Department of Health & Social Care

Equality Assessment

Calorie labelling in the out-of-home sector

Contents

1. Introduction

1.1 This paper examines the impact of the policy to mandate calorie labelling in the out-of-home sector on people with protected characteristics.

1.2 Under the Equality Act 2010 (the Act), the Department for Health and Social Care (DHSC), as a public authority, is legally obliged to give due regard to the Public Sector Equality Duty (PSED) when making policy decisions. The PSED is also known as the general equality duty.

1.3 DHSC, as a public authority must, in the exercise of its functions, have due regard to the need to:

(a) Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act;

(b) Advance equality of opportunity between people who share a protected characteristic and those who do not; and

(c) Foster good relations between people who share a protected characteristic and those who do not.

1.4 The PSED covers consideration of the following protected characteristics: age, disability, gender reassignment, pregnancy and maternity, race, religion and belief, sex, and sexual orientation, with marriage and civil partnership being a protected characteristic under (a) above.

2. Background

2.1 In June 2018 the Government published Chapter 2 of the Childhood Obesity Plan. This set a national ambition to halve childhood obesity and significantly reduce the gap in obesity between children from the most and least deprived areas by 2030. Childhood obesity is one of the most significant health problems this country faces and at the heart of the Government's prevention agenda.

2.2 Nearly a quarter of children in England are obese or overweight by the time they start primary school aged five, and this rises to one third by the time they leave aged 11[i].

2.3 Childhood obesity rates in the UK are among the highest in Western Europe[ii]. Obese children are more likely to become obese adults, and obesity in adulthood increases an individual's risk of developing type 2 diabetes, heart disease, fatty liver disease and a number of cancers[iii,iv,v].

2.4 The outbreak of COVID-19 has been one of the biggest public health challenges ever faced by the UK and is a catalyst for us to redouble our efforts to reduce obesity levels in the UK. Emerging evidence shows that patients with obesity, and in particular morbid obesity, may be more likely to be admitted to intensive care; require advanced treatment, such as ventilation; and early evidence suggests they might have a 37% increased risk of dying from COVID-19 compared to non-obese patients[vi].

2.5 We know it is regular overconsumption of a relatively small number of calories that leads to individuals becoming overweight or obese[vii]. It is likely that eating out frequently, including eating takeaway meals, contributes to this gradual overconsumption of calories. Research suggests that eating out accounts for 20-25% of adult energy intake[viii], and that when someone dines out or eats a takeaway meal they consume, on average, 200 more calories per day than if they eat food prepared at home[ix]. Data also tells us that portions of food or drink that people eat out or eat as takeaway meals contain, on average, twice as many calories as equivalent retailer own-brand or manufacturer-branded products[x].

2.6 Eating out or getting a takeaway is common; surveys tell us that 96% of people eat out, and 43% do so at least once or twice a week[xi]. Research also suggests that people are eating out more often; in 2014, 75% of people said they had eaten out or bought takeaway food in the past week, compared to 69% in 2010[xii]. Consumption of fast food and takeaways is particularly prevalent among families, as evidence from 2016 showed that 68% of households with children under 16 had eaten takeaways in the last month, compared with only 49% of adult-only households[xiii].

2.7 There is strong public demand for calorie labelling; 79% of respondents to a Public Health England survey said they think that menus should include the number of calories in food and drinks[xiv]. Another survey from Diabetes UK showed that around 60% of the public said that they would be more likely to eat at an establishment that offered calorie labelling on its menus[xv].

2.8 Currently, although some businesses offer calorie and other nutritional information in their stores or on their websites, many do not. The Department of Health and Social Care has previously tried a voluntary approach to encourage more businesses to calorie label through its Public Health Responsibility Deal, launched in 2011. One of the pledges asked food businesses to provide calorie information for customers on menus and/or menu boards; in total, only 45 businesses signed the pledge.

2.9 Subsequent studies have suggested that, among signatories of the pledge, some did not display calorie labels and many of those who did were not found to meet all the labelling recommendations[xvi]. Additionally, one study suggested that businesses would sign up to pledges with which they are already compliant, only 4% of signatories providing calorie labelling were judged as motivated by the Responsibility Deal[xvii].

2.10 Taken together, this suggests that voluntary action is insufficient to drive action on the scale required to address increasing levels of childhood obesity. Therefore, the Government consulted on introducing mandatory calorie labelling for the out-of-home (OOH) sector between 14 September and 7 December 2018.

2.11 This document accompanies the Government's response to that consultation which confirms that we will legislate to introduce calorie labelling for large out-of-home sector businesses (businesses with 250+ employees).

2.12 The following sections will examine the impact of the policies in the plan on various groups sharing protected characteristics. We have considered whether there are any unintended consequences and how we can mitigate any disadvantages.

3. Consultation feedback

Do you think that this proposal would be likely to have an impact on people on the basis of any of the following characteristics?

Age - 205 (29%)

Sex - 104 (15%)

Race - 65 (9%)

Religion - 51 (7%)

Sexual orientation - 28 (4%)

Pregnancy and maternity - 85 (12%)

Disability - 126 (18%)

Gender reassignment - 23 (3%)

Marriage / civil partnership - 27 (4%)

Total - 714

3.1 The consultation sought views on whether this proposal would be likely to have an impact on people on the basis of a number of protected characteristics. Respondents could select as many characteristics as they believed applied. In total, respondents selected characteristics 714 times.

3.2 Respondents could provide a justification to explain their answer in a free text box. Free text answers were analysed to assess whether the respondent believed the policy would have a positive or negative effect on the particular characteristic.

3.3 Of the free text responses, the most frequent comment was that the policy may have a detrimental impact on people with eating disorders or may contribute to more people developing eating disorders. A number specifically commented that eating disorders are more prevalent among women and therefore the policy may negatively impact women over men.

3.4 Some respondents raised the point that visually impaired and blind people will not benefit from calorie labels unless out-of-home outlets are required to display information in braille or read calorie information to customers.

3.5 There were a range of additional, less frequent comments. Some respondents mentioned that there may be a range of educational and language barriers which could make either providing or using calorie labels more challenging for certain individuals. Other respondents mentioned that an individual's calorie needs may vary by gender, age, and activity levels and therefore referring to the recommended daily intake for an adult woman may not be appropriate for many. A proportion of these respondents specifically suggested that calorie needs vary during pregnancy.

Do you think this proposal would help achieve any of the following aims?

Eliminating discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010 - 43 (4%) respondents

Advancing equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it - 59 (5%) respondents

Fostering good relations between persons who share a relevant protected characteristic and persons who do not share it - 46 (4%) respondents

Not answered - 1,010 (87%)

3.6 Respondents could provide free text responses to justify their answer. A number of respondents also mentioned in answer to this question that an increased presence of calorie labels may present a challenge for people with eating disorders.

3.7 Some respondents also highlighted that while the policy doesn't discriminate against people with diabetes it would be helpful for those with type 2 diabetes if the out-of-home sector also displayed carbohydrate content to help them manage blood sugar levels.

4. Assessment against protected characteristics

4.1 The policy is to introduce mandatory calorie labelling for large out-of-home sector businesses (businesses with 250+ employees). The out-of-home sector is considered as any outlet where food or drink is prepared in a way that means it is ready for immediate consumption by the person who buys it.

4.2 The primary objective of the policy is to help consumers make informed and healthier choices for themselves and on behalf of their families when eating out. It is also hoped that displaying calorie labels will encourage businesses to reformulate existing products to reduce the number of calories in them. As a result, the policy aims to reduce the number of calories people consume and, in combination with a number of other interventions, reduce the prevalence of childhood obesity.

Age

Obesity prevalence

4.3 Obesity prevalence is different across age groups. National Child Measurement Programme (NCMP) data shows that obesity prevalence increases in children in England as they progress through primary school. Around 1 in 10 children in Reception and 1 in 5 children in Year 6 is obese[xviii].

4.4 There are increasing trends in obesity in Year 6. For example, between 2006/07 to 2018/19 obesity prevalence for children in Year 6 (aged 10 to 11) increased from 17.5% to 20.2%, and broadly stayed similar for children in Reception (aged 4 to 5) from 9.9% to 9.7%.

4.5 Health Survey for England 2018 data shows that over 6 out of 10 adults are either overweight or obese (63.3%) with over 1 in 4 obese (27.7%).

Impact of OOH calorie labelling

4.6 There is some research suggesting people of different age groups are either more or less likely to use calorie labelling to inform their choices. Research from the United States of America suggests people over 55 may be least likely to use calorie labelling in restaurants [xix]. However, this is a US study and may have limited applicability to the UK.

4.7 In the UK, there is some evidence to suggest that attitudes towards calorie consumption are similar across different ages with people aged 16 - 34 valuing appropriate calorie consumption to a similar degree as those aged 55+[xx].

4.8 However, there may be some discrepancy in knowledge of recommended daily caloric intake, with younger individuals (aged 16 to 34) more likely to be aware of recommended daily intakes than individuals over 55[xx]. This suggests that menu labelling with calories alone may be less impactful among older individuals.

4.9 In addition to displaying calorie totals, the policy will stipulate that calorie labels will need to include contextual labelling, that is a reference to the recommended daily calorie intake of an adult women (2,000 kcal). Contextual labelling has been shown to be particularly effective at reducing calorie consumption[xxi]**.** It is also likely to support those with less knowledge of recommended daily intakes to make more informed healthier choices.

4.10 Consultation feedback highlighted that calorie needs can vary significantly, particularly among children. In 2016, Public Health England published dietary recommendations for males and females aged 1-18 years and 19+ years[xxii]**.** Public Health England's document suggest daily calorie intakes for children by the age of 11 years and over are broadly similar as general nutritional advice for adults.

Conclusion

4.11 The policy stands to benefit all regardless of age. While there are potential differences in knowledge of recommended daily calorie intakes across different age groups, requiring menus to reference recommended daily intake will help mitigate any differences.

4.12 There is no evidence that calorie labelling will be detrimental with regards to age under (a), (b) and (c) of paragraph 1.3. Overall, we expect the policy to have a neutral impact with regards to age.

Disability

Obesity prevalence

4.13 Analysis by Public Health England suggests children with disabilities are more likely to be obese than those without disabilities. This difference increases with age. Analysis of combined data from the Health Survey for England 2006-2010 shows that children with a limiting long-term illness are approximately 35% more likely to be obese than children without a limiting long-term illness. Overweight and obesity in children and young people has also been linked to a range of disabling

conditions, including learning disabilities, physical activity limitations, spina bifida as well as audio-visual impairments[xxiii].

4.14 Disabled children are therefore at greater risk of developing obesity-associated conditions as adults, such as type II diabetes. In adults, there is a two-way relationship between obesity and disability; i.e. disabled adults are more likely to be at risk of obesity, while obese adults may develop complications leading to disabilities because of being obese[xxiv].

Impact of OOH calorie labelling

4.15 Consultation feedback highlighted that calorie labels on a menu or menu board may not be accessible or have limited benefit for visually impaired people. The same may also be true for people with other disabilities, such as learning disabilities. In such cases business may be required to make reasonable adjustments to ensure that information on their menus can be accessed by all customers as is their duty under the Equality Act.

4.16 A few consultation respondents mentioned that requiring businesses to display carbohydrate and sugar content of their food and drink items would help people with diabetes to manage their blood sugar. The addition of carbohydrate labelling is outside of the scope of the policy that was consulted on. Nevertheless, calorie labelling will support many people with diabetes to manage their weight.

Mental Health

4.17 Obesity can affect an individual's quality of life and can lead to psychological problems, such as depression and low self-esteem[xxv]. Creating an environment which supports individuals in making healthier choices for themselves and their families will help individuals manage their weight and therefore support improved mental health outcomes.

4.18 Through the consultation a significant number of consultation respondents mentioned eating disorders in their responses with many suggesting that they believe the policy could have an adverse impact on people with eating disorders.

4.19 The evidence surrounding this issue is somewhat mixed. One paper[xxvi] reports that participants with an eating disorder ordered significantly fewer calories when presented with a menu with calorie labels compared to a no-label condition, and another[xxvii] suggests students with weight concerns were more likely to be influenced by food labels than those without. A paper by Larson et al.[xxviii] found that using menu labels led to more weight-related concerns and unhealthy weight-control behaviours.

4.20 However, research by Lillico et al.[xxix] considered the effect of menu labelling on those at high risk for eating pathologies and found no significant change in calorie consumption in response to posting calorie labels. And although research by Christoph et al.[xxx] found that label use on packaged foods was related to engagement in some unhealthy weight behaviours, there was a larger likelihood of participants engaging with healthy weight control behaviours.

4.21 Although the Department acknowledges this concern, with more than a third of children leaving primary school overweight or obese and nearly two-thirds of adults, it is important to equip people with the information to make decisions about their food intake. Information on the energy content of food and drink is already widely available in supermarkets through mandatory nutrition labelling requirements on pre-packaged foods and some restaurants. We are committed to striking a careful balance between informing and educating people to make healthier choices whilst not negatively impacting people with eating disorders or those in recovery from eating disorders.

Conclusion

4.22 Overall, we expect the policy to have a neutral impact with regards to the considerations under paragraph 1.3.

4.23 As there is a higher prevalence of obesity among people with disabilities, calorie labelling has the potential to particularly benefit this group. While printed / written calorie information will not be accessible to those with visual impairments, businesses are already required under the Equality Act 2010 to make reasonable adjustments for those with disabilities to access services, and therefore should make the information on menus, including calorie information, accessible for those with disabilities.

Gender Reassignment

4.24 We have considered the impact of the proposals on the protected characteristic of gender reassignment. There is no evidence to suggest that the proposed policy will have a negative impact on people who share this protected characteristic compared with people who do not share this protected characteristic.

Pregnancy and maternity

Obesity prevalence

4.25 Women who are obese when they become pregnant have increased risks to their own and their child's health[xxxi]. They are more likely to experience complications in labour[xxxii,xxxiii] and their children have increased risks of obesity in childhood and adulthood, and other health conditions later in life including heart disease, diabetes, and asthma[xxxiv,xxxv,xxxvi,xxxvii]. Maternal obesity is also associated with an increased risk of infant mortality[xxxviii].

4.26 Although maternal obesity rates are not routinely monitored in England, we do know that obesity in pregnant women has increased, which is likely to increase the risks passed on to children. Between 1989 and 2007, first trimester maternal obesity (the proportion of pregnant women with a BMI greater than 30) doubled from 7.6% to 15.6%[xxxix]. PHE analysis found that 58% of all women of childbearing age in England are either overweight or obese and therefore they and their children are at greater risk during and after the pregnancy[xl,xli].

Impact of OOH calorie labelling

4.27 In response to the consultation, respondents most frequently suggested that requiring menus to refer to the recommended daily calorie intake for women may not be appropriate for pregnant or breastfeeding women.

4.28 However, the National Institute for Health and Care Excellence (NICE) recommends that pregnant women should not alter their calorie intake during the first 6 months of pregnancy and only slightly increase calorie intake in the final 3 months (by around 200 calories per day)[xlii].

4.29 While there is a discrepancy in recommended daily calorie intake for pregnant women, this only occurs in the final trimester. Therefore, for the majority of the pregnancy, a woman's recommended calorie intake remains the same as is recommended for non-pregnant women.

Conclusion

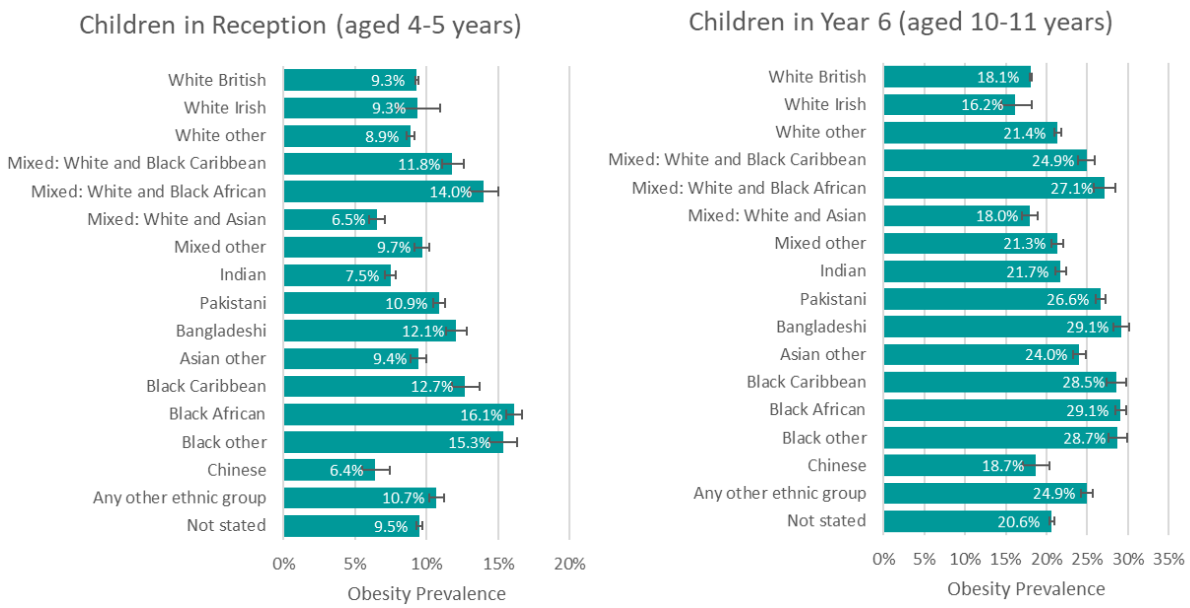
4.30 Overall, we expect the policy to have a neutral impact with regards to pregnancy and maternity on the three aspects of paragraph 1.3.

Race

Obesity prevalence

4.31 Data from the National Child Measurement Programme suggests there are differences in obesity prevalence across racial groups for both children (Figure 1) and adults (Figure 2).

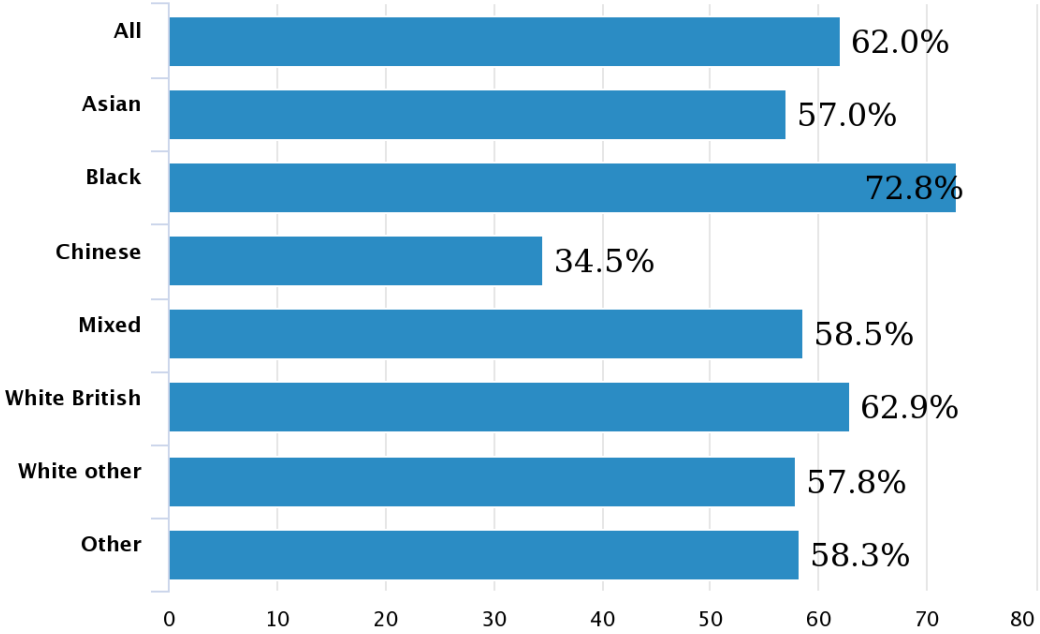
Figure 1 Obesity prevalence in children by ethnicity (NCMP (2017/18)[xliii])



4.32 White Irish and White British pupils in Year 6 had the lowest prevalence of obesity compared to other ethnic groups (16.2% and 18.1% respectively), with children of Black African ethnicity and Bangladeshi children having the highest prevalence of obesity both at 29.1%.

4.33 Data from the Active Lives Survey 2017/18[xliv] [Figure 2] demonstrates that Chinese adults had the lowest rates of overweight and obesity (34.5%), with Black adults having the highest prevalence at 72.8%.

Figure 2: Percentage of adults who were overweight or obese by ethnicity in England (Active Lives Survey 2017/18).



4.34 Differences in weight between racial groups arise due to various factors such as environmental factors, health behaviours, socio-economic status, access to health care, social marginalisation, or discrimination[xlv,xlvi]. The fact that ethnic differences persist even when controlling for deprivation and sociodemographic factors suggests that cultural and genetic differences within some ethnic minority groups may account for the increased likelihood of children from these groups becoming obese or overweight[xlvii,xlviii,xlix].

4.35 People from different ethnic groups have different levels of risk of developing conditions associated with obesity and being overweight. For the same level of BMI, people of African ethnicity appear to carry less fat and people of Asian ethnicity generally have a higher percentage of body fat than white people of the same age and gender[l,li]. Some groups (especially those of Asian descent) are at risk of type 2 diabetes and cardiovascular disease at a lower BMI than other groups[lii].

Impact of OOH calorie labelling

4.36 Evidence on how people of different ethnicities respond to calorie labelling is inconsistent**,** with some studies suggesting calorie selection is influenced by calorie labelling to a greater or lesser extent among different ethnic groups[liii,liv,lv]**.** However, it should be noted that these studies were based in the United States of America and therefore may have limited applicability to the UK.

Conclusion

4.37 We consider the policy will have a neutral impact on consideration (a) and (c) of the Equality Act.

4.38 However, as obesity prevalence and risk of developing conditions associated with obesity, such as type 2 diabetes and cardiovascular disease, are higher among certain ethnic groups, this policy may be beneficial in reducing such inequalities. Therefore, it could be seen to have positive implications with regards to consideration (b) of paragraph 1.3.

4.39 Overall, we consider the policy to have a neutral or positive impact with regards to race.

Religion and belief

4.40 We have considered the impact of the proposal on the protected characteristic of religion and belief. There is no evidence to suggest that the proposed policy will have a negative impact on people who share this protected characteristic compared with people who do not share this protected characteristic.

Sex

Obesity prevalence

4.41 There are differences in obesity prevalence depending on gender, as reported from the National Child Measurement Plan (NCMP) results from 2018/19[lvi] and the Health Survey for England (HSE) 2018[lvii]:

- The NCMP reported for children in Reception, the obesity prevalence for boys (10.0%) is slightly higher than for girls (9.4%). In Year 6, 22.5% of boys and 17.8% of girls are obese.

- The HSE demonstrated the majority of adults, and slightly more men than women, in England in 2018 were overweight or obese; 67% of men and 60% of women. However, there was slightly higher proportion of women who were obese (26% of men and 29% of women), and morbidly obese (2% of men and 4% of women).

4.42 The differences in obesity prevalence by gender have various possible underlying reasons. There is little data to identify any difference in girls' and boys' diets. National Diet and Nutrition Survey (NDNS) data, for example, cannot be reliably

analysed by gender because of its small sample size and the persistent problem of under-reporting that is common to all diet diaries.

Impact of OOH calorie labelling

4.43 Some consultation respondents suggested that the policy could impact the sexes differently. In most cases respondents linked this with eating disorders, suggesting that there is a higher prevalence of eating disorders among women, especially girls, compared with men and boys.

4.44 Surveys suggest that eating disorders are more prevalent among girls than boys, the Mental Health of Children and Young People in England 2017 survey found that eating disorders were identified in 0.4% of 5 to 19-year olds and were more common in girls (0.7%) than boys (0.1%). Rates of eating disorder were highest in girls aged 17 to 19 (1.6%)[lviii]. The evidence surrounding calorie labelling and eating disorders is discussed in more detail under the mental health heading in the disability section.

4.45 Others suggested that women will be more inclined to use calorie labels and alter their food choices as a result and therefore the policy might have more of a positive impact on them than on men. This is supported by research into calorie labelling in the United States of America[lix][lx].

4.46 Some respondents highlighted the difference in recommended daily calorie intakes between women and men, suggesting that by requiring contextual labelling referring to the daily calorie intake of an adult woman, that calorie labelling would be misleading for men. While this is true to an extent, including contextual labelling referring to the recommended daily intake for a woman will still help men to gauge their caloric intake and it creates consistency with existing pre-packaged nutrition labelling requirements.

Conclusion

4.47 There is evidence that suggests the policy could have a particularly positive impact on women as research suggests they are more likely than men to use calorie labelling. However, the policy will apply equally to both sexes and men still stand to benefit from it.

4.48 We have also considered the impact of the policy with regards to the three considerations in paragraph 1.3 and do not consider there to be an impact on any of them. Overall, we consider there to be a neutral impact with regards to sex.

Sexual Orientation

4.49 We have considered the impact of the proposal on the protected characteristic of sexual orientation. We do not believe the proposed policy will have a negative impact on people who share this protected characteristic compared with people who do not.

Marriage and civil partnership

4.50 We have considered the impact of the proposal on the protected characteristic of marriage and civil partnership. There is no reason to believe that the proposed policy will have a negative impact on people who share this protected characteristic compared with people who do not.

5. Summary of the effects of the policy on people with protected characteristics

5.1 **Age - Neutral.** Evidence suggests there may be some discrepancy in knowledge of recommended calorie intakes across people of different ages. The policy will require menus to include contextual information referencing the recommended daily calorie intake of an adult woman which is likely to minimise any discrepancy in knowledge of recommended daily intakes.

5.2 **Disability - Neutral.** As there is a higher prevalence of obesity among people with disabilities, calorie labelling has the potential to particularly benefit this group. While printed / written calorie information will not be accessible to those with visual impairments, businesses are already required under the Equality Act 2010 to make reasonable adjustments for those with disabilities.

5.3 Evidence with regards to the impact of the policy on mental health and eating disorders is somewhat mixed. Information on the energy content of food and drink is already widely available in supermarkets through mandatory nutrition labelling requirements on pre-packaged foods and some restaurants.

5.4 **Gender reassignment - Neutral.**

5.5 **Pregnancy and maternity - Neutral.**

5.6 **Race - Neutral or positive.** As obesity prevalence and risk of developing conditions associated with obesity, such as type 2 diabetes and cardiovascular disease, are higher among certain ethnic groups, this policy may be beneficial in reducing such inequalities.

5.7 **Religion and belief - Neutral.**

5.8 **Sex - Neutral.** There is evidence that suggests the policy could have a particularly positive impact on women as research suggests they are more likely than men to use calorie labelling. However, the policy will apply equally to both sexes and men still stand to benefit from it.

5.9 **Sexual orientation - Neutral.**

5.10 **Marriage and civil partnership - Neutral.**

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