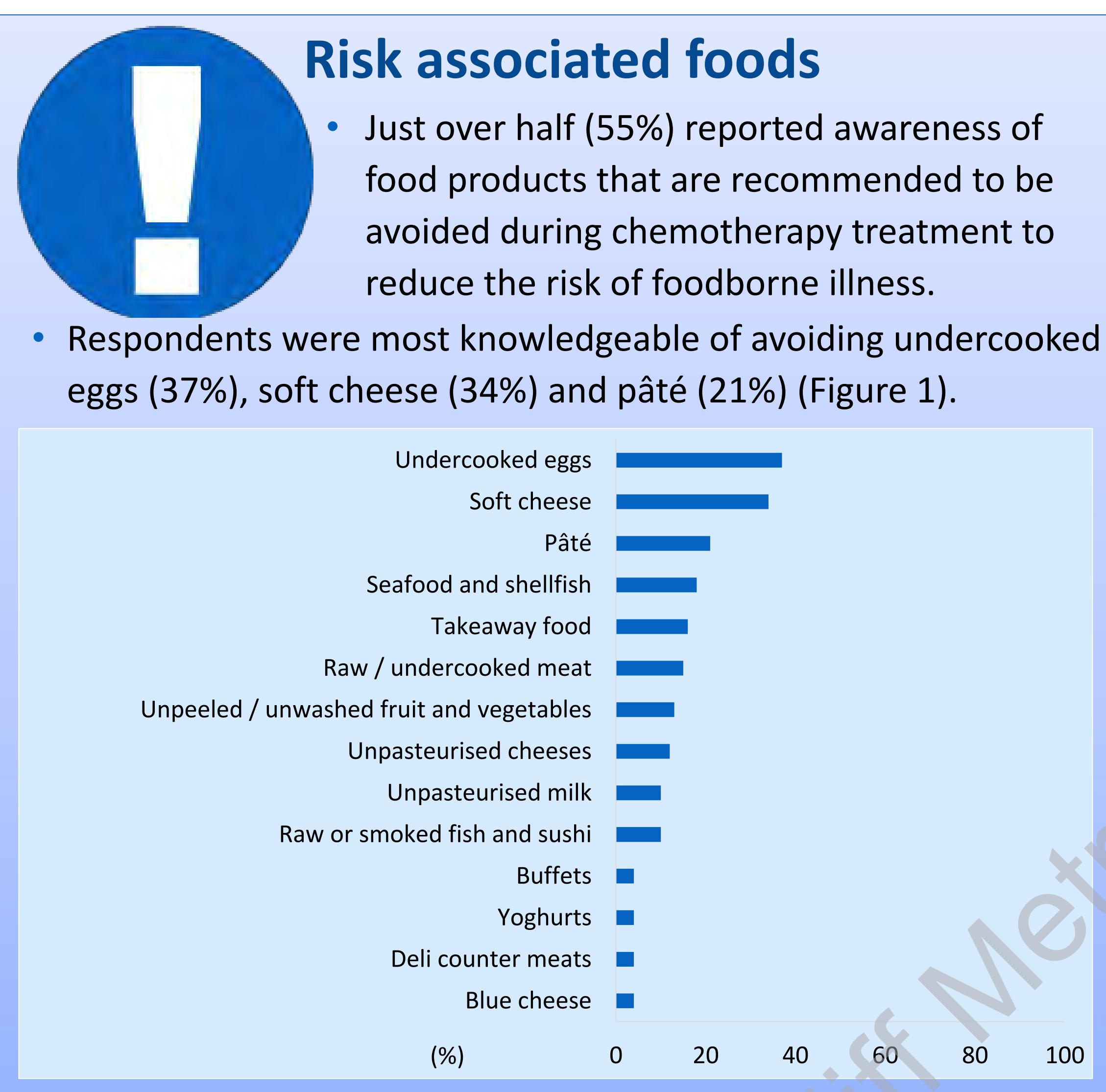


Figure 1. Knowledge of food products to be avoided during chemotherapy treatment (n=67)

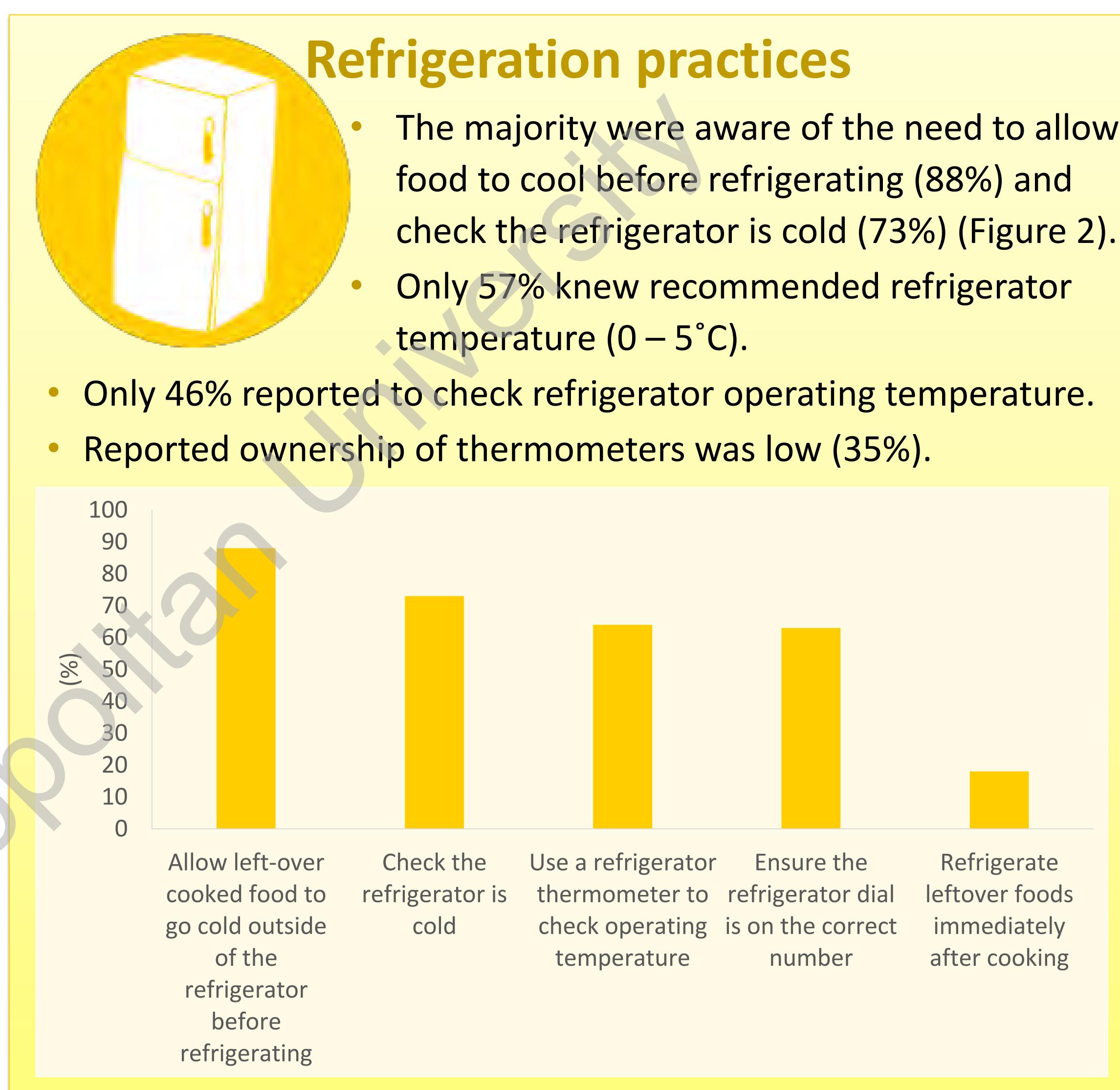


Figure 2. Knowledge of refrigerating practices in the home (n=124)



Figure 3. Knowledge of hand drying practices (n=123)

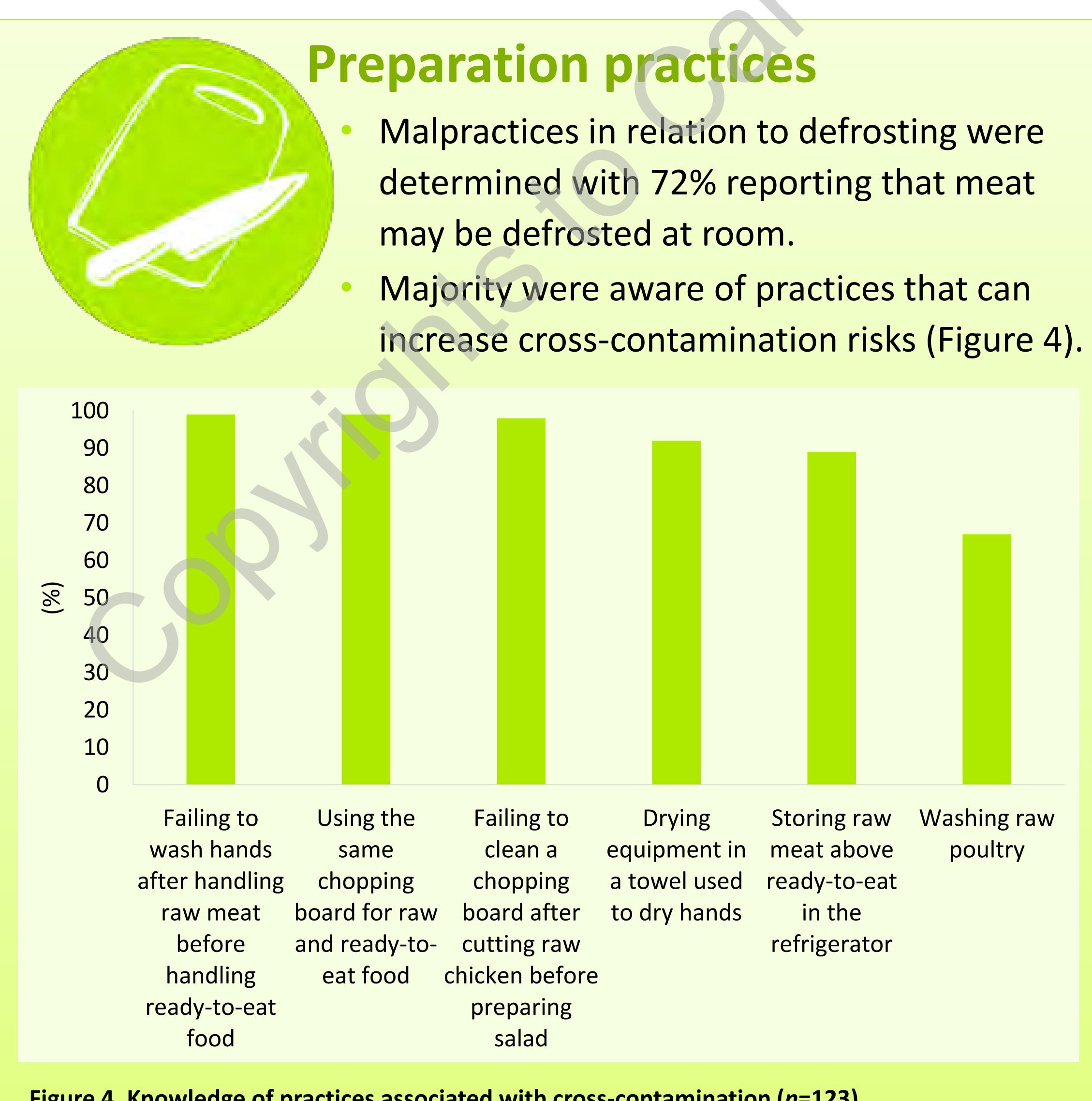


Figure 4. Knowledge of practices associated with cross-contamination (n=123)

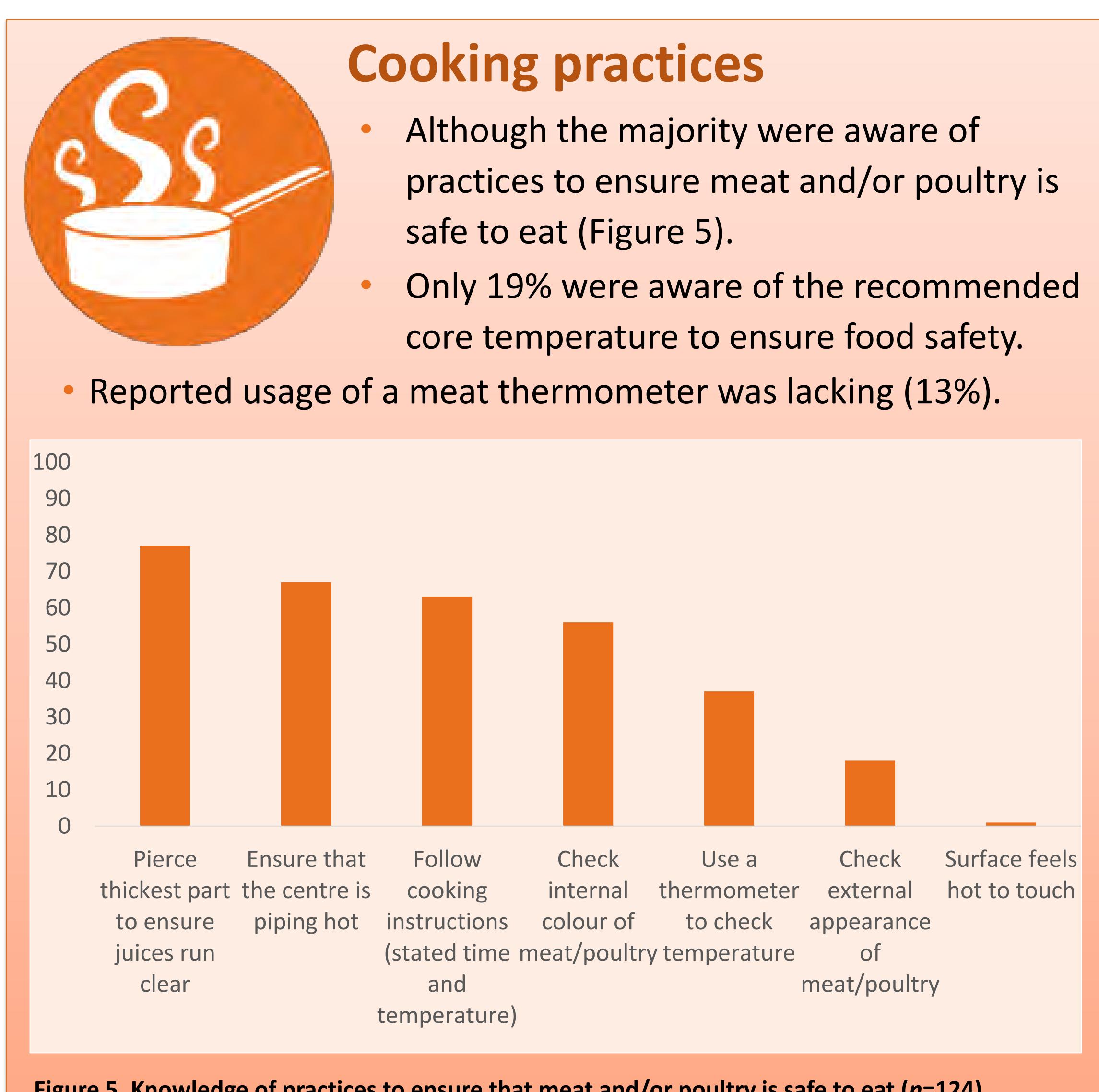


Figure 5. Knowledge of practices to ensure that meat and/or poultry is safe to eat (n=124)

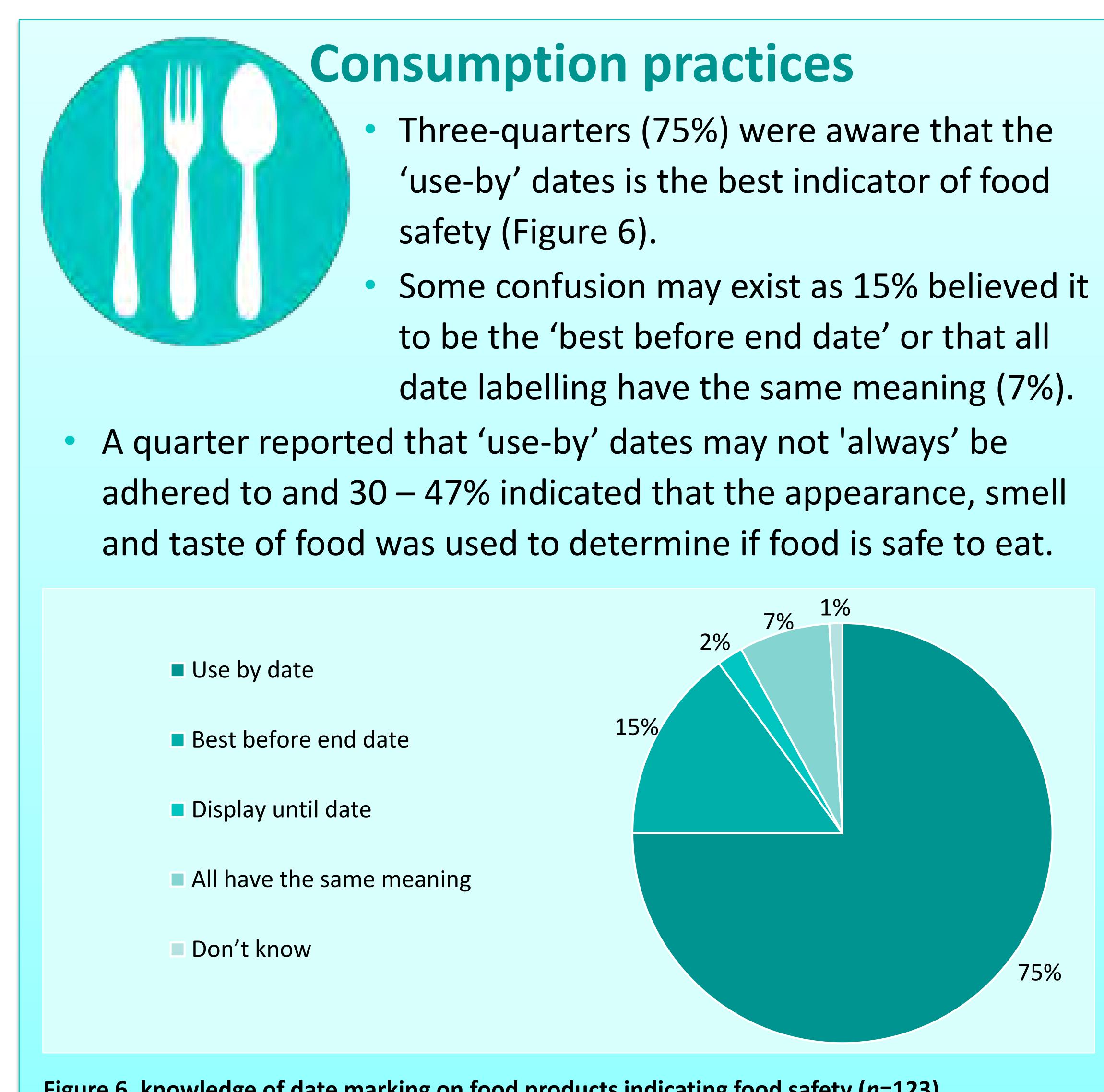


Figure 6. Knowledge of date marking on food products indicating food safety (n=123)

## Significance of study

Although chemotherapy patients and family-caregivers reported awareness of key food safety practices, self-reported practices indicate that malpractices may be implemented in relation to adequate temperature control, adequate hand washing, safe cooking and 'use-by' dates. Such malpractices may increase the risk of foodborne illness to patients during chemotherapy treatment. Such practices need to be the focus of targeted food safety education strategies for cancer patients and family-caregivers to reduce associated risks.