

‘Taking the politics out of broccoli’: debating (de)meatification in UK national and regional newspaper coverage of the Meat Free Mondays campaign

Abstract

This paper addresses UK society’s relationship with meat and specifically explores the extent to which a process of ‘de-meatification’ is underway in this context and one of the mechanisms involved. It does so through analysis of reporting of the Meat Free Mondays (MFM) campaign in the national and regional British print news media. MFM offers a convenient yet powerful vehicle for trying to understand shifting meanings of meat not least because it directly challenges, and generates debate about the dominant – meat based – diet. The paper concludes by arguing that a shift is taking place in the status of meat within UK society with the print news media acting as a mechanism that is working in support of de-meatification. However, these conclusions are qualified in a number of important ways, including the anthropocentrism of the (de)meatification debate, its geographical variability and its weakly politicised character.

Introduction

This paper examines the current status of meat within UK society and the ways in which this is changing. An increasingly vociferous case is being made by a diverse group of actors for ‘de-meatification’ i.e. a transition to less meat intensive diets on the grounds of environmental and human health and animal welfare (Sage 2014; Gerber et al. 2013; Scarborough et al. 2014; Westhoek et al. 2014; Hallstrom et al. 2015; Springmann et al. 2016). A recent suite of studies has begun to provide empirical evidence, in a number of different country contexts, of de-meatification in the form of ‘flexitarianism’ⁱ (e.g. De

Bakker and Dagevos 2012; Dagevos and Voordouw 2013; De Boer et al 2014; Raphaely and Marinova 2014; Dagevos 2016), while other research has begun to theorise transitions to a plant based diet (Vinnari and Vinnari 2014). This paper extends this emerging body of work to further explore the process of de-meatification, the extent to which it is happening in particular places and the reasons and mechanisms why/not, in order to inform debate and action. It does so by adopting a distinctive empirical focus and methodological approach, analysing reporting of the Meat Free Mondays (MFM) campaign in the British print news media. In doing so it conceptualises the media as a key site within which societal meanings of meat are produced, circulated and contested (Burgess, 1990).

MFM is selected as the focus of empirical analysis because it is the most prominent UK example of what Morris et al. (2014: 190) coin as 'less meat initiatives' (LMIs), "organized and formalized efforts, [originating mostly within civil society], that are attempting to mobilize action to reduce meat eating at a number of different sites and scales". Established in London in 2009 MFM is spearheaded by the former Beatle Paul McCartney and his family. The primary aim of this not-for-profit initiative is "to raise awareness of the detrimental environmental impact of eating meat and to encourage people to help slow climate change, preserve precious natural resources and improve their health by having at least one meat free day each week" (MFM website, accessed 10.8.2016). MFM is part of a larger global campaign, led by the US based Meat/less Monday project established in 2003, promoting meat free meals on one day of the week (Meatless Monday 2016; Singer 2016). Efforts to reduce meat eating have 20th century

antecedents which also help to explain why Monday is the preferred day of action. During the First and Second World Wars the US government organised successful campaigns to encourage less meat consumption on a Monday, together with 'Wheatless Wednesdays' (Foodwise 2013)ⁱⁱ. The Monday Campaigns, the parent organisation for Meatless Monday, has identified that as Monday is the beginning of the working week and the start of a weekly routine, organising action on that day can "positively affect a range of healthy behaviours" (Monday Campaigns 2013). MFM provides a convenient yet powerful focus for trying to understand shifting meanings of meat because it challenges directly the dominant – meat based - diet. As such, MFM is likely to generate debate and controversy which in turn will be revealing of deeper societal meanings ascribed to meat which are the particular concern of the paper.

In the next section further context is provided through a discussion of the emerging debate about the politics of meat and the role of the media in these processes. A description of the methods employed in the generation and analysis of empirical material is followed by its presentation organised in terms of the orientation of press reporting (positive and negative), less pronounced themes in journalism about MFM and regional reporting. The paper concludes by arguing that a shift in societal relationships with meat is underway with the media engaged in an active debate about the dietary centrality of meat and the negative effects of meat eating on the environment and health. Further, and in contrary to studies that assert the mass media is a key institution that endorses the current regime of meat provisioning, the evidence presented suggests instead that the UK print media is slightly more likely than not to endorse efforts such

as MFM which encourage *less* meat eating. In other words, newspapers as one prominent form of media, can be understood as a mechanism working in support of de-meatification. However, the conclusions are qualified in a number of important ways, including the anthropocentrism of the (de)meatification debate, its geographical variability and its weakly politicised character, all of which signal directions for future research.

Meatification, de-meatification and the media

Scholarship on the politics of meat has begun to expand in the last decadeⁱⁱⁱ and different contributions to this debate are starting to become apparent. Nevertheless, common to all analyses is a problematisation of the current regime of meat provisioning, characterised by the intensification of livestock production and escalating levels of meat consumption. This process has been conceptualised as the ‘meatification’ of diets (de Schutter, 2009) which is understood to have begun in countries in the global north that have been consuming relatively large amounts of meat for many decades^{iv}, but is now spreading to the emerging market economies of Asia and Latin America, countries that traditionally consumed relatively small amounts of animal foods. The default explanation for dietary meatification is changing consumer desires associated with rising real incomes of expanding urban middle classes in newly industrialising countries. More critical commentaries point instead to the role of corporate and government regulation of the meat provisioning system (Machlachlan, 2015).

While scholars agree that meatification is a serious problem, the intellectual basis of this critique is shaped by at least two distinct perspectives. The first of these is ‘political

ecological' in orientation and concerned with the power of the meat industry and its undesirable consequences for the environment and people (Emel and Neo, 2015; Raphaely and Marinova 2016). One example of this form of critique is Weis's (2010) 'ecological hoofprint' which he describes as: "a framework for conceptualizing the resource budget and multi-dimensional environmental burden of industrial livestock" (Weis 2013: 75). The second mode of critique is associated with 'critical animal studies' which challenges institutional discrimination towards particular species of animals and the normative power of animal food consumption. Specifically, through the lens of the 'animal industrial-complex' it uncovers the mechanisms which normalise the production and consumption of animal products (e.g. Fitzgerald and Taylor 2014).

Although these two approaches to critique are recognised as sharing some concerns, the starting points and emphases of the two problematisations of meatification are distinct and this is important since it can lead to different conclusions. Implied within the critical animal studies position is a 'no meat at all' conclusion but other forms of critical scholarship assert that "we can affordably make room for animal products at our dinner tables....(b)ut to reach this point, something significant must change" (Carolan 2011: 84; see also Food Ethics Council 2001; Fairlie 2010). Such positions necessarily accept the killing of animals for food but recognise that different meats and meat production systems have variable environmental (e.g. Hamerschlag 2011) and animal welfare impacts (Miele 2011), with some that are more sympathetic and benign than the intensive systems associated with meatification and which legitimise their continuation and expansion.

Also beginning to differentiate research within critical meat scholarship is a position asserted by some authors that a gradual shift is taking place in society's relationship with meat within some of the high consuming countries of the global north, in spite of the evidence for meatification. This is a view advanced by Fiddes (1991), who argues from an anthropological perspective that meat, particularly red meat, is experiencing "waning prestige" (p.45) as a food laden with meaning symbolising human control of nature. This diminishing of meat's symbolic status is a reflection of fundamental societal developments associated with the emergence and mainstreaming of environmental values i.e. a desire – albeit yet unfulfilled - to establish a less exploitative relationship with nature. Other authors also suggest that the cultural image and appreciation of meat are slowly changing and present alternative forms of evidence suggestive of a move towards 'de-meatification'. For example, a recent decline in US meat consumption has led some media commentators to coin the term 'peak meat' suggesting that the point of maximum meat consumption is now passed (Gunther 2013; see also Dagevos 2016)⁹. A survey of Dutch consumers reported by de Bakker and Dagevos (2012) found a little over a quarter are 'meat lovers' (eating meat at least once a day) while 4% are 'meat avoiders', excluding meat completely from the diet. However, about 70% were found to be 'meat reducers', a finding which "indicates that eating no meat regularly is adopted already by a group of several millions of Dutch consumers. ... To them, abstaining from eating meat periodically has nothing to do with a strange or problematic food habit. Instead, *non-meat consumption is an accepted food consumption practice*" (De Bakker and Dagevos 2012: 882 emphasis added; see also Dagevos and Voordouw 2013; De Boer et al. 2014; Dagevos 2016 for further empirical evidence of the rise of flexitarianism in the Netherlands). That LMIs have an international presence beyond the global north is

also suggestive that widespread and meaningful “steps that are being taken to address the apparent excess of meat production and consumption” (Morris et al. 2014: 190) even though the outcomes of these efforts are currently very unclear. Together with Sage’s (2014) exploration of a number of ‘pathways towards de-meatification’ and Vinnari and Vinnari’s (2014) sustainable transition framework for plant based diets, this group of studies not only recognises that the status of meat is already changing but is also characterised by a desire to explore ways in which new regimes of meat provisioning might be established. However, questions remain about the mechanisms of de-meatification, the extent to which it is happening and where. Such questions provide the motivation for and justification of the analysis conducted in this paper.

One of the possible mechanisms of de-meatification is the media, the institution of central interest herein. A typical argument in the scholarship on the politics of meat is that the media works to promote the meat eating status quo. For example, in concluding their analysis of LMIs Morris et al. (2014: 204 emphasis added) argue that “while commercial organizations, *the media* and the state continue to promote high and unsustainable levels of meat consumption ... the ability of the LMI niche to facilitate effectively the diffusion of an innovative social practice – eating less meat – is likely to be limited”. An even more damning assessment is provided by Cole and Morgan (2011) in a study revealing the derogatory discourses of veganism in UK national newspapers. These authors assert that a “flesh eating hegemony”, which is a reflection of dominant social attitudes, “permeates the modern media” (cited in Fitzgerald and Taylor, 2014: 169). Fitzgerald and Taylor’s analysis of multiple forms of meat promotion media in Australia finds agreement with Cole and Morgan leading them to conclude that the

messages communicated to potential consumers by the ‘animal-industrial complex’, of which marketing and public relations are critical, constitutive components, are an important mechanism normalising the consumption of animal foods Khazaal and Almiron (2016) draw similar conclusions based on analysis of US and Spanish newspapers (see also Freeman et al. 2011). The media then is identified as an influential institution in the politics of meat, being understood as playing a key role in determining conventional beliefs about and attitudes toward non-human animals and, by extension, their contribution to food provisioning.

However, if the media can encourage and reinforce it can also dissuade, particularly when other influential institutions such as the Food and Agriculture Organisation (FAO) and Intergovernmental Panel on Climate Change (IPCC) are starting to raise questions about current levels of meat production and consumption (e.g. Gerber et al. 2013). Further, although research has examined how the media portrays various dimensions of the topic of meat including in particular the role of meat production and consumption in climate change (e.g. Neff et al. 2008; Kiesel 2010; Almiron and Zoppeddu 2015; Lee et al. 2015; Mayes 2016) there have been no studies that have specifically addressed the reporting of efforts to reduce meat consumption and what this might reveal about shifting societal meanings of meat. The paper now turns to its methodological approach.

Methods

As Fitzgerald and Taylor (2014: 169) argue “in modern western society, the media has an enormous power to disseminate ideas about issues, to frame things in certain ways and to determine what is considered normal” including, in the analysis herein, the

consumption of animal foods. Following this logic, UK newspapers, and their reporting of MFM, were utilised as the source of empirical material. This news source was accessed through LexisNexis an online legal and media database that includes national and regional newspapers. All national newspapers, both broadsheet and tabloid, were included in the search as it was assumed that discussion of meat and MFM would vary within and between these newspaper types due to differences in editorial emphasis and target audiences (Browne, 2005) and this variation could provide helpful insights into the object of concern while also avoiding any bias in reporting that might arise from making selective use of news sources. Previous UK based research on meat in the media has not examined multiple newspapers across the political spectrum (e.g. Dornbusch 1998; Kiesel 2010). To enhance geographical sensitivity and insight two regional newspapers were also selected for analysis: The Western Mail and the Western Daily News. The former covers the south west of England (and is published in Plymouth, Devon) while the latter is a Welsh newspaper, published in Cardiff south Wales and self identifies as the 'national newspaper of Wales'. Both regions are predominantly rural in character and livestock farming is an important dimension of the rural economy. As such, it was assumed that these newspapers might be more likely to promote the interests of livestock agriculture and be more critical of MFM. Since the national press in the UK has a reputation for urban bias it was not deemed necessary to select particular city based newspapers to 'balance' the coverage provided by the two regional newspapers.

The time limit of the search was from the launch of MFM in 2009 to the end of July 2015 when the research was completed. 'Meat Free Monday' was the only search term

employed. For the national press, 125 articles have been analysed, a figure that excludes duplicate articles from different editions of the same newspaper and those that simply mention the MFM cookbook published by the McCartneys in 2011, or which reproduce a recipe from it with no accompanying commentary. Article types and lengths varied, were found in different sections of the newspapers and included reader letters. Thirteen articles were derived from the regional newspapers, all of which were published within the period up to December 2011. After this point the researcher's university changed its access agreement with LexisNexis which meant that a full search of the regional newspapers was not possible for the later part of the research period. It is acknowledged that this is a limitation.

Building on the approach adopted by Cole and Morgan (2011), each article was categorised according to whether its overall tone was positive, negative, neutral or mixed. Cole and Morgan employed the first three of these categories but here it was judged necessary to include the fourth. To be assessed as either positive or negative required an article to explicitly include evaluative language that was either supportive or critical of MFM. Articles which included both positive and negative commentary about MFM, without either type of assessment being dominant, were categorised as 'mixed' rather than 'neutral'. A neutral article was assessed as such when it reported 'the facts' of the MFM campaign e.g. information about its launch and objectives as stated by the campaign itself, without any evaluative language by the journalist. The next stage of analysis was thematic and involved a manual 'descriptive' line by line coding that formed the basis of more conceptually oriented or 'analytical' codes

(Boyatzis 1998). These higher level codes enabled identification of a series of thematic subcategories within each of the article categorisations (i.e. positive, negative, neutral).

Results

Articles in the national press were more likely to discuss MFM positively (38%) rather than negatively (33%) (Table 1). Slightly more than a fifth of articles were neutral in their reporting (22%) and only a small proportion (8%) offered a mixed analysis of MFM. Overall journalists are more inclined than not to write about eating less meat in positive or neutral terms.

Table 1. Frequency of positive, negative, neutral and mixed reporting of MFM by newspaper

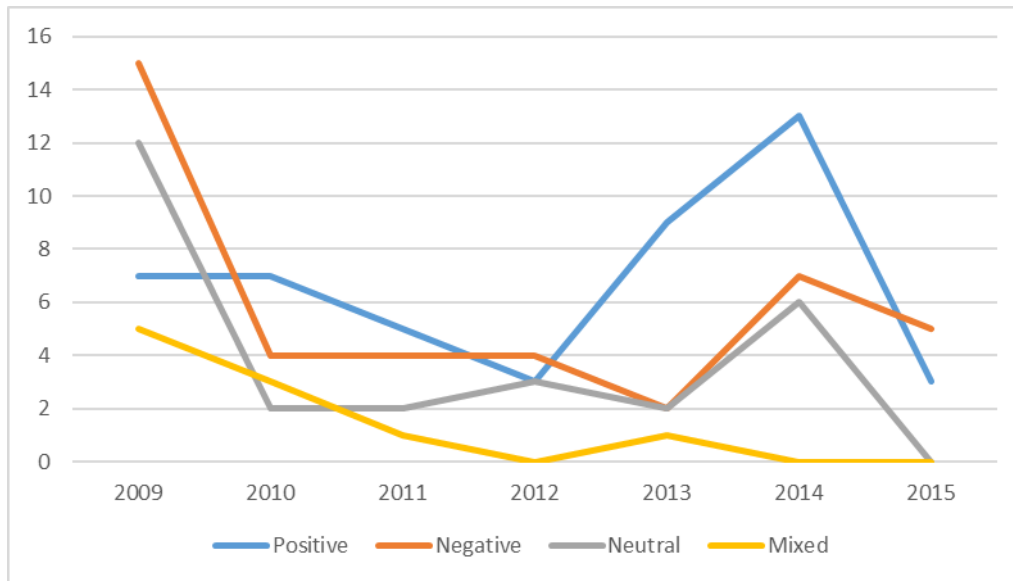
Newspaper	Positive		Negative		Neutral		Mixed		Total
<i>Tabloids</i>									
Daily Mail	5	11%	10	24%	1	4%			16
Daily Mirror	1	2%	3	7%	2	7%			6
Daily Star	1	2%	2	5%	3	11%			6
Express	4	9%	2	5%	1	4%			7
Metro	2	4%			3	11%	1	10%	6
Morning Star					1	4%			1
People	1	2%		0%	2	7%			3
Sun	2	4%	4	10%	5	19%			11
<i>Broadsheets</i>									
Guardian	3	6%	1	2%	1	4%	3	30%	8
Independent	8	17%	3	7%	1	4%	2	20%	14
Observer	3	6%	1	2%			1	10%	5
Telegraph	4	9%	9	22%	2	7%	1	10%	16
Times	13	28%	6	15%	5	19%	2	20%	26
Total No & %	47	38%	41	33%	27	22%	10	8%	125

Another key finding evident in Table 1 is a tendency towards more negative reporting in the right leaning press^{vi} (notably the Telegraph and Daily Mail) with the opposite being

the case in the left leaning and independent press (Guardian, Observer and Independent) (Browne 2005). The latter is also more likely to contain 'mixed' articles that include discussion of both negative and positive dimensions of the campaign i.e. they offer more balanced reporting. The one newspaper that breaks the rule is the Times. Although currently owned by the politically conservative media entrepreneur Rupert Murdoch the newspaper has previously supported the Labour Party. It contains the largest number of articles overall and the greatest proportion of positive reporting, with a similar proportion of mixed, neutral and negative articles. One explanation for this is that in spite of its current owner the newspaper has retained its reputation as the UK's 'newspaper of record'^{vii} (Martin and Hansen 1996).

The number of articles published in the national press varied across the years studied, with the greatest number (39) appearing in 2009, a peak that is likely to be associated with the launch of MFM. The number dropped dramatically, to between 10 and 20 articles per year between 2010 and 2013. A further peak of interest came in 2014 (26 articles) and can be partly explained by the release online by Paul McCartney of a song promoting MFM in advance of the UN climate summit in September of that year. The number of articles subsequently slumped to eight in 2015. Initially, at the launch of MFM, reporting was much more likely to be negative in orientation but this pattern reversed as the research period progressed (see Figure 1).

Figure 1. Number of positive, negative, neutral and mixed national newspaper articles by year



In the following sections the themes within each of the categories of positive and negative article are considered before less pronounced themes in the national reporting and the regional perspectives are presented.

Positive reporting of MFM

Within the articles with content categorised as positive, three themes were identified: MFM is good for your health; the message of the campaign is moderate, sensible and achievable; MFM is good for the environment. In some instances more than one of these themes was present in the same article. Each of these themes is discussed in more detail below

The articles claiming that MFM is good for health (a theme identified in 13% of all articles) make the argument that the UK population eats too much meat and this is bad

for health and therefore initiatives such as MFM that encourage people to eat less meat and more plants are likely to have health benefits. It is not always the case, however, that the specific health benefits from eating less meat and more plants are elucidated. Likewise, evidence supporting these claims is provided only occasionally as in the following example:

"A good way to cut calories and saturated fat, increase your vegetable intake and help the planet is to take the Meat Free Mondays pledge which aims to reduce the amount of meat we eat. In 2010, a study carried out by Oxford University found that eating meat no more than three times a week could prevent 31,000 deaths a year from heart disease, 9,000 from cancer and 5,000 from strokes"(Ebelthite, 14.4.2015, Express).

Although the majority of the articles featuring a 'good health' dimension acknowledge that health is one of a number of benefits to be realised from MFM, a few articles make the erroneous claim that MFM has the singular objective of improving health (e.g. Anon, 22.6.2014).

Associated with the health benefits of MFM, but a distinct second theme (evident in 14% of all articles), is that the campaign's call for lower levels of meat eating reflects, while also contributing to its further popularisation, an already in progress, societal shift towards flexitarianism. This transition is understood in the reporting as being driven primarily by health, but also financial benefits i.e. a diet involving less meat costs less than a meat based diet^{viii}. One article writes of MFM as:

"encouraging people to eat less meat, starting one day at a time. In fact, according to recent figures, nearly 90% of Brits now have at least two meat-free days per week - an idea once unheard of in our traditional British meat-and two-veg culture" (Stoppard, 16.7.2009, Daily Mirror).

Another reports research conducted by an agency 'The Food People' that has observed increases in flexitarianism over the last 5 years, particularly among younger people, and which predicts this trend will continue in the near future (Cooper and Mills, 20.1.2013, Sunday Times). In being linked to these broader dietary changes MFM is characterised as not demanding anything unusual because society is already moving in the direction of a diet involving less meat eating.

In sum, the campaign's recommendations are characterised by these commentators as entirely reasonable and achievable. From this perspective, a meat free day does not have to challenge in any significant way the consumption of meat and by doing so helpfully avoids the unduly radical position of vegetarianism which remains a challenging, unreasonable, and nutritionally suspect dietary manoeuvre e.g. Hollweg (5.7.2009, Sunday Times)^{ix}. In short, MFM is represented in the reporting as an unthreatening, apolitical lifestyle choice. As the late Sunday Times food writer AA Gill observes, the growth in 'vegevores' is "trying to take the politics out of broccoli". Vegevores represent a backlash against the 'meatification' of menus in the last 10 years, but they explicitly remove the politics surrounding meat eating because in this trend one still eats meat albeit not so much or so prominently (Gill, 5.2.2012, Sunday Time).

In contrast to the apolitical character of the first two themes, a third (evident in 27% of all articles) is potentially more political as it highlights the environmental benefits to be realised from eating less meat. Consistent, however, with the other themes is that this is reported as an environmental 'easy win' for those signing up to a MFM. For the most part articles featuring this theme negatively associate livestock production with climate change – typically referred to as 'global warming' - through greenhouse gas emissions. For example, Mesure (12.7.2009, Independent) describes MFM as aiming to help "help slow climate change since livestock production pumps more greenhouse gas emissions into the atmosphere than transportation." In support of these assertions the UN's 2007 report 'Livestock's Long Shadow' is cited as a key evidence source, although by no means consistently. That supporting evidence is sometimes lacking may help to explain occasional inaccuracies in reporting which state that the source of the greenhouse gas emissions from livestock is their anuses rather than their mouths. This may be deliberate as it offers journalists the opportunity to inject some toilet humour into their stories and has been observed in reporting of the link between meat and climate change in other national contexts (Almiron and Zoppeddu 2015). For example, the MFM campaign is reported by Freeman (17.6.2009, Guardian) to be "predicated on the legitimate and yet also fabulous concern that cows are ... farting the planet to death".

Only very occasionally are other environmental impacts of livestock production discussed, such as its land use implications (e.g. Hickman, 15.6.2009, Independent). The following quotation is from an article that considers some of the environmental complexities of meat production that go beyond its negative contribution to climate

change, albeit repeating the erroneous claim that this is due to farting rather than burping livestock. The article also recognises that in some specific locales livestock production can be environmentally positive:

"A limited amount of livestock production is good for the environment -- it's part of our heritage, after all. I don't want to see the British landscape changed for good, but I also don't want rain forests hacked down and turned into pastures where cattle are intensively reared to supply an addiction to cheap meat and burgers that's out of control. Cows fart, which produces methane gas, but ... (t)he bigger environmental damage comes from producing their feed and the costs of transportation. If you can eat local food, excellent. But that's not realistic for everyone, and that's why eating a bit less meat is a good idea" (Street Porter, 15.6.2009, Daily Mail).

This article is unusual in its reference to particular spatialities – the British landscape and local food – as the majority of the discussion about the positive environmental impacts of reducing meat consumption is framed in terms of a generic, place-less environment e.g. doing something good ‘for the environment’ (Smart, 1.11.2010, The Sun). Otherwise the most frequently mentioned imagined spatiality in this thematic context is the global scale, notably in the form of the ‘global climate’ (e.g. Ursell, 6.4.2010, The Times).

Negative reporting of MFM

A brief but striking article by journalist Jeremy Clarkson provides an introduction to the negative reporting about MFM. Clarkson, best known for his irreverent, oftentimes

macho and politically conservative views presents unequivocally his position: "On Paul McCartney's meat-free Monday, I went out and had a nice steak" (Clarkson, 20.6.2009, The Sun). This statement could reflect Clarkson's anti-environmentalist position (often revealed in his writing which celebrates and promotes petrol based motoring) or a resistance to having his dietary choices dictated by others, including celebrities, a theme evident within 10% of all articles. Such reporting expresses an objection to celebrities, or any prominent or influential actor, "telling us what to eat" (Sitwell, 24.6.2009, Daily Mail; see also Moir, 20.07.2010, The Daily Mail).

The negative dimensions of the articles about MFM featured four further themes, the most prominent of which and evident in 17% of all articles, asserts that MFM is likely to be ineffective in producing the changes it seeks to bring about. A further theme, found in 8% of all articles, contests in various ways the environmental claims of the campaign. MFM is employed (in 6% of all articles) as a means of raising a broader set of questions about diets that feature more plants or are entirely plant based. Finally, the adverse impacts of MFM on the farming industry is a theme featuring in only 3% of all articles. Each of these themes is discussed in the following sub-sections.

The unlikely impacts of MFM

Countering the argument that MFM's concerns are moderate and reasonable, this negative theme argues that the campaign is (likely to be) ineffectual. There are various ways in which this case is made, one of which is lessons from history, specifically past initiatives that have attempted to effect changes in diet, by encouraging the avoidance of particular foods on specified days of the week, but have failed e.g. eating fish on

Wednesday and Friday to help fishermen (Anon, 16.6.2009, Telegraph; May, 4.12.2009, The Sun; Anon, 6.12.2009, Sunday Times; McDonagh, 21.1.2014, Telegraph)^x. The claim is also made in terms of contemporary temporalities, in particular that the campaign is focused on the wrong day of the week. For example, it is pointed out that “poor households often eat Sunday leftovers on a Monday” (Anon, 16.6.2009, Telegraph; also Seymour, 30.6.2009, The Times). Also in making the case that MFM is likely to be ineffective is reporting of a failed attempt to introduce MFM in Brighton town council’s catering outlets following election of the Green Party to lead the council. A protest by some council employees lead to a retraction of MFM which is characterised by journalists as one of a larger number of ‘lunatic’ or ‘ludicrous’ Green policies and as such is used as an opportunity to criticize Green politics (e.g. Archer, 25.2.2012, Telegraph; Clark, 11.12.2014, The Times).

A distinct, yet underdeveloped, further aspect to this theme is that MFM does not go far enough in its recommendations for dietary change. For example Wilson (22.3.2015, Sunday Telegraph) while recognising that MFM as a movement is growing in popularity, asserts it is unlikely to be effective because “the ratio is wrong. The amount of meat that everyone in the world could eat without straining resources is more like meat on Mondays and Tuesdays only”. More radical steps such as entire weeks that are meat free, as introduced recently in Australia, may therefore be required.

MFM and the environment

Contradicting the framing of MFM as environmentally positive, is a questioning and critique of MFM’s environmental credentials specifically its claims about the climate

benefits of eating less meat. In this respect, so Forsyth argues, Paul McCartney employs an “abstruse logic” (26.6.2009, Express). Linking meat eating and climate change raises all sorts of unanswered questions for other commentators. One journalist (unnamed) from the Express, for example, asserts that “vegetarians must also account for a lot of gases. Look how many beans they eat” (21.6.2009). Here, then, it is farting vegetarians rather than farting cows that are the problem. Meanwhile, Herbert, writing in the Independent (17.11.2009), questions why meat should be singled out for criticism by the MFM campaign when dairy cows also produce greenhouse gases and Asian paddy fields are significant emitters of methane. Another journalist elaborates that “60 per cent of our farm land is grassland, suitable only for rearing animals. The environmental damage that would ensue should this be ploughed up for cereals and legumes would be catastrophic” (Brooks, 4.12.2009, Telegraph).

That different forms of meat production have differential environmental impacts is discussed by Markwell in the Independent (16.6.2009) and is unusual in introducing complexity into the debate about livestock production and climate change. “Do turkeys and chicken really expel enough methane to worry the climate-change crew?” she questions. “Sane omnivores” (as opposed to, one assumes, ‘insane vegetarians’), it is asserted, who enjoy eating organic chicken or locally produced lamb should be able to carry on consuming these more “environmentally benign” forms of meat although no supporting evidence is provided.

The problems with a plant based diet

Although erroneous the MFM campaign is associated, indeed at times conflated with vegetarianism^{xi}, an approach to diet which is represented as questionable in various ways. Although himself a vegetarian, Freeman (17.6.2009, Guardian) criticises the logic of the diet on the basis that “humans are meant to be omnivores, not herbivores”. A diet featuring more plants, is further characterised as undesirable environmentally. Although reported in a much smaller number of articles than those featuring the ‘less meat is good for health’ perspective, meat eating is seen as good for health, being an integral part of a ‘balanced’ diet. Vegetarian diets or those involving less meat are, in contrast, reported as ‘imbalanced’ (e.g. Turner, 30.6.2009, The Daily Mail; see also Ursell, 6.4.2010, Times). Finally, gastronomically, MFM and / or vegetarianism are depicted as unappealing (e.g. Wyke, 29.6.2009, The Times) and impractical, particularly in households where ‘fussy’ children are unlikely to eat vegetarian dishes (Markwell, 16.6.2009, Independent).

MFM – a problem for British farming

Perhaps unsurprisingly, MFM is framed as an initiative that is likely to have the undesirable outcome of undermining the farming industry in the UK, although this was a theme that was present in only a small number of articles in the national print media reflecting perhaps its urban orientation. Here, the voices of industry representatives are reported contesting MFM while in others the journalists themselves anticipate an industry backlash (e.g. Street-Porter, 28.12.2009, Daily Mail). In both cases the critique of MFM is made in terms of the rural economy i.e. farmers will go out of business (e.g. Hunt, 17.7.2009, Telegraph), environment (see discussion above of the environmental contradictions of MFM) and health i.e. eating red meat is good for health and part of a

balanced diet. More specifically within this theme, MFM is claimed to have ignored the farming industry's efforts to reduce its greenhouse gas emissions (Anon, 21.6.2009, Daily Star).

Less prominent themes

Of interest are themes within the reporting that are less pronounced. Three in particular are noted. First, in only a very small number of articles are the adverse consequences for animals of meat production considered, with Observer journalist and vegetarian Barbara Ellen the only one to offer an extended discussion (19.9.2010). While recognising Paul McCartney's need to highlight the environmental dimensions of meat production "to try to enrol more carnivores into his cause" ultimately, Ellen argues "...the animal rights argument for vegetarianism is more powerful and meaningful." Second, there is a lack of attention given to the role of government in shaping diets in relation to meat consumption. Although the focus of reporting is a non-governmental campaign, reporting of MFM could legitimately act as a jumping off point for discussion of other institutional mechanisms, including government policy, for modifying diets. Only one article discusses how civil society food campaigns such as MFM are growing in number and becoming more sophisticated, while also relying on celebrities to help raise their profile and impact (a feature decried by other commentators). This trend is attributed to a lack of government action in addressing food provisioning challenges (Rayner, 14.6.2009, The Observer). Only one further article addresses the UK government's reticence in formulating dietary policy including in relation to meat eating and this in a context which connects to the second less pronounced theme – the relationship between meat eating and masculine identity. Here, the UK's *male* defence

minister at the time - Philip Hammond - is reported as unlikely to follow the decision of his *female* counterpart in Norway to institute MFM in the country's army canteens, a move applauded by the female journalist (Street-Porter, 29.3.2014, The Independent).

Although the relationship between gender and meat eating has received explicit attention within the academic literature (e.g. Rozin et al. 2012; Adams 2015) very few of the articles made reference to this relationship and were more likely than not to be negative in their analysis. Feeding a man vegetables within the context of MFM is reported as a direct affront to his masculinity. One tabloid journalist, for example, describes his resentment to MFM being imposed upon him by his female partner:

"(b)ecause feeding men broccoli doesn't turn us into lean, content metrosexuals. It turns us into inwardly simmering beasts with a zombie-like craving for flesh. Feed a man steak, and he'll turn into a subservient pussycat who can't wait to get home" (Daubny, 30.5.2012, The Sun).

Only one article classified as positive, and which provides advice on simple steps to improving men's health, made the case that MFM is a healthy option for men because they do not have to give up meat completely, the implication being that their masculinity is preserved (Ebelthite, 14.4.2015, Express).

Regional perspectives

Although the total number of articles analysed overall is very small, that only two of the 13 articles in the two regional newspapers were coded as positive represents a much lower proportion than in the national print media. Six articles were coded as negative, a slightly higher proportion than in the national print media, and such articles featured language that was noticeably more emotive. The remainder (5) were mixed in content, containing both positive and negative perspectives. In noticeable contrast with the national press barely any mention is made of the 'less meat is good for your health' argument. Instead, the assertion that eating meat is part of a healthy balanced diet is more likely to feature. There is no acknowledgement or attention given to MFM being part of a wider societal shift towards less meat eating. Instead, the statement is made that the rising demand for meat globally represents an aspiration that we have no right to deny, a morally charged argument that is not a feature of the national reporting but one that fails to acknowledge that this trend might be supply rather than demand driven (Machlachlan 2015). One article is unusual in its negative stance as it makes the case for a more radical move to eating no meat at all, asserting in the process that MFM does not go nearly far enough in its objectives. This is, however, explained by the author being the campaign manager of an animal rights group based in Bristol.

Discussion in the regional reporting is dominated by the twin concerns of the adverse impacts of MFM on farm incomes and livestock production's environmental impacts, particularly on the climate. A distinctive feature of the reporting of the second theme is the more consistent attention given to the complexities of the debate about meat production and the environment. Journalists acknowledge agriculture's role in climate change, with no errors made in specifying the source of the emissions. However, much

more emphasis is placed than in the national press both on the steps being taken to address this by the industry but also on contesting the figures which claim that agriculture contributes more greenhouse gases than other economic sectors (e.g. Dube, 23.6.2009, Western Mail). A more careless, evidence poor style of reporting is illustrated the evocation of the 'farting vegetarian' (Anon, 20.5.2009, Western Mail; Anon, 16.12.2009, Western Morning News). In addition, the point is made that agriculture is as much a victim of climate change as a contributor to it (Parish, 2.12.2009, Western Morning News), something that did not feature at all in the national news coverage. Furthermore, a strong case is advanced for livestock agriculture's positive environmental impacts, particularly in terms of its contribution to "spectacular scenery" (Hall, 6.10.2009, Western Morning News), while the environmental illogic of converting upland areas to cropping is also highlighted (21.7.2009, Western Mail). Although the hypocrisy of celebrities calling for MFM mirrors the national reporting, one article takes the unusual step of criticising the meat industry for using celebrities in its promotional campaigns in recent years (Williams, 25.7.2009, Western Mail).

Discussion and conclusions

This paper has sought to examine the changing meanings and status of meat within UK society, specifically whether and to what extent there is evidence for a process of de-meatification. It has used as its vehicle of analysis the national and regional print news media and how these media have reported the Meat Free Mondays campaign, a civil society initiative that encourages reduced levels of meat eating and in the process challenges directly meat-centric diets. The analysis reveals a relatively balanced picture,

of both positive and negative reporting. However, a key conclusion is that newspapers are slightly more inclined than not to conceptualise eating less meat, encouraged by MFM, in *positive* terms. That this is most likely to be framed in relation to environmental benefits is noteworthy, particularly given previous media research which has revealed that meat's role in climate change is consistently under-reported (e.g. Almiron and Zoppeddu 2015; Mayes 2016). The health benefits of eating less meat also feature prominently providing some support for Singer's (2016) interpretation of Meatless Monday as an anthropocentric campaign. At the very least what these UK data suggest is that a debate is actively taking place about the centrality of meat in the diet and that this is associated with a softening of attitudes towards eating less meat if not towards excluding meat completely from the diet. As such, the findings provide support for the view, as espoused by Fiddes (1991) and authors who have subsequently pursued similar lines of reasoning, that UK society's relationship with meat is changing and specifically that some degree of de-meatification is taking place. Further, and in contrary to studies that argue the mass media is a key institution that works to reinforce the current regime of meat provisioning (e.g. Fitzgerald and Taylor 2014; Freeman et al. 2011), this paper concludes that newspapers, as one prominent form of media, can be understood as a mechanism that, at least in the UK context, is working in *support* of de-meatification.

However, these conclusions need to be nuanced in three important ways. First, editorial policy matters. The right leaning press, which includes UK national tabloid newspapers with the widest circulation, has been found to be more likely to contest MFM, a position which can be read as tacit endorsement of the meat eating status quo. This reinforces the work of Almiron and Zoppeddu (2015) who found, in their analysis of national news

media in Spain and Italy, that right-leaning newspapers showed a higher degree of scepticism and contrarianism in reporting the relationship between meat eating and climate change. Second, de-meatification has its own geographies which have begun to be revealed through the analysis of regional reporting and as such would merit further investigation. Although the findings from this analysis cannot be seen as comprehensive, due to restrictions on accessing regional newspapers in Lexis Nexis, a distinct perspective was clearly observable. Regional newspapers with a predominantly rural audience, including a significant animal agriculture constituency, are more likely to problematise demands for lower levels of meat eating made by MFM and similar initiatives. This in itself is to be expected but it does suggest that there is work to be done in engaging further the farming industry in discussion about meat production and consumption.

The third point of clarification is that the media debate surrounding de-meatification, as this is associated with MFM, is one that is not strongly politicised (Singer, 2016, makes a similar argument, albeit in more extended and elaborate form, about Meatless Monday). This is apparent in a number of ways including that the debate fails to engage directly with questions of meat production and consumption governance, even though the reporting is of a civil society campaign and therefore of a process that contributes to an increasingly important food system governance domain (Renting et al. 2012). Only one article published by the liberal press highlighted a lack of government action in relation to food provisioning challenges, providing an explanation for celebrity lead interventions such as MFM^{xii}. More specifically, and as revealed through the quote used in the title of this article, MFM 'takes the politics out of broccoli' because it allows

consumers to continue to eat meat rather than compelling them to adopt an entirely plant based diet i.e. it is interpreted in the reporting as an easy and entirely 'reasonable' lifestyle choice. However, taking the politics out of broccoli at best dilutes, and at worst denies de-meatification's concern both with environmental and animal politics. Although the environmental benefits of less meat eating are addressed directly in the reporting of MFM this is presented for the most part as an 'easy win' i.e. individual behaviour but also institutional structures are not required to change significantly in order to deliver an environmental benefit. Further, the emphasis on health, lifestyle and environmental easy wins means that barely any attention is given to the implications both of meatification and de-meatification for the interests of agricultural animals. That agricultural animals fail to capture the attention of journalists has also been observed in related work outside the UK on national news' coverage of the relationship between meat eating and climate change (e.g. Almiron and Zoppeddu 2015) and of broader reporting of domesticated animals and fish killed for food (Freeman et al. 2011; Khazaal and Almiron 2016). This suggests, at the very least, that there should be a continuing if not an enhanced role for 'critical animal studies' in ongoing debates about de-meatification (Fitzgerald and Taylor 2014; Freeman et al. 2011; Evans and Miele 2012; Singer 2016).

Three additional future lines of enquiry are identified. First, the analysis herein has been limited to newspaper articles focused on MFM. This has undoubtedly provided a meaningful and revealing focus of investigation but it is acknowledged that the media debate about meat production and consumption is broader than LMIs. Further analysis of UK national print media reporting of meat in relation to, for example, health, animal

rights / welfare, and climate change would be worthwhile in helping to corroborate or contest the evidence herein and could be usefully informed by similar studies undertaken in other national contexts (e.g. Neff et al. 2009; Kiesel 2010; Goodwin and Shoulders 2013; Almiron and Zoppeddu 2015; Lee et al. 2015; Mayes 2015). The broadcast media's role, notably TV and radio, could also be included in this endeavour. Second, analysis of print and broadcast media for a 'general' rather than specialist audience or profession e.g. the farming press means that issues of importance to the latter might well be missing (Morris et al. 2016). Although this has been partially addressed in the research reported herein through the inclusion of regional newspapers with a predominantly rural consumer base it would be worthwhile examining the agricultural press as part of a wider research effort, as suggested above, that engages agricultural actors in deliberating the challenges of meat production and consumption. Third, another future line of enquiry could be pursued online through analysis of blogs and social media. The latter is not only challenging the print media as a news source but is an increasingly influential means of mobilising action on controversial matters (e.g. Askanius and Uldam 2011). It specifically provides platforms for an increasingly diverse range of individuals, both expert and lay, and organisations that seek to promote plant based diets but also celebrate meat eating, many of which are oriented to younger audiences.

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References

Adams, C. 2015. *The sexual politics of meat: a feminist vegetarian critical theory*. Bloomsbury: New York. 25th Anniversary Edition.

Almiron, N. and Zoppeddu, M. 2015. Eating Meat and Climate Change: The Media Blind Spot—A Study of Spanish and Italian Press Coverage. *Environmental Communication*, 9:3, 307-325.

Askanius, T. and Uldam, J. 2011. Online social media for radical politics: climate change activism on YouTube. *International Journal of Electronic Governance* 4(1-2): 69–84.

Boyatzis, R. 1998. *Transforming qualitative information: thematic analysis and code development*. Sage: London.

Browne, K. 2005. *An introduction to sociology*. Polity Press: Cambridge. 3rd Edition.

Burgess, J. 1990. The production and consumption of environmental meanings in the mass media: a research agenda for the 1990s. *Transactions of the Institute of British Geographers*, 15 (2): 139-161.

Carolan, M. 2011. *The real cost of cheap food*. Earthscan: Abingdon.

Cole, M. and Morgan, K. 2011. Vegaphobia: derogatory discourses of veganism and the reproduction of speciesism in UK national newspapers. *Sociology* 62 (1): 134–153.

Dagevos, H. 2016. Exploring flexitarianism: meat reduction in a meat-centred food culture. Chapter 12 in Raphaely, T. and Marinova, D. (eds) 2016. *Impact of meat consumption on health and environmental sustainability*. IGI Global: Hershey, PA.

Dagevos, H., & Voordouw, J. 2013. Sustainability and meat consumption: Is reduction realistic? *Sustainability: Science, Practice, & Policy* 9: 60-69.

de Bakker, E. and Dagevos, H. 2012. Reducing Meat Consumption in Today's Consumer Society: Questioning the Citizen-Consumer Gap. *Journal of Agricultural and Environmental Ethics*, 25: 877–894.

De Boer, J., Schösler, H., & Aiking, H. 2014. 'Meatless days' or 'less but better'? Exploring strategies to adapt Western meat consumption to health and sustainability challenges. *Appetite* 76: 120-128.

De Schutter, O. 2009. The meatification of diets and global food security. Report prepared by the UN Special Rapporteur on the right to food, 3 December 2009, for the European Parliament.

Dornbusch, D., 1998. An analysis of media coverage of the BSE crisis. In Ratzan, S. (eds) *The Mad Cow Crisis: Health and the Public Good*. UCL Press: London, 138-52.

Emel, J. and Neo, H. (eds) 2015. *Political ecologies of meat*. Routledge: Abingdon.

Evans, A. and Miele, M. 2012. Between food and flesh: how animals are made to matter (and not matter) within food consumption practices. *Environment and Planning D: Society and Space*, 30, 298-314.

Fairlie, S. 2010. *Meat: a benign extravagance*. Permanent Publications: East Meon, Hampshire.

Fehrenbach, K.S., Righter, A.C. and Santo, R.E. 2015. A critical examination of the available data sources for estimating meat and protein consumption in the USA. *Public Health Nutrition* 19(8): 1358–1367.

Fiddes, N. 1991. *Meat: A Natural Symbol*. Routledge: London.

Fitzgerald, A. and Taylor, N. 2014. The cultural hegemony of meat and the animal industrial complex. Chapter 8 in N. Taylor and R. Twine (eds) *The rise of critical animal studies: from margin to centre*. Routledge: Abingdon.

Food Ethics Council. 2001. *Farming Animals for Food: Towards a Moral Menu*. London: Food Ethics Council.

Foodwise 2013. Meat Free Mondays. Published online:<[http://foodwise.com.au/meat free-Mondays](http://foodwise.com.au/meat-free-Mondays)>, accessed 14 May 2013.

Freeman, C., Bekoff, M., and Bexell, S., 2011. "Giving Voice to the 'Voiceless': Incorporating Nonhuman Animal Perspectives as Journalistic Sources." *Journalism Studies* 12 (5): 590–607.

Gerber, P.J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., Falcucci, A. & Tempio, G. 2013. Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities. FAO, Rome.

Goodwin, J.N. and Shoulders, C.W., 2013. The future of meat: A qualitative analysis of cultured meat media coverage. *Meat Science* 95(3): 445-450.

Gunther, M. 2013. Peak meat: is animal consumption falling out of style in the US?

Published online, URL:

<https://www.theguardian.com/sustainable-business/sustainable-meat-vegan-vegetarian-celebrities> [accessed 21.12.2016]

Hallström, E., Carlsson-Kanyama, A., Börnjesson, P. (2015) Environmental impact of dietary change: A systematic review. *Journal of Cleaner Production* 91: 1-11.

Hamerschlag, K. 2011. Meat eating guide to climate change and health. Environmental Working Group. Published online, URL: www.ewg.org/meateatersguide, [accessed 26.07.2011].

Khazaal, N. & Almiron, N. 2016. "An Angry Cow is Not a Good Eating Experience". *Journalism Studies* 17(3): 374-391.

Kiesel, L., 2010. A comparative rhetorical analysis of US and UK newspaper coverage of the correlation between livestock production and climate change. Proceedings of the 10th Biennial Conference on Communication and the Environment: Portland, OR.

Lee, K., Newell, J., Wolch, J. and Joassart-Marcelli, P. 2015. Cows, climate and the media. Chapter 12 in Emel, J. and Neo, H. (eds) (2015) *Political ecologies of meat*. Routledge, Abingdon pp.195-216.

MacLachlan, I. 2015. Evolution of a revolution: meat consumption and livestock production in the developing world. Chapter 2 in Emel, J. and Neo, H. (eds) (2015) *Political ecologies of meat*. Routledge: Abingdon pp.21-41.

Martin, S. and Hansen, K. 1996. Examining the "virtual"; publication as a "newspaper of record". *Communication Law and Policy* 1 (4): 579-594.

Mayes, X. 2016. Livestock and Climate Change: An Analysis of Media Coverage in the Sydney Morning Herald. Chapter 5 in Raphaely, T. and Marinova, D. (eds) 2016. *Impact*

of meat consumption on health and environmental sustainability. IGI Global: Hershey, PA: 75-105.

McMichael, A. Powles, J., Butler, C., Uauy, R. 2007. Food, livestock production, energy, climate change and health. *The Lancet* 370 (9594), pp. 1253-1263.

Meatless Monday (2016) It's worldwide! Published online:

<http://www.meatlessmonday.com/the-global-movement>, accessed 21.12.2016.

Miele, M. 2011. The taste of happiness: free range chicken. *Environment and Planning A* 43: 2076-2090.

Monday Campaigns 2013. About. Published online:

<http://www.mondaycampaigns.org/about>, accessed 11.9.2013.

Morris, C., Kirwan, J. and Lally, R. 2014. Less meat initiatives: an initial exploration of a diet-focused social innovation in transitions to a more sustainable regime of meat provisioning. *International Journal of the Sociology of Agriculture and Food*. 21 (2): 189–208.

Morris, C., Helliwell, R. and Raman, S. 2016. Framing the agricultural use of antibiotics and antimicrobial resistance in UK national newspapers and the farming press. *Journal of Rural Studies* 45: 43-53.

Neff, R.A., Chan, I.L. and Smith, K.C., 2009. Yesterday's dinner, tomorrow's weather, today's news? US newspaper coverage of food system contributions to climate change. *Public Health Nutrition* 12(07): 1006-1014.

Raphaely, T. and Marinova, D. (eds) 2016. Impact of meat consumption on health and environmental sustainability. IGI Global: Hershey, PA.

Renting, H., Schermer, M. and Rossi, A. 2012. Building Food Democracy: Exploring Civic Food Networks and Newly Emerging Forms of Food Citizenship. *International Journal of the Sociology of Agriculture and Food*, 19 (3): 289–307.

Rozin, P., Hormes, J., Faith, M., Wanksink, B. 2012. Is meat male? A quantitative multimethod framework to establish metaphoric relationships. *Journal of Consumer Culture*, 39. DOI: 10.1086/664970.

Sage, C. 2014. Making and un-making meat: cultural boundaries, environmental thresholds and dietary transgressions. Chapter 9 in M. Goodman and C. Sage (eds) *Food transgressions: making sense of contemporary food politics*. Ashgate: Aldershot pp.181-204.

Scarborough, P., Appleby, P. N., Mizdrak, A., Briggs, A. D. M., Travis, R. C., Bradbury, K. E., & Key, T. J. 2014. Dietary greenhouse gas emissions of meat-eaters, fish-eaters, vegetarians and vegans in the UK. *Climate Change* 125: 179-192.

Singer, R., 2016. Neoliberal Backgrounding, the Meatless Monday Campaign, and the Rhetorical Intersections of Food, Nature, and Cultural Identity. *Communication, Culture & Critique*. doi:10.1111/cccr.12155.

Springmann, M., Godfray, C., Rayner, M. and Scarborough, P. 2016. Analysis and valuation of the health and climate change cobenefits of dietary change. *PNAS* 113 (15): 4146-4151.

Steinfeld, H., Gerber, P., Wassenaar, T., Castel, V., Rosales, M., de Haan, C. 2006. *Livestock's Long Shadow: environmental issues and options*. Rome: Food and Agriculture Organisation.

Vainio, A., Niva, M., Jallinoja, P., Latvala, T. 2016. From beef to beans: Eating motives and the replacement of animal proteins with plant proteins among Finnish consumers. *Appetite* 106: 92-100.

Vinnari, M., & Vinnari, E. 2014. A framework for sustainable transition: The case of plant-based diets. *Journal of Agricultural and Environmental Ethics* 27: 369-396.

Westhoek, H., Lesschen, J. P., Rood, T., Wagner, S., De Marco, A., Murphy-Bokern, D., Leip, A., van Grinsven, H., Sutton, M. A., & Oenema, O. (2014) Food choices, health and environment: Effects of cutting Europe's meat and dairy intake. *Global Environmental Change* 26: 196-205.

Weis, T. 2010. The ecological hoofprint and the population bomb of reverse protein factories. *Review*, 33(2/3), 131–152.

Weis, T. 2013. The meat of the global food crisis, *The Journal of Peasant Studies*, 40 (1): 65-85.

Worldwatch 2014. Peak Meat Production Strains Land and Water Resources.

Worldwatch 'Vital Signs'. Published online:

<http://www.worldwatch.org/peak-meat-production-strains-land-and-water-resources-1> [accessed 21.12.2016].

ⁱ Flexitarianism is described by Dagevos (2016: 233) as a present day food style involving the less frequent eating of meat and consists of different forms or levels “ranging from minor adjustments to regular meat consumption patterns to fundamental departure from habitual meat eating practices”.

ⁱⁱ Such success can be interpreted as an outcome of a conflict situation in which food was in short supply and citizens could be more readily enrolled as part of a collective war effort. This is a very different context to the one encountered by contemporary LMIs in which food, and meat in particular, is abundant.

ⁱⁱⁱ It is interesting to reflect on the reasons for this growing interest, one of which is undoubtedly the publication in 2006 by the FAO of its report ‘Livestock’s Long Shadow’ (Steinfeld et al. 2006) which, although contested, has done much to raise the level of debate across a number of domains about the relationship between livestock production and climate change (e.g. Almiron and Zoppeddu 2015).

^{iv} Although meat consumption levels vary between countries in the developed world, overall these are in excess of 220g per person per day, more than double the global average target proposed by some health professionals to reduce the health risks from diet-related diseases (McMichael et al. 2007; Fehrenback et al. 2015).

^v However, caution needs to be exercised in use of the term ‘peak meat’ as elsewhere it has been used to refer to rising levels of meat consumption (e.g. Worldwatch 2014).

^{vi} Right leaning tabloid newspapers: Daily Express, Daily Mail, Daily Star, Metro, Sun. Right leaning broadsheet newspapers: Telegraph, Times (Browne 2005).

^{vii} Associated with which is editorial independence as well as a reputation for high standards of journalism, and accuracy in reporting both nationally and internationally.

^{viii} The impact on costs of food of a reduced meat / no meat diet is given more detailed consideration in Vainio et al. (2016).

^{ix} Although a small number of articles assert that even vegetarianism – cf ‘demi’ vegetarianism - is experiencing a positive shift in societal attitudes (e.g. Mesure, 12.7.2009, Independent).

^x In none of these cases was any supporting evidence provided of these past failures. It is also notable that the US government campaigns of the First and Second World wars that successfully encouraged citizens to ‘eat less meat’ are conveniently ignored in this reporting.

^{xi} Although the McCartney family are well known proponents of vegetarianism, the MFM campaign encourages the consumption of *less* rather than *no* meat. This is an important distinction ignored by some journalists.

^{xii} To further illustrate the lack of UK government action in this respect it is noted that the government in China has recently announced an intention to reduce meat consumption by 50%: <https://www.theguardian.com/world/2016/jun/20/chinas-meat-consumption-climate-change>.