Consumer survey of UK kitchens reveals poor food safety perceptions and behaviour in older people

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Research conducted by the University of Hertfordshire, UK, and commissioned by the UK Food Standards Agency (FSA), investigated what happens in household kitchens to assess food safety risks in domestic environments. The study revealed that food safety was not a priority for most households and in some cases ‘lay’ or ‘common sense’ knowledge took precedence over expert advice.

Food Borne Illness (FBI) is a significant public health challenge, which results in roughly one million cases per year in the UK. FBI results from consumption of food contaminated with bacteria or viruses such as salmonella and campylobacter. People of 60 or over have a higher risk of contracting FBI as a result of their kitchen practices, as well as from deteriorating senses (smell and taste) and increased health needs (e.g. due to a compromised immune system). Previous research had revealed that in general consumers’ food safety knowledge was relatively low and that their reported behaviour may not correspond to their actual behaviour.

The study used qualitative ethnographic methods by observing participants in their homes to assess their food safety behaviour and understand their reasons. Researchers visited 10 households around the UK of people aged 60 years and older, roughly three or four times. They used a combination of sketches and photographs to document kitchen items and appliances, and videos to record participants’ everyday lives. Participants were also given disposable cameras, notebooks and video recorders to capture information they felt was relevant to the study. Informal interviews gave them the opportunity to describe circumstances or events they believed may have influenced their behaviour.

Results showed that food safety was not top of the agenda in households or just misunderstood entirely. Knowledge of food safety practices were influenced by participants’ social encounters and behaviour was often based on ‘common sense’, rather than expert advice. However, food safety habits can be affected by changing circumstances, for example a shift in an individual’s health, or living alone.

Participants’ attitudes to food safety stemmed from either ignorance or, in some cases, disregard of current food safety advice. Trust in food processes and packaging was found to be a factor in the way the elderly behaved towards meat, which was less likely to be trusted than other foods. Some participants reported unease or mistrust concerning meat from supermarkets, preferring to use a butcher.

Participants’ attitudes to fruit and vegetables were confused, especially in knowing when they need to be washed. In one example, expert advice was adapted by a participant who cut the tips off fruit and vegetables after hearing that pesticides accumulated in those areas. None of the participants adhered strictly to ‘use-by dates’ on food packaging, which was to some extent due to a lack of trust in food processes. Participants frequently used their own senses to assess food freshness: smelling food before using it or throwing food out when mould was seen. Food safety risks were most obvious when studying
refrigeration practices by the participants. None of the household fridges had built-in thermometers so participants did not know what temperature the fridge should be at, and there was confusion concerning where items should be stored.

Participants gave several reasons for conducting risk-taking behaviour. The most common reason was a dislike of wasting food (often relating to wartime rationing or for financial reasons). Others explained that they had carried out such practices for many years with no obvious adverse effects. Furthermore, ‘common sense’ was regularly cited as a reason for certain behaviours, for example the testing of eggs for freshness by seeing whether they float in water. This behaviour was often given equal or more precedence than expert knowledge.

Health deterioration due to age and incorrect food safety behaviour mean that older people are especially vulnerable to FBI. While expert food safety knowledge is available, confusion could result from other sources of information which exist alongside expert knowledge, or conflicting information from social relationships, such as relatives or carers. The authors recommend that practitioners should be aware of older people’s risk of FBI and explore whether their patients are following correct food safety guidelines.

To improve food safety practices, it is essential that current behaviours in the kitchen are known, and importantly, that the reasons behind poor food safety behaviour are understood. The study provides the means for further research to assess the barriers to correct risky food safety behaviour, which could enable more successful FBI prevention measures.

For further information, please see: