

Institution: University of Hertfordshire		
Unit of Assessment: 03 – Allied Health Professions, Dentistry, Nursing and Pharmacy		
Title of case study: Food and eating across the life-course: informing and influencing policy makers, providers and public health teams		
Period when the underpinning research was undertaken: 2006 – 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Wendy Wills	Professor of Food and Public Health	2005 – present
Angela Dickinson	Senior Research Fellow	2002 – present
Samantha Rogers	Senior Research Fellow	2014 – 2021
Laura Hamilton	Research Fellow	2013 – present
Period when the claimed impact occurred: September 2013 – December 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>Research carried out by the Centre for Research in Health and Community Care (CRIPACC) at the University of Hertfordshire (UH) on food and eating across the life course has contributed to parliamentary debate and recommendations regarding the prevention of malnutrition among older people, and in relation to improving food and diet in schools. The team is directly influencing and informing UK dietary guidance through the research. National supermarket chains are using the research to inform their strategies to support people with specific needs to access nutritious food. There has been a direct impact on the third sector, carers, older people and health and social care students in relation to understanding how to prevent and address vulnerability to malnutrition. The programme of research is highly regarded by local authority public health teams, who are using the research to provide guidance to schools about food.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>Accessing and eating a nutritious, balanced diet is fundamental to health and wellbeing throughout life. In the UK, however, issues of family poverty, with children and young people not having enough to eat, sit alongside concerning levels of obesity and overweight. One in 10 adults aged 65+ is malnourished or at risk of becoming malnourished making them more vulnerable to infection, illness and hospitalisation. Since 2006, the CRIPACC multi-disciplinary team led by Professor Wendy Wills has conducted research addressing food vulnerabilities across the life course. The research makes use of both qualitative and quantitative methods to reveal detailed accounts of the determinants of everyday eating habits.</p> <p>From 2006-08, research funded by the ESRC [G1] investigated parents' and teenagers' conceptions of diet, weight and health, and explored the differences in social class that influence the eating habits, weight and health of young people. The research clearly showed that young people from families with lower socio-economic status (SES) live with economic insecurity, with parents concerned about their own employment, housing, and health. This makes it challenging for such families to prioritise their children eating a healthy diet, relying instead on providing food that is filling, cheap and desirable. Wills developed the term 'hierarchies of worry' to explain that families from low SES backgrounds <i>are</i> concerned about food and eating but it is a lower priority than other more immediate concerns. Families with higher SES put greater emphasis on healthier eating practices as they have more secure jobs, housing status and fewer daily concerns; the hierarchy of worry is different. SES also informs the level of independence young people have, with those from poorer backgrounds having more scope for making their own decisions about what and where to eat [3.1, 3.2].</p> <p>Funded by Food Standards Scotland from 2010-14 [G2, G3], the team investigated the lunchtime food purchasing practices of secondary school students, including the influence of SES and the food environment within and around schools. A mixed-methods study incorporating an online purchasing recall questionnaire and multiple qualitative methods was undertaken at seven case study sites in Scotland. The analysis showed that SES was intricately woven with</p>		

lunchtime food practices. Three-quarters of young people regularly purchase food outside of school; up to 90% of young people at low SES schools report regularly leaving school to buy food. Young people's perception of food and eating in schools in areas of low SES is often negative and they feel that food retailers outside school better understand their needs. Health as a driver is only mentioned by pupils at higher SES schools [3.3, 3.4, 3.5].

Starting in 2011 the team began a programme of work initially funded by the [UK] Food Standards Agency investigating food safety and security across a range of populations [G4]. The Kitchen Life study used multiple qualitative methods including participant/non-participant observation of households going shopping for food; interviews; and 'go-along' tours, an ethnographic technique that incorporates the taking of photographs and recording of video footage while participants go about the process of getting, preparing and eating food [3.6, 3.7]. Our findings on older people within this study then informed further work, the Food in Later Life study, funded by the ESRC [G5]. This showed that food security and malnutrition is influenced in later life by the food environment, social networks, and physical and mental competency and capacity. An accumulation of small changes can tip older adults towards food insecurity or malnutrition. Multiple trivial changes, such as bus routes changing and gradual deterioration of eyesight, unless balanced by positive factors such as regular social contact or capacity to reach out to services like meals on wheels, leave older people more vulnerable to malnutrition [3.8].

3. References to the research (indicative maximum of six references)

3.1 Wills WJ, Lawton J. Attitudes to weight and weight management in the early teenage years: a qualitative study of parental perceptions and views. *Health Expect.* 2015 Oct;18(5):775-83.

<https://doi.org/10.1111/hex.12182>

3.2 Wills W, Backett-Milburn K, Roberts ML, Lawton J. The framing of social class distinctions through family food and eating practices. *Sociol Rev.* 2011 Nov;58(4):725-749.

<https://doi.org/d53dhs>

3.3 Wills W, Danesi G, **Kapetanaki AB**, **Hamilton L**. Socio-Economic Factors, the Food Environment and Lunchtime Food Purchasing by Young People at Secondary School. *Int J Environ Res Public Health.* 2019 May 8;16(9):1605. <https://doi.org/fq3m>.

3.4 Wills W, Danesi G, **Kapetanaki A**. Lunchtime food and drink purchasing: young people's practices, preferences and power within and beyond the school gate. *Cambridge J. Educ.* 2016 Apr;46(2):195-210. <https://doi.org/fq3n>

3.5 Hamilton LK, **Wills WJ**. Patterns of sugar-sweetened beverage consumption amongst young people aged 13-15 years during the school day in Scotland. *Appetite.* 2017 Sep 1;116:196-204. <https://doi.org/gbqsdt>.

3.6 Wills WJ, **Meah A**, **Dickinson AM**, **Short F**. 'I don't think I ever had food poisoning'. A practice-based approach to understanding foodborne disease that originates in the home. *Appetite.* 2015 Feb;85:118-25. <https://doi.org/10.1016/j.appet.2014.11.022>.

3.7 Wills W, **Meah A**, **Dickinson A**, **Short F**. Reflections on the Use of Visual Methods in a Qualitative Study of Domestic Kitchen Practices. *Journal of Sociology.* 2016 Jun 1;50(3):470-485. <https://doi.org/10.1177/0038038515587651>

Findings were also published as a report for the Food Standards Agency:

Wills W, **Meah A**, **Dickinson A**, **Short F** (University of Hertfordshire, Hatfield, UK).

Domestic Kitchen Practices: Findings from the 'Kitchen Life' study. London: Food Standards Agency; 2013 Jul. 36 p. Unit Report 24. <https://doi.org/fq3q>

3.8 Dickinson A, **Wills W**, **Kapetanaki AB**, **Halliday S**, **Ikioda F**, **Godfrey-Smythe A**. Food security and food practices in later life: A new model of vulnerability. *Ageing and Society.* 2020 Dec 22. <https://doi.org/10.1017/S0144686X20002020>

Key grants:

G1 ESRC (RES-000-23-1504). 2006-8. Parents' & teenagers' conceptions of diet, weight & health: Does class matter? £132,739. PI: Wills.

G2 Food Standards Agency Scotland. 2010-11. Survey of Diet Among Children in Scotland (2010). £19,331 to UH. Co-I: Wills (led by University of Aberdeen).

G3 Food Standards Agency Scotland. 2013-14. The influence of the food environment and SIMD on food and drink purchased by secondary school pupils beyond the school gate. £61,304. PI: Wills, Co-I: Kapetanaki.

G4 Food Standards Agency. 2011-12. Domestic Kitchens and Food Safety: Exploring Practices, Technology and Design (Kitchen Life). £219,130. PI: Wills, Co-I: Dickinson.

G5 ESRC (ES/M00306X/1). 2014-17. Older people's perceptions and experiences of strengths and vulnerabilities across the UK food system. £266,697. PI: Wills, Co-I: Dickinson.

4. Details of the impact (indicative maximum 750 words)

Impact has been achieved by establishing relationships with parliamentarians, policy makers, practitioners and the commercial and third sectors, to directly inform them about key research findings and to engage them in utilising the research to inform policy and practice. The following sections illustrate some of the impact that has been achieved.

Older people and food

In 2017 the team submitted written evidence to an enquiry into hunger and malnutrition in older people which was set up by the All Party Parliamentary Group (APPG) on Hunger and were then invited to give verbal evidence. They highlighted their research showing factors that make accessing food difficult for many older people; the research was highly cited in the subsequent enquiry report published in January 2018, with eight direct quotes [5.1]. The enquiry particularly drew on the research relating to the importance of supermarkets for older people's food security.

The team have also engaged directly with the supermarkets themselves to help inform their strategies relating to older people. Using findings from the Food in Later Life study, in 2017 Wills and Dickinson wrote a briefing paper for supermarkets about the steps they could take to improve the shopping experience for older people, including recommendations about 'slow' shopping aisles; improving accessible toilet and parking facilities; and marketing/promotions that are appropriate for older people who spend 'little and often'. They sent targeted letters to senior executives across all national supermarket chains. Subsequently they met with the Head of Customer Experience Strategy at Tesco HQ and presented to the Customer Experience Working Group at Waitrose HQ. Both groups were keen to take this work forward, with the Head of Customer Experience Strategy at Tesco describing the research as "*very clear and helpful*" [5.2]. The COVID-19 pandemic, however, has delayed this work.

Also using findings from the Food in Later Life study the team created an educational board game which uses vignettes from participants in the research to highlight the complexities of accessing food in later life. This game was commercialised through 'serious games' company Focus Games, who released it for sale in 2018. It has since sold 25 copies to organisations including NHS trusts, social care providers and the third sector. The team have also loaned the game to be played with community dietitians, meals on wheels/lunch club providers, adult social care and carers' groups, and to academic colleagues to play with undergraduate students on courses including nursing, social work, nutrition and dietetics. Feedback received to date includes: '*The game is definitely useful. Has great scenarios to make you think about nutrition and hydration for older people;*' '*the group enjoyed exchanging useful ideas about managing their access to food*' (volunteer/chef at lunch club in Plymouth); '*It was successful as an informative discussion*' (organiser of Hertfordshire dementia group). The game was selected by Focus Games for conversion to online format during 2020 [5.3].

The innovative research methods used in the Kitchen Life study have also had a broader impact on policy making at the Food Standards Agency. The team at the FSA which commissioned the study said in an email in 2020: "*We refer back to the original study fairly often more as a general reminder to policy colleagues that people don't act in a vacuum – and that what people say is not necessarily what they do. It was the beginning of a more behavioural approach to policymaking which is now pretty well accepted. So I would say it was more the general insights and approach which gave us something new*" [5.4].

The team have also engaged with the public through the exhibition "25: Lives Seen Through Food." Based on the research highlighting factors that impede older people's access to a healthy

diet, it has now been exhibited six times including as part of the ESRC Festival of Social Science, and at the East of England Big Bang Fair. During summer 2019 they worked with 80 young people aged 15-16 who were part of the National Citizen Scheme (NCS), engaging them with the research about the challenges older people face to stay well nourished. This inspired them to raise £2,000 for Age UK and to produce a short film to promote third sector organisations and their role in looking after the health and wellbeing of older people. All the main UK newspapers have featured stories based on the research on the importance of supermarkets for older people with a total of 113 news items across 58 different news outlets and 26 radio stations, and a total print/broadcast/internet reach of 27 million.

School Food

Wills and Hamilton regularly attend and contribute to the APPG on School Food, which is chaired by Sharon Hodgson MP and is attended by representatives from civil society/third sector organisations, the National School Food Plan Alliance, the Department for Education, schools and contract caterers. In October 2019 Wills presented her research findings on the importance of understanding the social context of 'school food'; that the experience of eating is at least as important to young people as the food itself, if not more. [5.5]. Wills also submitted written evidence about young people's food purchasing habits outside of school to the Parliamentary Inquiry into Children's Future Food; this was directly cited in detail in the Inquiry's report in 2019 [5.6]. Through this inquiry, Wills' research was cited by a charter produced by the Children's Right2Food Campaign – a nationwide initiative co-ordinated by the Food Foundation which aims to ensure every child in the UK can access and afford nutritious and healthy food [5.7].

As a result of her involvement with the APPG, Wills has joined a wider network of experts in the School Meals arena and has been contacted for advice by a variety of organisations including schools and providers. She has advised both Chartwells and Sodexo, two of the country's largest school caterers. For the former she provided training materials to assist with developing their secondary school strategy. The team described the work as "*very insightful for us and our Secondary sites moving forward*" and outlined how they had engaged with key points on dining room facilities, comparisons with the high street and innovative ways of encouraging pupils to stay in school to eat [5.8].

Food Policy and guidance in Scotland

The team's research on school food was cited by the Scottish Government in their guidance for local authorities, schools, retailers, caterers and other partners on what they can do to influence the food environment around schools and support children and young people to make healthier choices [5.9]. The Scottish Government later described this guidance as "driving real change." The research has also been used by other organisations in response to government policy. Obesity Action Scotland used it in their response to a Scottish Government consultation [5.10]. A report written by SPIRU for Assist Facilities Management, a non-profit organisation who promote the facilities management services of all member local authorities in Scotland, cited the research widely in a review of school meal provision. This was then highlighted prominently in the organisation's November 2019 newsletter which went to all local authorities [5.11].

The research investigating young people and parents' experiences of obesity, and young people's food purchasing practices resulted in an invitation from Food Standards Scotland (FSS) to Wills to participate in a stakeholder workshop about developing effective dietary guidance for Scotland. The report from the workshop drew on the research finding about hierarchies of worry within low income families which influence whether they consume a healthy diet [5.12]. Food Standards Scotland's Senior Public Health Nutrition Adviser said: '*Our dietary guidelines would put healthy eating guidance in the context of real lives...having worked with Professor Wills on related research...I was confident that her expertise would be useful to our discussion. As per Technical Appendix A, the discussion of 'hierarchy of worry' pertaining to the conflicting priorities for families around eating healthily can be attributed to Professor Wills research*' [5.13]. Wills was then invited to join an academic review panel to continue to develop the Scottish dietary guidance during 2019-20; this has been continued into 2021 due to the COVID-19 pandemic.

Hertfordshire Public Health

The team's research is highly regarded and used by the Hertfordshire Director of Public Health (DPH) and the County Council public health team. A collaborative group and website, the Hertfordshire Public Health Connect strategic network, has been set up to share research information. As a direct outcome of the network, the Public Health team included details of the research on food in and around schools in its guidance to all schools and catering teams in the county. The research team were also asked to give verbal evidence to a County Council scrutiny enquiry in December 2018 into the low take-up of Free School Meals and the research is cited in the scrutiny enquiry's subsequent report. Wills has presented research findings at the Hertfordshire Public Health conference, and to a symposium with the DPH and including key individuals from Public Health England and local authority public health departments from across the UK. At this event the Herts DPH highlighted how the strong partnership between the research team and his department was benefiting local approaches to promoting wellbeing. Two UH Research Fellows (Dickinson and Hamilton) will be seconded to the County Council in 2021 to work with local policy makers directly to address food poverty and inequalities [5.14].

Drawing on the findings of the research in 3.1, the CRIPACC team carried out a collaborative project with Hertfordshire County Council in 2019 to engage with young people and prioritise issues related to obesity. They worked with 56 young people who were attending the NCS scheme in Stevenage to identify key issues and solutions. Hertfordshire Public Health presented the findings to local counsellors and local authority staff at a Healthy Stevenage Partnership meeting. This consultation has been used by Stevenage Borough Council to improve the active environment for young people in Stevenage, starting with an upgrade of basketball courts. Further work is planned once the pandemic subsides. As a result of the work in Stevenage, Hamilton and Wills were invited by the Scottish Government to plan a similar exercise in Scotland; this is due to be carried out in 2021, having been delayed by the COVID-19 pandemic.

5. Sources to corroborate the impact (indicative maximum of 10 references)

5.1 Forsey, A (2018) All-Party Parliamentary Group on Hunger. Hidden hunger and malnutrition in the elderly. References to our research on pages 8, 10, 12, 15, 16, 21, 24 and 25.

<http://www.frankfield.co.uk/upload/docs/Hidden%20hunger%20and%20Malnutrition%20in%20the%20elderly.pdf>

5.2 Email from Head of Customer Experience Strategy, Tesco.

5.3 Sales data from royalty payments to UH; online version of game available here:

<https://shop.focusgames.com/es/products/zest-food-in-later-life>

5.4 Email from Head of Social Science and Strategic Insight, Food Standards Agency

5.5 <https://www.apse.org.uk/apse/index.cfm/members-area/advisory-groups/catering-school-meals/appg/>

5.6 Children's Future Food Inquiry Report (2019) <https://foodfoundation.org.uk/wp-content/uploads/2020/11/Childrens-Future-Food-Inquiry-report.pdf> (p44 in particular)

5.7 Children's Right to Food charter (2019) <https://foodfoundation.org.uk/wp-content/uploads/2019/04/Right2Food-Charter.pdf>

5.8 Emails from Nutritionist at Chartwells and Marketing Manager for Schools UK&I for Sodexo

5.9 <https://www.gov.scot/publications/beyond-school-gate-improving-food-choices-school-community/> p.51 cites work by Wills et al.

5.10 Scottish Government Consultation on amendments to the Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2008. Consultation Response from Obesity Action Scotland. August 2018

5.11 SPIRU report cites Wills et al. 2015 multiple times; Assist FM newsletter available here:

<https://assistfm.com/wp-content/uploads/2020/02/Assist-November-Newsletter-A064-Final-lo-res.pdf>

5.12 Food Standards Scotland (2018) Developing a Scope for Dietary Guidelines for Scotland.

https://www.foodstandards.gov.scot/downloads/Developing_a_Scope_for_Dietary_Guidelines_for_Scotland_-_Stakeholder_Engagement_-_Appendix_A.pdf

5.13 Email from Senior Public Health Nutrition Adviser, Food Standards Scotland 22 Aug 2019

5.14 The Hertfordshire Director of Public Health can corroborate details in this paragraph.