Title: Public reaction to the UK government strategy on childhood obesity in England: a qualitative and quantitative summary of online reaction to media reports.

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Competing Interests: All authors declare that they have no conflicts of interest relevant to the submitted work.

Funding: All authors are supported by core funding from Manchester Metropolitan University. As such, this research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Key words: netnography, obesity, children, policy

Word count: abstract 218, text 3592

## ABSTRACT

This work aimed to summarise public real-time reaction to the publication of the UK government childhood obesity strategy by applying a novel research design method. We used a netnographic technique to carry out thematic analysis of user-generated comments to online newspaper articles related to the strategy. We examined likes/dislikes associated with comments as a proxy of agreement of the wider community with identified themes. To examine media influence on public reactionary comments we carried out thematic analysis of online media headlines published about the strategy, and compared these themes with themes identified from comments.

Three newspaper articles and 1704 associated comments were included. Three parent themes were identified: paternalism/libertarianism, lobbyist influence and, anecdotal solutions. The comments were largely negative (94%). Commenters were split as to individual responsibilities and the role of the government, some felt that lobbyist influence had won out over the nation's health and others offered non-evidence based solutions. The ten most liked and disliked comments reflected themes identified in our main analysis. There was parity between themes that emerged from comments and from headlines. This summary of the public's reactions to the obesity strategy publication may aid translation of public views and receptiveness into practice and inform subsequent government action and policy. Furthermore, the process applied herein may provide a means of informal public engagement.

# **1** INTRODUCTION

- 2 Nearly a third of children in England aged 2 to 15 years are overweight or obese. (1) By 2050 Britain is
- 3 predicted to be a mainly obese society with 25% of its children affected. (2) In a bid to halt the increasing
- 4 burden of obesity, the UK government have published their strategy to reduce childhood obesity in England,
- 5 "Childhood obesity: a plan for action". (3) This strategy was developed following recommendations of the
- 6 Health Select Committee in 2015.(4) Previous measures to tackle obesity have not been specifically focused on
- 7 children and have focused on single initiatives e.g. food labelling or provision of physical activity and healthy
- 8 eating guidance (5). These strategies however are lacking in effective approaches exemplified by the increasing
- 9 prevalence of obesity. The childhood obesity strategy aims to provide more appropriate intervention and support
- 10 by opening the discussion to stakeholders.
- 11 The strategy outlines 14 action areas relating to the following areas: changes and mandates for the food industry
- 12 including food labelling; supply of healthy food in public sector, school and home settings; improving
- 13 opportunities for physical activity and; support for families and individuals. The strategy is presented as the "the
- start of a conversation" and an integral feature is for the active engagement of schools, communities, families
- and individuals to achieve long-term sustainable change. Yet, although this call acknowledges the crucial
- 16 contribution the public can make in reducing obesity, the views and ideas of these acknowledged stakeholders
- 17 have not been sought (6) and thus have not informed the strategy and cannot inform subsequent government
- 18 actions.
- 19 It is important to ensure that public health strategies, policy, services and practice are aligned with the beliefs
- 20 and priorities of the public.(7) Translating public views into strategies and policy could help create services,
- 21 practice and interventions that are more effective.(8) Furthermore, gauging the reactions of the public is
- 22 important to ascertain understanding of and receptiveness to strategies and may also be a source of novel ideas
- and alternative perspectives.
- 24 There is no pre-existing forum for the public to comment on this strategy directly. Traditional qualitative
- 25 interviews, focus groups and systematic reviews could be used to collect and summarise the public's reactions
- and views, however there is a plethora of user-generated data available in online for that can be used for this
- 27 purpose. The public's views on news publications about the strategy are recorded in comments areas of
- 28 newspaper websites. Using these as a data source can provide a more timely and cost effective alternative to the
- 29 more traditional methods and has been previously shown not to compromise on the breadth of views captured
- 30 and to parallel findings from focus groups.(9) Thematic analyses of these comments provides a flexible but
- 31 rigorous means of capturing the broad range of views in reflexive reactions of individuals.(10, 11) It can give us
- 32 timely insight into popular views, predominant interpretations and potentially novel concepts and perspectives.
- 33 The collation and analyses of user-generated comments in this way, is inspired by netnography, originally
- 34 developed for marketing research.(12, 13) The value that online media can have for exploring public health
- issues is increasingly acknowledged.(9, 14-16) However, this is the first work to use this method and type of
- 36 data to provide timely thematic analysis of public comments to a core public health strategy.

- 37 The aims of this study is to present a novel research design method, netnography, by utilising it to summarise in
- real-time, the public's reactions to the publication of the childhood obesity strategy with the purpose of
- 39 informing subsequent policy, practice and government action.

40

## 41 METHODOLOGY

#### 42 Study design

- 43 We applied a netnographic technique of reviewing user-generated online content written by commentators on
- 44 mainstream media and social networking fora. In brief, we collated user-generated comments from selected
- 45 newspaper articles and to give context to the comments, headlines pertaining to the obesity strategy published in
- 46 online media. Using these data, we carried out a qualitative review of the headlines and comments and examined
- 47 the associated likes and dislikes as a proxy of resonance of views with the wider community.

## 48 Ethics, consent, copyright, and data anonymisation

- 49 Ethical approval was awarded by the Manchester Metropolitan University ethics committee prior to data
- 50 collection. We have followed the guidance for internet-mediated research from the British Psychological
- 51 Society (17) and adhered to copyright laws in conducting this work. Direct consent could not be attained
- 52 because of the nature of the data collection however; implicit consent was deemed to have been given by virtue
- 53 of posting in an open forum. No directly identifiable data were collected, comments were disassociated from
- 54 usernames prior to analyses.

## 55 Data collection

- 56 All headlines pertaining to the childhood obesity strategy published within 24 hours of publication were
- 57 collected using Google Alerts with the alert terms: "Online newspaper titles from which to collect comments
- 58 were selected using data from the National Readership Survey.(18) Our *a priori* inclusion criteria were national
- titles only and PC and mobile readership above 1,000,000 per year. On this basis the following publications
- 60 were identified for inclusion: Daily Mail, Daily Telegraph, Daily Mirror, The Sun and The Guardian. Further
- 61 inclusion criteria applied on the day of publication of the childhood obesity strategy were, running a story on the
- 62 obesity strategy within 24 hours of publication, and allowing user comments on the article. Articles from
- 63 included newspaper titles were eligible for analysis if the obesity strategy was the main theme. Two researchers
- 64 (RG and LOC) independently selected the articles from which to collect comments. There were no discrepancies
- between selections when compared. Comments along with the associated number of likes and dislikes were
- collected on the 18<sup>th</sup>-19<sup>th</sup> August 2016. Comments submitted during the first 24 hours after the publication of the
- 67 strategy were included. As there was no time of publication published with the childhood obesity strategy we
- applied a cut point of 7am on the 19th August to represent 24 hours.

#### 69 Data analysis

Headlines were grouped according to the type of publication they appeared in (e.g. news/medical/food industrypublications).

- 72 Headlines and comments were imported into Excel where they were screened for personally identifiable content,
- 73 profanities and calumny. Two researchers (RG and LOC) agreed all comments identified for censoring prior to
- 74 redacting.
- 75 Headlines and comments were imported into NVivo (version 10, QSR International) for separate thematic
- 76 analysis. An inductive approach was taken for the identification of themes as such there were no predetermined
- 77 themes or frameworks applied. Themes were identified from the headlines and comments in a step-by-step
- 78 process.(10, 11) A thematic approach was used to firstly identify open codes, subsequently these were translated
- into focussed codes. New themes were created when a comment did not fit with any of the previous identified
- 80 themes. A thematic map was created to illustrate relationships between the identified themes. One researcher
- 81 (RG) carried out the thematic analyses coding each headline/comment to one or multiple themes in an
- 82 interpretivist manner.(10, 11)
- 83 To ensure authenticity of meaning and rigour in the analysis, we developed a tiered auditing process based on an
- 84 audit trail and peer debriefing, two previously described methods for establishing validity in qualitative
- 85 research.(19) First, a second researcher (AP) reviewed that the themes identified reflected the coded data and
- that the interpretation and assignment of each headline/comment to a theme was justified. Secondly, the agreed
- 87 themes were presented to a panel of four researchers (RG, AP, SP, LOC) who reviewed the thematic maps to
- 88 ensure that they illustrated the coded data. We refined the thematic maps by making theoretical links between
- 89 child themes to generate parent superordinate themes representing theoretical perspectives within the data. We
- 90 collectively agreed the names of the themes to diminish personal contextualisation by any one researcher.
- 91 Sample comments were selected to represent each parent and child theme and are presented herein. We decided
- 92 *a priori* to examine the top five most liked and most disliked comments from each article. These comments were
- 93 extracted and summarised as a proxy of the level of agreement of the wider community and as a quality control
- 94 for representativeness of the comments. This was an *a priori* decision.
- 95 Headlines and comments were also classified as either a positive or a negative reaction to the strategy. Lastly,
- 96 identified themes in the headlines were compared with themes in the comments as a proxy of the impact of the
- 97 media on public reactionary comments.

## 98 RESULTS

#### 99 Media coverage

- 100 The "Childhood obesity: a plan for action", strategy was published on the 18<sup>th</sup> August 2016 by the UK
- 101 Department of Health. A Google alert 24 hours after the release of the strategy yielded 105 articles that
- 102 mentioned the strategy. After articles published prior to the publication of the strategy were removed, 87
- 103 remained. These 87 publications were from 66 distinct publishers. These were largely newspaper websites
- 104 (41%), food industry websites (19%) and scientific/medical websites (16%) (Supplementary table 1).
- 105 The most frequent theme identified from the headlines was *strategy insufficiency and ineffectiveness* (51
- 106 headlines). This was followed by *stakeholder lobbying* (27 headlines) and *strategy presented* (13 headlines).
- 107 Other less frequent themes included *soft drinks tax* (8 headlines), *political perspectives* (7 headlines), *Scotland's*
- 108 *obesity strategy* (3 headlines), *miscommunication of scientific messages* (2 headlines), *perception of obesity*
- 109 problem (1 headlines), belated strategy (1 headlines) and no consultation (1 headlines) (Supplementary table 2).

## 110 User-generated comments

- 111 Using the inclusion criteria specified, a total of three articles were identified from which to collect comments:
- 112 Health chiefs' fury as tougher rules on junk food are axed: Ministers accused of caving in after ditching plans to
- reduce sugar and put adverts on after the watershed (the Daily Mail), Childhood obesity: UK's 'inexcusable'
- strategy is wasted opportunity, say experts (the Guardian) and 'FAR FROM ROBUST' Jamie Oliver blasts
- 115 'disappointing' obesity strategy as Government attacked by experts for 'watering down' plans (the Sun). There
- 116 were 567 comments associated with the Daily Mail article, 1136 with the Guardian article and one with the Sun
- 117 article. During cleaning, we redacted 119 comments for irrelevance and 19 comments for contentious,
- 118 inflammatory and hate content, this included the one comment from the Sun. This left 1566 comments from two
- 119 data sources for thematic analysis.
- 120 Three parent themes, paternalism or libertarianism, anecdotal solution and lobbyist influence, along with 13
- 121 child themes emerged from our summary of public comments to the publication of the strategy (Figure 1).
- 122 Table 1 details the themes and provides sample comments that are representative of the comments within the
- 123 theme. 22% of commenters thought the responsibility of childhood obesity lies with parents. Parents were
- 124 viewed as ultimately responsible, despite wide acknowledgement of government responsibility with 55% of
- 125 commenters commenting that the government also had a responsibility to step in. A *them not me* perception of
- the obesity problem was evident irrespective of where the commenters thought the responsibility lay.
- 127 Commenters offered anecdotal solutions (32% of comments) largely around nutritional education and cost of
- healthy food. Comments highlighted changing societal norms (15% of comments) including two working parent
- 129 households and the changed takeaway environment, as having an impact on obesity rates. The prohibitive cost
- 130 of healthy food (7% of comments) was also discussed.

- A prominent theme was the suspicion about the influence of the food industry; commenters felt that the
- **132** government had been lobbied to make a decision that placed industry interests above public health interests
- 133 (34%) and that supermarkets had an opportunity to have impact but are not engaging (18%). There was an
- undercurrent of distrust towards health campaigners and medics (6% of comments) and experts (2% of
- comments). 9% of comments were about sugar and the "sugar tax". Mostly these were based on incorrect
- 136 interpretation of scientific literature and misinterpretation of the soft drinks levy e.g. incorrectly stating the role
- 137 of a certain nutrients in the body and the danger associated with them or had misunderstood the soft drinks levy
- to extend to confectionary.
- 139 The two most liked comments also were grouped under the theme paternalism or libertarianism and spoke about
- 140 parents' responsibility to teach their children. The other three most liked comments were grouped under lobbyist
- 141 influence and spoke about the food industry's influence on governmental decisions and the government
- 142 reneging on previously planned commitments.
- 143 Three of the most disliked comments were grouped under the theme paternalism or libertarianism and spoke
- about parents being at fault for failing to act. The other two most disliked comments were grouped under
- 145 lobbyist influence and spoke about conspiracy theories and the soft drinks levy not being about health but about
- 146 making money.
- 147 Comments reflected headline themes. 58% (n=51 headlines) of the headlines had a negative "spin" of
- 148 insufficiency and ineffectiveness. The public reaction was largely negative (94%, n=1472 comments). A
- 149 frequent theme in both headlines and comments was stakeholder lobbying/lobbyist influence.

### 150 DISCUSSION

#### 151 Principal findings

152 Public reaction to the strategy was largely negative and reflected the media headlines. The comments were

153 fundamentally split between where the responsibility lies for the cause and prevention of childhood obesity.

154 Commenters took a simplistic view of the issue and parents were ultimately viewed as responsible, despite some

155 acknowledgement of wider society, cultural and environmental influences that were seen as government

156 responsibility. A prominent theme was the suspicion about the influence of the food industry; commenters felt

157 that the government had been lobbied to make a decision that placed industry interests above public health

158 interests. Finally, commenters were keen to offer solutions. Mostly these were anecdotal and not evidence based

159 however, they offered insight into how the public perceive the obesity problem, changing societal norms, drew

160 parallels with situations, and referred to practice in other countries.

#### 161 Findings in context

162 The government has presented the strategy as "the start of a conversation". Thus, the findings of this first163 application of netnography to gauge public reactions to a core public health strategy can be used to inform

164 subsequent government action and policy and future strategies by ascertaining understanding, receptiveness and

165 alternative perspectives. This research also provides a means of genuine public engagement between citizens and

166 government in policymaking. One of our principal findings, that the respondents felt that the government had

167 been influenced by industry lobbying, demonstrates a degree of scepticism and disappointment among the public

168 about the potential impact of their participation. Engagement with online public fora may alleviate this. This is in

169 keeping with the growing acknowledgement that the internet can play a key role in capturing opinion towards

170 public health issues.(9) In that vein, we believe that netnography can present the range of opinion and that it may

171 de-marginalise the voices of respondents. Higher level of government trust has been previously associated with

172 acceptance of public health interventions.(20) Involvement of the public in the evolution of public health

173 strategies and transparency in the consultation process that underpins them could therefore help towards a feeling

174 of public ownership and may improve acceptability. Clinicians and public health professionals should take note of

themes that arose from this summary. Our analyses suggest the public are distrustful of "experts", they are

176 confused about nutritional messages and they do not acknowledge how wide reaching the obesity problem is, in

177 particular thinking only other people's children are overweight. Being aware of the presence of these attitudes

178 when having conversations with the public may improve communication of obesity messaging. Lastly, the

179 plurality in opinion identified in our analyses leaves any approach open to failure and thus acknowledges a

180 difficult position for government intervention.

181 The influence of the media on public reaction to the publication of the strategy was evident. Parity between the

182 themes identified in the headlines and those in the comments suggests that if the reporting had been different and

183 more focused on presenting the key points contained in the strategy then the comments and views may have been

184 different. Mass media has the potential to influence health related behaviours and perceptions.(21) The question

185 arises therefore, as to the responsibility of the media to report accurately and as to the need for active management

186 of the release of public health strategies and policies.

## 187 Strengths and limitations

188 As is the nature of qualitative research, we do not present these results as objective and cannot rule out researcher 189 bias. However, we took steps to mitigate subjectivity and personal contextualisation of the themes and to increase 190 reliability of the comment assignment to theme including, stepwise agreement and independent review of themes. 191 We also used likes and dislikes to evaluate agreement of the other commenters and readers with the themes and 192 comment representativeness of reactions to improve robustness of findings and representativeness of themes. 193 There is currently no official forum for the public to present their reactions to the strategy directly therefore, this 194 analysis is an indirect assessment of public reaction mediated through online news stories. It is unclear how many 195 people read the strategy itself or the news reports and biases arising from the media presentation of the strategy 196 were evident in the public reaction. Although this is a limitation of summarising the public reactions to the 197 strategy using this method, it highlights the influence the media has on public opinion and is presented and 198 discussed herein as an implication of this research. We should note that we cannot infer the direction of this 199 association from our work and there is the possibility that media headlines reflect long standing public views. 200 Other limitations of indirect assessment included, inability to steer the conversation and no facility to ask follow 201 up questions to improve clarity of meaning. We did not aim to summarise comments from a representative sample 202 of the UK population but rather to capture the voices of individuals who are acknowledged stakeholders but do 203 not usually contribute to the evolution of policy. As the comments were collected post hoc and the commenters 204 post under assumed online identities, we cannot comment as to the representativeness of the commenters. The 205 contributors to online news fora are a self-selecting group likely with varied socioeconomic status, political views, 206 race and gender. Those without internet access or sufficient proficiency in English are inherently excluded. Also, 207 those who dislike a policy are more likely to participate in forums that those who are indifferent or agree with it. 208 (22) However, the newspaper titles were taken from the three national groups identified by the National 209 Readership Survey (Quality, Mid-range and Popular) (18) in order to be representative of the newspaper market. 210 We chose a cut-off of 24 hours for data collection. While it might be argued that the brief time frame was 211 insufficient to collect a wide breadth of reactions, we felt that the spontaneity and contemporaneous nature of the 212 comments was a distinct and important feature of the data. Furthermore, as we reached new theme saturation 213 after coding 24% of the comments it is unlikely that extending our data collection period would not have 214 generated further themes. Lastly, we limited our data collection to comments generated in response to online 215 newspaper publications. It could be argued that expanding the data collection field to include social media would 216 be beneficial in terms of identifying other demographics and reactions, however social media comments are not 217 linked to information sources and identification of comments for inclusion is based on researcher search terms. 218 Therefore, to ensure a systematic approach to data collection and to ensure we could interpret the collected data in 219 light of the information source, we did not use social media comments. The main strengths of this research is that 220 using user-generated online comments is a quick and cost effective method that facilitates timely summarisation and interpretation of a large number of reactions. Thus producing material that can inform further related policy, 221 222 practice and public health actions as they are generated.

223 The ethics of methods that make use of readily available online data are less developed than an 'off line' project 224 which relies on the informed consent of its participants for its moral sufficiency. The participants in this study 225 could not have anticipated that their contributions would be used for this research therefore; they have not

- 226 provided their consent in the usual sense. However, participants have contributed to public online fora with the 227 intention of having their views heard and by doing so they have sought to influence the debate surrounding the
- 228 government's childhood obesity strategy. Notwithstanding that, the participants have not provided their express
- 229 consent, in our view and as agreed by the ethics review board, it is reasonable to infer that by their actions they
- 230 implied consent to the use of their contributions in subsequent debate. While data collection without prior notice
- 231 raises ethical issues, it has the advantage of allowing a level of candour that may not be forthcoming where a
- 232 researcher declares their presence and seeks explicit consent. Some of the comments were inappropriate but have
- the advantage that they were open and reflect the reality of citizens' experience. It is conceivable that we may
- 234 have taken steps to notify participants of our intention to use material for research. For example by seeking to
- amend the terms of the forum with the cooperation of the site owners, or simply by joining the discussions and
- announcing our presence and thereby imputing acquiescence from continued participation rather than express
- 237 consent. On balance, we took the view that such action might influence discussions and undermine the
- authenticity of the debate and, was disproportionate to the risk of any harm.

#### 239 CONCLUSION

- 240 The process applied herein may provide a time and cost effective means of informal public engagement with
- 241 citizens and mitigate the risks of disengagement. The summary of the public's real time reactions to the
- 242 publication of the obesity strategy might inform subsequent government policy should it choose to respond. The
- 243 process may thus be applied across many aspects of policymaking in England, the UK and, internationally.

# 244 References

- 1. Health and Social Care Information Centre. Health Survey for England 2014. 2015.
- 246 2. Forsight Tackling Obesities: Future Choices Project. 2007.
- 247 3. Department of Health. Childhood obesity: a plan for action. 2016.
- 248 4. House of Commons Health Committee. Childhood obesity—brave and bold action. 2015.
- 2495.Department of Health. 2010 to 2015 government policy: obesity and healthy eating 2015
- [cited 2016 22nd December]. Available from: <u>https://www.gov.uk/government/publications/2010-</u>
   <u>to-2015-government-policy-obesity-and-healthy-eating/2010-to-2015-government-policy-obesity-</u>

and-healthy-eating.

253 6. gov.uk. Government Publications Consultatations 2016 [cited 2016 22nd December].
254 Available from:

255 <u>https://www.gov.uk/government/publications?publication\_filter\_option=consultations.</u>

- Israel BA, Schulz AJ, Parker EA, Becker AB. Review of community-based research: assessing
   partnership approaches to improve public health. Annu Rev Public Health. 1998;19:173-202.
- Cheadle A, Hsu C, Schwartz PM, Pearson D, Greenwald HP, Beery WL, et al. Involving local
   health departments in community health partnerships: evaluation results from the partnership for
   the public's health initiative. J Urban Health. 2008;85(2):162-77.
- 9. Giles EL, Holmes M, McColl E, Sniehotta FF, Adams JM. Acceptability of financial incentives
  for breastfeeding: thematic analysis of readers' comments to UK online news reports. BMC
  Pregnancy Childbirth. 2015;15:116.
- 264 10. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology.
  265 2006;3(2):77-101.
- 11. Fade SA, Swift JA. Qualitative research in nutrition and dietetics: data analysis issues. Journal
  of Human Nutrition and Dietetics. 2011;24(2):106-14.
- 12. Kozinets RV. The Field Behind the Screen: Using Netnography for Marketing Research in
  Online Communities. Journal of Marketing Research. 2002;39(1):61-72.
- 270 13. Kozinets RV. Marketing Netnography: Prom/ot(Ulgat)ing a New Research Method.
- 271 Methodological Innovations Online. 2012;7(1):37-45.
- 27214.Giles EL, Robalino S, McColl E, Sniehotta FF, Adams J. The effectiveness of financial273incentives for health behaviour change: systematic review and meta-analysis. PLoS One.
- 274 2014;9(3):e90347.
- 275 15. Giardina TD, Sarkar U, Gourley G, Modi V, Meyer AN, Singh H. Online public reactions to
  276 frequency of diagnostic errors in US outpatient care. Diagnosis (Berl). 2016;3(1):17-22.
- Henrich N, Holmes B. What the public was saying about the H1N1 vaccine: perceptions and
  issues discussed in on-line comments during the 2009 H1N1 pandemic. PLoS One. 2011;6(4):e18479.
- 279 17. British Psychological Society. Ethics Guidelines for Internet-mediated Research2013 [cited
- 280 2016 23rd August]. Available from: <u>http://www.bps.org.uk/system/files/Public%20files/inf206-</u>
   281 guidelines-for-internet-mediated-research.pdf.
- National Readership Surevy [cited 2016 15h June]. Available from: <u>http://www.nrs.co.uk/</u>.
   Creswell JW, Miller DL. Determining Validity in Qualitative Inquiry. Theory Into Practice.
- 284 2000;39(3):124-30.
- 285 20. van der Weerd W, Timmermans DR, Beaujean DJ, Oudhoff J, van Steenbergen JE. Monitoring
  286 the level of government trust, risk perception and intention of the general public to adopt protective
  287 measures during the influenza A (H1N1) pandemic in The Netherlands. BMC Public Health.
  288 2011;11:575.
- 289 21. Leask J, Hooker C, King C. Media coverage of health issues and how to work more effectively 290 with journalists: a qualitative study. BMC Public Health. 2010;10:535.
- 291 22. Chmiel A, Sobkowicz P, Sienkiewicz J, Paltoglou G, Buckley K, Thelwall M, et al. Negative
- 292 emotions boost user activity at BBC forum. Physica A: Statistical Mechanics and its Applications.
- 293 2011;390(16):2936-44.

	% of comments reflecting themes <sup>a</sup>	Selected comments		
Paternalism or	96	but you and the many other posters responding have adopted the		
libertarianism		most cynical of all views a notion that we have no agency.		
Parental responsibility	21	I would welcome stronger measures to reduce sugar and other substances in food by taxation or any other means BUT the ultimate responsibility for having fat kids lies fairly and squarely with the parents.	The only people who should be looking after their children's food intake are the parents.	
Personal responsibility	16	If I want junk food I'll eat it. If people can't control themselves and become obese charge them for the treatment.		
Government responsibility	55	If millions of parents are letting millions of kids get obese then what more reason does the government need to step in?	As it's impossible to persuade many parents, you need control to avoid the cost to the NHS. That's why you need government regulation.	
EU Brexit	3	Brexit step one of "freedom" - now do you know what it means? "We want less interference from Brussels" well - here you go - children and grandchildren with rotten teeth.		
Communism	2	This is not a communist state, we should be advised not forced.		
Inadequate government	17	Typical of MPs to turn their backs on good advice. Why is it that politicians always do the opposite to what is the right thing to do!!	This Administration were not going to upset their supporters and donors who manufacture this rubbish, for the sake of the health of the peasants who are too ill educated not to eat the junk. After all PROFITS above ALL is their policy.	
Inadequate/ineffective strategy	7	The next time they moan about the cost to the NHS concerning obesity I'll ignore their hand ringing moaningand recognise their greed.	It was just tokenism at its worse and a typical Cameron trick to avoid really dealing with the problem by physical effort and proper dietary information.	
Left vs right political perspectives	7	It is a shame that the government is doing anything at all. What shape we are is no business of theirs. They should tell these professional nanny campaigners to take a hike. This is supposed to be a free country, not a dictatorship.	This is *exactly* what happens in countries like Norway, Sweden and Germany. Because unfettered capitalism and a communist dictatorship are the only two choice.	
Individualistic ideology vs social responsibility	5	The good thing is that through all this publicity, everyone is more aware of how many foods contain sugar, and if they wish to make some changes in what they buy, then they are free to do so. I would say though that supermarkets should take the decision not to put sweets at the checkout, to show they care about their customers by avoiding the parents having to seem like the bad guys, when they have to refuse to buy that rubbish for their kids.	If poor people die due to choosing a bad diet then yes it is their fault, if they die due to poor local health care then yes blame the government.	
Nanny state	9	Part of me says shame on the government but do we really need a nanny state telling us what to feed our kids and taxing us as such? Surely adults are 'adult' enough to decide what is good or bad for their children.	What we put in our mouths is our responsibility. As adults we are in control of ourselves and our children - Not Nanny.	
Positives of the strategy	2	While state interference might be somewhat effective, there are always repercussion and consequences, including: a good many of the supplementary taxes that hurt the poor most. So, I am glad	Already too much regulation in people's lives. For better or worse we make our own choices.	

		about this report. This is an appropriate level of action, and perhaps even shows a level of wisdom not often seen in the corridors of Westminster.	
NHS burden	4	The NHS was intended to treat the genuinely sick and injured not people making a lifestyle choice to be unhealthy and kill themselves through gluttony.	By not reducing sugar content in products the Ministry of Health is storing up very expensive problems for the NHS in the future when so many children are already overweight.
Schools' responsibility	4	Proper education about nutrition is needed and children should be taught to cook in schools.	have compulsory cookery lessons in secondary schools for all youngsters from year 9 on a weekly basis so that all youngsters leave school being able to budget and cook a range of at least 20 simple and nutritious meals.
Anecdotal solutions	32	As long as we make sure the unhealthier sugary food isn't cheaper than the 'proper' food and thus unobtainable for a large proportion of the population struggling under austerity nothing can go wrong.	It's about education and ensuring kids have enough exercise - running around outside instead of sat in front of screens. Parents should be educated on nutrition.
People power	2	The consumer is powerful, if people really didn't want to consume sugary goods then the sugar industry would lose their power.	The manufactures of all the salty and sugary foods might think twice if there was a big move to boycott their products but sadly this will not happen.
Misled nutritional messages	5	The exercise myth as peddled by the sugar industry.	Sugar is better for you than all the chemical sweeteners in food now.
Health inequalities	7	To cook good healthy food from scratch costs money, good butcher's meat is more expensive as are good fruits and veg, cheap processed foods are cheaper, that is the problem. I can afford to walk around a supermarket and not worry about cost, many can't.	People who are on a low wage and purchase cheaper supermarket meats like mince and sausages should not have to check a label to see if it contains sugar, which many processed meats do.
Changing societal norms	15	We live in a society where both parents have to work as standard. When I grew up my mother, like many others of that era stayed at home and cooked from scratch. These days parents, even those with the best intentions sometimes due to work pressures have to grab a jar of curry sauce or the like and make a quick meal.	Too many kids living off takeaways. Town centres full of fast food shops. Parents who never touch a cooker, just ring out for pizza or Indian, or nip to the chippie.
International reference	1	Same thing happened in America when they tried to reduce the amount of sugar in food. The food agency has a lot of power.	If you go to my local supermarkets in Germany you will see a whole section devoted to salty snacks, another to sweets and another to biscuits.
Lobbyist influence	52	Most people know that it's lobbyists that run the country, not the government.	
Stakeholder influence	6	Too many politicians, doctors, charity chief executives and scientists with their noses in the boardroom troughs.	the "health campaigners" are professional lobbyists backed by a great deal of money and influence
Jamie Oliver	3	We don't want sugar tax as per Jamie Oliver's proposal.	
Supermarkets	18	I would say though that supermarkets should take the decision not to put sweets at the checkout, to show they care about their customers by avoiding the parents having to seem like the bad guys, when they have to refuse to buy that rubbish for their kids. Of course it won't happen.	Supermarkets are getting away with murder literally but we have a choice.

Sick of experts	2	I'm glad the government has at last reined back the nanny state from these sugar tax proposals put forward by the fascist dietary 'experts' recently.	These charlatans who have been handing out all the wrong advice for the last 40 years actually demand people take notice of their food fads. These people have caused the obesity epidemic in children with their seriously flawed advice and yet they expect us all to fall in line behind them once again.		
Private industry influence	35	This outcome is the lowest of the low putting corporates and their profits before British children's health	The real question here is why are companies allowed to lobby our government this is an affront to our Democracy.		
Sugar and "sugar tax"	9	There should at least be a level of taxation on sugar, to match the costs to the NHS, for the health issues that sugar is known to cause. The same for fatty junk food.	There is sugar in pizza, burger buns and pasta which are generally food items that you wouldn't expect to find it in. Sugar is additive and extremely powerful.		
30/ should not add to 1000/ as commonts can be counted under multiple themes or may be in a percent theme but not only of the shild themes					

<sup>a</sup> % should not add to 100% as comments can be counted under multiple themes or may be in a parent theme but not any of the child themes

Figure 1 Thematic map of user-generated comments in response to the publication of the childhood obesity strategy 2016, n=1566

