Patients with compromised immunity (including young children, pregnant women, people receiving chemotherapy for the treatment of cancer, people with diabetes and people living with HIV) have an increased risk of foodborne infection, consequently efforts are required to reduce the risk.  

To enable this, patients and their family caregivers need to be informed of food safety risks and enabled to implement risk reducing food safety practices through the provision of food safety information.  

Dietitians are key gatekeepers that provide food-related information to patients, and are perceived as trusted sources for food safety information by patients. Delivery of food safety advice by adequately trained dietitians can inform vulnerable patients of increased foodborne illness risks and enable risk-reducing food safety practices.  

Gaps in Registered Dietitians food safety knowledge have been identified. Dietitians need appropriate and adequate knowledge and skills to deliver effective food safety advice to vulnerable patients, which can be gained as trainee dietitians.  

Currently, information detailing the training experiences and awareness of trainee dietitians in Lebanon regarding the need for food safety information is lacking.

**Purpose**

The purpose of the study was to assess trainee dietitians’ knowledge, attitudes and training regarding the provision of food safety information.

**Methods**

Data Collection: Paper-based questionnaires to determine food safety cognition and training experiences were completed by trainee dietitians at the Modern University for Business and Science (MUBS), Beirut, Lebanon.  

Data analysis: Thematic analysis of data was conducted using NVivo to identify themes in food safety perceptions.  

Ethical Approval: Approval was obtained from the Health Care and Food Ethics Panel at Cardiff Met, and the Ethics Panel at MUBS, Lebanon.

**Acknowledgements**

Cardiff Met, the ZERO2FIVE Food Industry Centre and MUBS, wish to acknowledge the students that completed the questionnaire.

<table>
<thead>
<tr>
<th>Food safety knowledge of trainee dietitians</th>
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<tr>
<td><strong>Foodborne pathogens</strong></td>
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<td>The majority (64-92%) indicated awareness of common foodborne pathogens. Greatest reported awareness was for E. coli and Salmonella (92%) and associated foods (60-64%), only 36-52% were aware of food products associated with the other four most common foodborne pathogens (Figure 1).</td>
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</table>

**Date labelling**

Confusion regarding data labelling was indicated with only 32% aware of the ‘use by’ date to be the best indicator of food safety whilst 40% believed it to be the ‘best before end’ date, and 16% believed all date labels to have the same meaning (see Figure 3).  

**Cross-contamination**

Although the majority were aware that failing to clean, or using the same chopping board after raw chicken before preparing salad (92%) would increase the risk of cross-contamination, awareness of other practices were lacking. Less than half (40%) were aware washing raw meat increases cross-contamination risk, consequently, 28% believed failing to do so would increase the risk of cross-contamination.

**Food safety training of trainee dietitians**

All trainee dietitians reported having studied food safety as part of their degree course in modules such as ‘food microbiology and parasitology’, ‘food hygiene’ and ‘food service management’, however, many indicated the desire to learn more (Figure 6).

- 72% believed they still had more to learn to enable them to inform patients about food safety in the home.  
- 40% felt the food safety education they received was not clinically applicable.  
- 70% agreed a continual professional development (CPD) course would ensure dietitians are knowledgeable of food safety.  
- 76% agreed that educating dietitians to inform vulnerable patient groups of the importance of food safety during mealtime may reduce the risk of foodborne illness.

**Significance of study**

- Completion of the study has determined that although trainee dietitians in Lebanon attend lectures on food safety, knowledge of some key food safety practices were lacking. It must also be considered that knowledge of food safety does not equate to the ability to disseminate food safety advice to vulnerable patient groups.  
- Consequently, there is a need for specifically-targeted training for trainee dietitians to inform and enable vulnerable patients groups of food safety risks and risk-reducing practices.  
- The need for further research has been identified through completion of this study, including a comparison study whereby different approaches are taken to educate trainee dietitians in food safety, investigate the need for a food safety CPD programme for registered dietitians and explore the need for a standardised resources to support dietitians in the delivery of food safety information to vulnerable patients.