

# **Getting behind the closed Kitchen door Exploring domestic Food Safety practices and the implications for Food Risk Communication**

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# Summary of Presentation

- Who am I?
- Incidences of Foodborne Illness
- Why do people do what they do with food?
- Shift from attitudinal and perceptual to practice based research
- Emerging approaches and methodologies
- Implications for food risk communication

# Who am I?

- First degree in Agricultural and Food Engineering, University College Dublin
- Senior Lecturer in Food Marketing and member of the Food & Society group in the Centre for Rural Economy, School of Agriculture, Food and Rural Development, Newcastle University led by Professor Lynn Frewer
- Expert member on the International Life Sciences Institute (ILSI) Europe Expert Group on Consumers Risk Perception of Food Choice
- Expert Member of the Food Standards Agency Social Science Research Committee 2008-2010
- Mixed method researcher with interdisciplinary expertise with particular interest in food-borne illness and domestic food safety practices
- Bring a (social) marketing perspective (focus on the behaviour of interest) to my research into domestic food safety
- Active Food Consumer researcher working on projects for the Food Standards Agency, UK (Kitchen Life) and the EU Framework 7 (BROWSE; Pegasus) on topics ranging from pesticides exposure, to GM Animals and domestic food safety practices

# Foodborne Illness in the UK: 2000-2010 for the Big 5

Laboratory confirmed cases of food-borne illness acquired in the UK:  
2000 to 2010

	Campylobacter	Salmonella	E. coli O157	Listeria monocytogenes	Norovirus**
<b>2000</b>	52,567	12,784	1,035	114	—
<b>2001</b>	49,287	13,935	916	162	—
<b>2002</b>	43,355	12,736	748	160	—
<b>2003</b>	41,283	13,207	777	248	—
<b>2004</b>	39,822	12,344	819	230	—
<b>2005</b>	41,882	10,220	1,029	220	4,653
<b>2006</b>	42,360	10,970	1,146	208	7,320
<b>2007</b>	46,733	10,570	974	254	8,495
<b>2008</b>	44,842	8,542	1,096	205	9,438
<b>2009</b>	52,617	7,677	1,160	234	10,377
<b>2010*</b>	56,767	6,613	924	174	15,529

FSA (2011) \*Figures for 2010 are provisional figures provided by the HPA

# The Public & Food

- Food is much more than the sum of its parts to people
- We develop a personal, enduring yet dynamic relationship with food over our lifetime (one that is not always positive but one that we can never live without)
- The physical act of ingesting food and taking it into our bodies sets food apart from other items that we buy and consume.
- Thus how we perceive food and the safety and health risks and benefits associated with its consumption is an intensely personal though highly socially constructed phenomenon.
- Very importantly, often the risks posed are at odds with the benefits desired
- Much of our daily interaction with food happens at a habitual and unconscious level
- Research into the relationship we have with food and how it defines and drives our food choices requires an interdisciplinary approach

## Why do people not follow best practice domestic food safety guidelines?

- **Overconfidence in own assessment**
- **Past experience – personal evidence**
  - Following best practice food safety and health guidelines not necessary as current behaviour has not resulted in ill effects
- **Credibility**
  - Yes there is scientific evidence to support a problem
  - But personal evidence does not support the suggested solution or the problem context

(Brennan et al., 2008; Brennan, 2010)

## Why do people not follow best practice domestic food safety guidelines?

- **Habit**
  - Have done it the same way for years
  - Formed these habits at a very young age
- **Interest in Food**
- **Facilities/resources available**
  - availability of hot running water
  - thermometer in the fridge – fridge temperature control dial versus thermometer

(Brennan et al., 2008; Brennan, 2010)

# Emerging Hypothesis

- A lack of general knowledge and understanding of domestic food safety is not the primary cause of food borne illness (originating in the domestic environment) but instead food borne illness is being caused by the inconsistent application of known and understood best practice domestic food safety guidelines (Brennan, 2010).

Requires a shift from a primarily cognitive approach to investigating domestic food safety practices to a much more interdisciplinary approach which takes place primarily behind the kitchen door.



# Food Standards Agency Forward Evidence Plan 2011

- **Study of food handling behaviours in the home**

Little is known about actual food handling behaviours/ food safety practices within the domestic kitchen – this information is crucial in order to aid our understanding of what people *actually do, rather than what they say they do*.

*The aims of this research will be to collect information on food safety practices*

*and behaviours in the home; collect information on people's attitudes towards food safety practices in the home; unpick the differences between what people say they do and what they actually do; and investigate behaviours related to a range of pathogens (e.g. listeria, campylobacter etc).*

- ***Funded the Kitchen Life Project in Nov 2011 (University of Hertfordshire & Newcastle University)***
- ***Built on FSA Postgraduate studentship (Helen Kendall)***



# **Research shift from exploring attitudes & perceptions to exploring practices**

**The Case of Domestic Food Safety  
Practices**

# Rationale and Theoretical Basis

- Discrepancy between what people **say they do** and what they **actually do**...

Two approaches taken:

1. HACCP inspired
  2. Ethnographically inspired
- Growing interest in capturing social and technological data simultaneously in real life kitchens (*Brennan, 2010*)
  - Growing recognition of the multi-dimensional nature of our lived experiences and multi-functional role our kitchens play in our everyday lives
  - The practices of interest are the unit of analysis not the individual
  - Do not separate out food handling practices but instead explore how they co-exist and are incorporated into other practices in the domain of every-day life?
  - Understanding 'action' requires an observational approach

# “HACCP” Inspired Approach

- Examination using a HACCP inspired assessment of how well domestic food safety is performed in experimental/real kitchens
  - Focused on the primary food preparer
  - Participants asked to prepare a meal in accordance with a specific recipe and they are observed by a researcher during this process (Participant observation/Video observation).
  - Microbiological swabbing of key potential contamination sites
  - Microbiological sampling of food prepared
  - Visual inspection and temperature checking
  - Knowledge based questionnaire

(Kennedy et al., 2011; Fischer et al., 2007; Redmond et al., 2004)

# “Ethnographically Inspired” Approach

- “Real kitchens” as the primary site of analysis
- Practice of interest is the primary unit of analysis
- All members of the household, not just primary food preparers, are integrated into the research as they are all users of the kitchen
- Immersion in the life of that kitchen through the application of a range of techniques (including the scientific and technical) to build up a nuanced of ‘Kitchen Life’ and how domestic food safety is performed within the kitchen, under ‘normal’ conditions.
- Requires a forensic analysis that focuses on understanding how the practice is performed and what stuff, space and people are involved in the performance of a practice

(Martens & Scott, 2004; Brennan, 2010; on-going FSA postgraduate studentship – Helen Kendall – due for submission Sept 2012.; ongoing FSA funded project Kitchen Life 2011-2013))

# Definition of Practices

- “...routinised types of behaviours which consist of several elements, interconnected to one another: forms of **bodily activities**, forms of **mental activities**, **things and their uses** and a **background knowledge** in the form of understanding, know how, states of emotion and motivational knowledge”

- Reckwitz (2002)

# **Ethnographically Inspired toolkit for exploring domestic kitchen practices**

1. Life-course Interviewing (household)
2. Kitchen 'go-along' and mapping (including photography) (Kusenbach,2003)
3. Activity & Temperature recognition
4. Auditing of key sites and microbiological sampling
5. Video documentation

# Methodological Reflections

- **Life-course interview**
  - Contextual understandings and rapport building
  - Focus on individual attitudes and values
  - *Lacked 'action' association*
  - *Difficulty in verbalising mundane behaviours*
- **Kitchen 'go-along'**
  - Window into practices
  - Demonstration of activity
  - Helps overcome participants' difficulties in verbalising mundane activities (Power, 2000)
  - *Reliant on the physical ability of the participant*



# Methodological Reflections

- **Fridge audit/Microbiological sampling**
  - Detailed insight into how the technology is being used
  - Prompts for interviewing
  - Assessment of the microbiological
- **Activity and Temperature Recognition**
  - 'Ground truth' of kitchen activity (24 hours over 14-21 days)
  - Objective data that can be used to validate of self-reported behaviours
  - Check cohort's ability to self-report
  - Establish activity and temperature patterns within and between households
  - Fridge (stuff) functionality
  - Focus and prioritise video analysis
  - Unobtrusive
  - Low cost
  - Option to scale up to statistically representative samples

# Methodological Reflections

- **Video/Photographic Documentation**
  - Aide-memoire/elicitation tool
  - Set up and shoot
  - Actual activity- demonstration of the mundane
  - *Relying on the technical competence of participant (potential for error)*
  - *Participant editing*
  - *Set up difficulties given range of kitchen sizes and design*
  - Video engaging and enjoyable
  - *Performance pressure if researcher present*
  - *Happy to guide researcher less happy to take photographs themselves*

# Implications for Food Risk Communication

- Require you to bring the practice(s) you are looking to influence into sharp focus
- Recognises the mundane, routine nature of domestic kitchen practices and argues for the need to use innovative methodologies and technologies to capture the mundane and routine
- Explicitly recognises that the space, things and people involved in the performance of domestic kitchen practices influence compliance with best practice
- Non-compliance is no longer assumed to be solely a cognitive driven choice made by an individual

# Implications for Food Risk Communication

- Supports a detailed analysis of the costs (time/energy/new things) and benefits (reduction in risk of contracting a food borne illness) associated with complying with best practice domestic food safety guidelines
- While risk communication can inform the public (and others) of the risks associated with particular practices and provide advice on best practice, it is not sufficient, on its own to change behaviour
- Need to develop behavioural change programmes that explicitly recognise the role of space, things and people in the performance of everyday kitchen practices
- Need to question the bases on which we segment and target communications and behavioural change initiatives - Should we be targeting different types of kitchens?

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