

Institution: The University of Leeds
Unit of Assessment: UOA 30 (History)
Title of case study: Enhancing adults' and children's awareness of healthy eating today by using research into medieval ideas of healthy lifestyle and diet
<p>1. Summary of the impact</p> <p>Since June 2010, Dr Iona McCleery has led a programme of public engagement activities including workshops in schools and museum exhibitions. These activities enhance adults' and children's awareness of historical food and diets and encourage participants to reflect on their own diet through comparison with medieval lifestyles. Supported by the Wellcome Trust, the work has been a highly successful example of original historical research's ability to fire the public imagination and to inspire children in formal education to follow a healthier lifestyle (50,000 adults and children in Yorkshire have participated in the project to date.)</p>
<p>2. Underpinning research</p> <p>Iona McCleery (Lecturer in Medieval History, University of Leeds, 2007-present) researches the history of medicine in late medieval Europe. Three elements of her research have had most impact, being used to underpin exhibitions, school workshops, talks and web articles.</p> <p>Theoretical ideas about health. McCleery researches the extent to which medieval people put medical theories into practice. In Output 1, she underlines the intimate relationships between diet, exercise, emotions and sleep, four of the external factors ('non-naturals') that were believed to cause illness or restore health depending on how they were balanced and also considers the extent to which the medieval sick followed medical advice based on these theories. Outputs 3, 4 and 5 consider medieval ideas about illness, healthcare and the causes of death. The idea that a balanced lifestyle was crucial in the Middle Ages correlates with modern theories about nutrition: it is not just what you eat, but how, when and where you eat, and what else you do that has an impact on health.</p> <p>Healthy lifestyle. Outputs 1, 4 and 5 and Grant 2 interrogate the emergence of debates about urban lifestyle choices between c.1300 and c.1500. These debates included the vulnerability of the poor to ill-health, coping with food shortages, the vernacularization of recipes and the need for public health systems. Output 3 considers the variety of ways in which a number of illnesses were interpreted, including gout, which is understood today to be partly caused by diet. Gout was once thought to be a problem associated with elite status. Class is still perceived to be a factor in modern dietary choices.</p> <p>Foods in pre-modern society. Outputs 1 and 2 analyse the prominence of Portugal in global trade, and the reception and impact of new foods, or improved access to foods taken for granted today, such as sugar and spices. Output 5 considers the role of women in food provision. These outputs emerged from archival research carried out in Portugal in 2007-8, supported by Grant 2. Anonymous peer reviewers of Grant 1, which has involved collaborative research with food scientists and archaeologists, described the project as 'really innovative and exciting', and commented that 'the vision is impressive'. Awareness of McCleery's interdisciplinary approach led to the commissioning of Output 2 by a leading medical journal, an article that explores the sensory impact of environments and considers medieval theories of sensory perception, including taste.</p> <p>As a historian of medicine, McCleery's research highlights the social and cultural determinants of health in the medieval period: wealth, status, location, religion, gender, age and fashion. Much of the impact of her work derives from the fact that these determinants are similar to those described by nutritional epidemiologists today. Although the contexts of daily life have changed markedly since the Middle Ages, diet continues to play an important role in healthcare and people continue to eat in accordance with their customs and beliefs.</p>
3. References to the research

Impact case study (REF3b)

1. **Iona McCleery**, 'Both "illness and temptation of the enemy": melancholy, the medieval patient and the writings of King Duarte of Portugal (r. 1433-38)', *Journal of Medieval Iberian Studies* 1:2 (2009): 163-78. DOI: 10.1080/17546550903136041 (submitted to REF2014)
2. **Iona McCleery**, Review essay: 'A sense of the past: exploring sensory experience in the pre-modern world', *Brain: A Journal of Neurology* 132:4 (2009): 1112-7. DOI: 10.1093/brain/awp020 (<http://brain.oxfordjournals.org/content/132/4/1112.long>)
3. **Iona McCleery**, 'Medical 'emplotment' and plotting medicine: health and disease in late medieval Portuguese chronicles', *Social History of Medicine* 24:1 (2011): 125-41. DOI: 10.1093/shm/hkq107 (submitted to REF2014).
4. **Iona McCleery**, 'Medical perspectives on death in late-medieval and early-modern Europe' in: C. Krötzel and K. Mustakallio (eds), *On Old Age: Approaching Death in Antiquity and the Middle Ages* (Turnhout: Brepols, 2011), 277-91 (submitted to REF2014).
5. **Iona McCleery**, 'Medicine and disease: the female 'patient' in medieval Europe', in: K. Phillips (ed.), *A Cultural History of Women in the Middle Ages* (London: Bloomsbury, 2013), 85-104 (submitted to REF2014).

All publications are deemed at least 3* by internal and external readers. They are all outputs of Grant 2 (see below) and therefore the underpinning research predated the impact activities that began in 2010. Output 3 was submitted to the publisher in September 2008; Output 4 was submitted in March 2010; Output 5 was submitted in January 2011.

Peer-reviewed grants

1. **2010-13**: Wellcome Trust Society Award (no. 092293): *You Are What You Ate: Food Lessons from the Past* (PI: Iona **McCleery**, £176,725).

This collaboration involves archaeologists, food scientists, cultural officers and historians at the University of Leeds, the University of Bradford and Wakefield Council (www.leeds.ac.uk/youarewhatyouate). The historical content of the inter-disciplinary public engagement activities is based on **McCleery's** research. Clinical, nutritional and archaeological data, youth workers and museum collections are provided by project partners.

2. **2007-8**: Wellcome Trust Project Grant (no. 076812): *Physicians of the Body and Physicians of the Soul: Medicine in Late Medieval Portugal* (PI: Iona **McCleery**, £17,000).

This grant funded archival work in Portugal on medicine, illness and welfare. The daily lives of sick men and women from kings to peasants featured heavily. The project emphasised the problems of famine, plague and war across the whole of Europe, and the role of medical practitioners in maintaining well-being, including the preparation and/or selling of food and spices (especially apothecaries). Portugal dominated trade in sugar and spices in this period.

3. Details of the impact

Schools activities

Between January 2011 and June 2013, 45 Wakefield state primaries participated in a free workshop developed by **McCleery** and the Senior Cultural Officer at Wakefield Council (a). This activity was delivered in-house under the auspices of the *You are what you ate* project (Grant 1), using **McCleery's** research from Grant 2. It was experienced by 3,469 children aged 7-11 (b). In the workshop the pupils were asked to think through medieval scenarios illustrating diet, food budgets and health dilemmas and they made a basic herbal sauce. The activities were structured to support the Key Stage 2 curriculum for science and history.

Feedback obtained via a questionnaire from 61 participating teachers at 30 schools is entirely positive, indicating that the sessions encouraged children to think about their own health and diet, as well as supporting the curriculum by capturing imaginations, presenting new

Impact case study (REF3b)

information and consolidating prior knowledge about food. 90% of the teachers stated that the workshop had addressed the issue of healthy eating very well (b). One teacher working in a deprived area of Wakefield said: 'A fantastic start to our 'Healthy Eating' topic, with historical facts they found interesting (or gruesome!). It was interesting to hear their answers which reflected their attitudes to food, and the shift from certain opinions once they had heard the facts or new ideas and participated in making their own sauce. I learnt a lot too!' Another evaluation, again from a teacher in a poorer district, observed 'definite changes in attitude toward food'. Another said: 'The class was interested in the fact that the idea of healthy eating was hundreds of years old' (b).

The workshop has been a major success. Wakefield Council's Senior Cultural Officer said it attracted schools that had not previously accessed Wakefield's cultural services, notably schools in poorer areas (a). **McCleery's** track record as a researcher, enabling her to secure Wellcome funding substantially enhanced Wakefield Council's capacity to offer educational activities at a time of severe funding cuts. The project as a whole has had a significant organisational impact on Wakefield Council, raising the public profile of Cultural Services in parts of Wakefield where users were not traditionally drawn and creating links between schools, museums and the NHS that would be the basis of future collaboration (a, c). The Wellcome Trust agreed in March 2013 to extend Grant 1 until September 2014, awarding **McCleery** another £15,000, allowing her to develop these links further.

McCleery's commitment to developing school curricula was demonstrated in January 2013 by an invitation from the Prince's Teaching Institute to speak at a training day in Altrincham for recently qualified teachers nationally at Key Stage 3 and 4. **McCleery's** talk on plague and famine drew on Grant 2 and was described by one teacher as providing 'excellent ideas that I can apply to the classroom to add value and meaning for the students' (d). **McCleery** has since been invited to speak at a conference in London in October 2013 organized by United Learning, responsible for the largest group of academies in the UK.

Enriching cultural life and enhancing understanding of healthy eating

The work in schools is related to a much wider programme of public engagement, aimed at encouraging personal reflection on modern eating habits through exploration of the past. **McCleery** organized three exhibitions: *Sugar & Spice* (2011), *Dark Side of Eating* (2012) and *Food For All Seasons* (2013) at Wakefield museums under the auspices of Grant 1. She wrote a large part of the text for the exhibitions, including material from Outputs 1-5 and Grant 2 on famine, gout, sensory perception, royal health and the use of spices, and played a key role in shaping the content of the displays (f). The first two exhibitions were visited by 37,000 people. Public response was overwhelmingly positive, with evidence of visitors relating the historical material to their own health. 80% of visitors who completed evaluation forms for *Sugar & Spice* said they had been 'inspired to eat a healthier diet' (e).

The Director of Public Health (NHS Wakefield) commented that **McCleery's** research had 'caught the imagination of participating children and young people in a novel way, and that learning from this would influence the development of future interventions in this area [of childhood obesity], which remains one of key strategic importance for the public health service' (c). He described how *Sugar & Spice* had expanded his own thinking, informing his 'own knowledge about the introduction of sugar into the British diet', giving 'historical, social and cultural context' to the work he leads. He invited the Director of Health and Well-being for Public Health England to the *Food For All Seasons* exhibition. The latter commented: 'History can help uncover our country's rich food heritage and may provide a sense of context for the current challenges of unhealthy habits we now see' (f). These examples of **McCleery's** research enriching the viewpoints of medical professionals were not isolated. Output 2 led to an invitation for **McCleery** to talk about medieval sensory perception to neurologists at Addenbrooke's Hospital, Cambridge in March 2010. The hospital consultant who organised the talk stated it 'has universally been recognised as one of our best talks of recent times' (g).

McCleery has been exceptionally active in ensuring her research reaches beyond specialist audiences and formal education. While she has engaged extensively in conventional

Impact case study (REF3b)

outreach work (see below), she also ran stalls at 18 markets in 2011-13 to reach a broader public. She made all three elements of her research accessible through cooking demonstrations, talking through displays of historical seasonal and imported foods for rich and poor and providing printed information sheets. 10,104 members of the public were engaged by this activity; 82% of polled adult visitors said they had learned something new (h). Questionnaire responses such as 'Spices were really expensive and hard to get hold of' and 'Rhubarb is from China' indicated reflection on the contrast between current and historical eating habits and global agricultural and trade patterns; today the Wakefield area is the UK's most important rhubarb growing region and most people see it as local (h).

McCleery appeared on BBC Radio 4's *Women's Hour* in May 2011 [RAJAR provides listening figures of 3.56 million] to discuss the Sugar & Spice exhibition and the place of sugar in our culture. In November 2012 she discussed the relationship between food and education on BBC4's *Calf's Head and Coffee: the Golden Age of English Food*. In February and April 2013, she spoke about taste, commerce and health on BBC Radio Leeds [RAJAR=235,000].

McCleery authored web pages on www.leeds.ac.uk/youarewhatyouate, explaining key themes of her research in an accessible way (9,353 unique visitors since January 2011). She discussed her research from Grants 1 and 2 and Output 1 in talks entitled 'The medieval healthy diet', 'Medieval famine' and 'The king's stomach' at Clarke Hall Educational Museum (2011, 2012), West Yorkshire Heritage Forum (2011), Otley Science Café (2011) and Hull Historical Association (2013). After a similar talk to Boston Spa Archaeology and Heritage Group (2012), **McCleery was described** as 'infectious to share her subject', and its relevance to today was noted (i).

5. Sources to corroborate the impact

- a) Senior Cultural Officer, Wakefield Metropolitan District Council: transcript of telephone interview 10/09/12.
- b) Figures provided for each school on a table and a spreadsheet (for feedback from teachers). Quotations are from anonymous teachers at Three Lane Ends, Castleford; Methodist Junior and Infants School, Thornes in central Wakefield; Ryhill Junior and Infants. These are all state primary schools in deprived areas in the Wakefield region that were visited on 24/6/11, 14/9/11 and 16/11/11 respectively. These figures were collected by youth workers delivering the workshop on the day, were amalgamated by the project team and can be confirmed by the individual who also supplied source a.
- c) Director of Public Health (NHS Wakefield): transcript of telephone interview 05/09/12 and face-to-face interview with follow-up e-mail 17/06/13.
- d) Letter from co-director of the Prince's Teaching Institute, 30/8/2013.
- e) Reports embedded in e-mails dated 7/10/2011 and 5/12/13 written for *Sugar & Spice* and *The Dark Side of Eating* by Wakefield Council (can be confirmed by the individual who provided source a). The third exhibition (began March 2013) ran until the end of September 2013.
- f) Director of Health and Well-being, Public Health England: e-mail 20/07/13.
- g) Hospital consultant who organized the talk: email 14/04/10.
- h) Report on festivals drawn up by project team: figures based on head counts done at events by the team (= people who stopped and asked questions or tried the food, not just passers-by), and on 196 adult questionnaires. Quotations come from anonymous questionnaires from Leeds Loves Food 2012 (26/05/12) provided in a spread sheet. The individual who provided source a can confirm overall attendance figures which in some cases exceeded 40,000 people: e.g. at the Pontefract Liquorice Festivals. However, stall attendance could only be counted by the stall team present on the day.
- i) Anonymous quotation from questionnaire completed at event: 29/03/12.