Factors influencing food-safety in children’s co-curricular food-preparation classes.

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Introduction

Within the UK, half of the reported foodborne illness cases occur in children (Facco et al. 2013) and the rise of foodborne illness prevalence among children aged <5 years (Crim et al. 2014) affirms the importance for children’s food-safety education. Eves et al. (2010) indicated that educating children from a young age is the most effective, as hygienic skills they learn will be carried on into adulthood. UK national curriculum changes (Byrd-Bredbenner et al. 2010) have resulted in limited food-safety education in schools, however, in recent years there has been an increase co-curricular food-preparation classes (CCFPCs) for infants/junior children. Such classes may provide a valuable opportunity to convey healthy eating messages to children and educate about safe food handling and hygiene behaviours. To date, little is known about food-safety in such groups.

Purpose

This study aimed to ascertain information delivery and potential influence and contribution CCFPCs can have on the food-safety learning of young children.

Methods

In-depth interviews: Qualitative in-depth telephone interviews with food-preparation class leaders and parents (n=5) were undertaken using a pre-structured developed interview schedule to determine inclusion of food-safety in CCFPCs and reported/perceived adequacy of food-safety information delivery.

Recipe Analysis: A quantitative analysis of ingredient frequency within children’s class recipes (n=45) was undertaken to determine food type occurrence and opportunities for cross contamination and/or food-safety education during preparation.

This study has received ethical approval from the Cardiff Metropolitan University Healthcare and Food Ethics Panel (Reference 9593).

Results

Class leader perspectives of CCFPCs and food safety

- Qualitative findings from CCFPC leaders (Table 1) indicated that food safety was considered to be a high priority. However, responses were variable between groups and although handwashing was reportedly highlighted before starting to prepare foods and at the end of food preparation, there was no mention of how handwashing/drying was advocated.
- Findings suggested CCFPCs aimed to: advocate safe food preparation, give children opportunities to learn cooking skills, create foods that they may not have the opportunity to do at home. Indeed, the reported rise in busy lifestyles and ‘not having time to cook with children’ may contribute to the popularity of such classes.

Table 1. Summarised CCFPC leaders perspectives about children’s cooking classes and food.

<table>
<thead>
<tr>
<th>Class Leader perspectives about...</th>
<th>food-safety and information delivery</th>
<th>transportation and consumption of food at home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incorporates new foods that children may not have the opportunity to try at home.</td>
<td>Handwashing was reported to be important and a ‘major point’ highlighted at the beginning and throughout the classes.</td>
<td>Selective on the foods and times that prepared foods can be taken home.</td>
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<td>Foods cooked to each theme every month.</td>
<td>Classes important for teaching children how to cook high-risk foods.</td>
<td>They don’t like people taking high-risk foods home because they don’t know how if they will store them correctly.</td>
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<tr>
<td>Teaches children to eat the foods that their parents eat.</td>
<td>Food selection – some reported to prepare vegetarian dishes ‘to reduce use of high risk ingredients’ others selectively used high-risk foods.</td>
<td>The food is not cooked in the class, children are sent home with the prepared foods and instructions on how to cook them. This extends the learning process.</td>
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<td>Attempts to involve the national curriculum.</td>
<td>Children given a hygiene checklist at the class start.</td>
<td>Leaders reportedly inform children/ parents about storage of the food when taking it home. Verbal instructions were given to store prepared foods in a fridge straight away or throw away.</td>
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<td>Encourages children to try new foods.</td>
<td>Use of hygiene quizzes to engage children and learn about food safety.</td>
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<tr>
<td>Introduces children to cooking skills that they may not be taught at home due to busy lifestyles.</td>
<td>Food is not cooked on site.</td>
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</table>

References


Significance of study

- CCFPCs may provide a valuable opportunity to convey information about safe food-handling/storage to children; however, findings indicate a disparity between intention to do so and current practice.
- Tailored and age-appropriate information development and food-safety support regarding food-preparation class recipe selection and food-safety practice is required to improve and optimise this co-curricular educational opportunity.