Cyflwynwyd yr ymateb i ymgynghoriad y Pwyllgor Iechyd a Gofal Cymdeithasol ar Atal iechyd gwael - gordewdra

This response was submitted to the Health and Social Care Committee consultation on Prevention of ill health - obesity

OB44 : Ymateb gan: British Dietetic Association (BDA) Obesity Specialist Group|

Response from: British Dietetic Association (BDA) Obesity Specialist Group

Prevention of Ill Health – Obesity

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As the Obesity Specialist Group of the British Dietetic Association, we welcome the consultation on obesity and preventing ill health and its consideration for the Health and Social Care Committee's strategy. This is a much need consultation and we believe that addressing the points within this consultation will help access to care and support for people living with overweight or obesity in Wales. Below we would like to offer our views on the following topics.

1. Effectiveness of Welsh Government Strategy

In Wales, there is a nine-percentage-point difference in obesity prevalence between the most deprived (29%) and least deprived quintiles (20%) [1]. In addition to socio-economic factors, obesity is rooted in a myriad of biopsychosocial determinants, including genetic polymorphisms and biological processes, psychological factors, and environmental conditions [2]. According to the Kings Fund, the disparity of obesity rates *and its severity* between areas of most deprivation compared to the least is widening in the UK [3]. By 2035, according to Keaver and colleagues' total population projection rates for severe obesity (i.e. BMI 40 kg/m^2) indicate Wales will be have more than double the rates of Scotland at 11, 8 and 5% in Wales, England and Scotland, respectively [4].

This data highlights the urgency for action and we welcome that the health and social implications of obesity is a Health and Social Care Committee priority. Although obesity is rooted in biopsychosocial determinants, the stark influence of socio-economic factors points to the need for policy innovations focusing on reversing health inequalities. This profound undertaking requires system level approaches that involves legislation, cross-sector collaboration, including industry, to influence the socio-environment consequences that lead to health disruptive behaviours (e.g. sedentary behaviour, poor diet). These myriad of factors have been noted in Wales, with collective legislation, policy and practice frameworks to help minimise the risk of obesity to current and future generations, including:

- All Wales Adults Weight Management Pathway (2021) and All Wales Children, Young People and Families Weight Management Pathway (2021) – A comprehensive update to the All Wales Obesity Pathway (2010) to implement a targeted levelled approach to the obesity problem in adults, children, and young people.
- Healthy Weight: Healthy Wales (2019): A comprehensive plan focusing on preventing and reducing obesity through community-based initiatives, policy changes, and funding for local health programs.
- Future Wales: National Plan 2040 – A spatial plan set out to compliment the priorities of the public, private and third sectors while improving them for the future.
- Public Health (Wales) Bill 2016 – Emphasises the importance high profile leadership to enable health environments, settings, and people.
- Wellbeing of Future Generations (Wales) Act (2015): Ground-breaking legislation focusing on seven wellbeing goals and the creation of the Future Generations Commissioner.

Cross public service, interventions for preventing childhood obesity to enable more physical movement and healthy diet form an essential part of the systems approach to the obesity problem. The Welsh Government rollout of universal primary free school meals is a commendable plan to

reduce the childhood poverty impact on healthy diet and body weight. This access to food will help promote healthy eating in infancy and potentially the home environment, via learned experiences of the child [5]. Securing funding and ensuring schemes are in place for children to access free meals during the holidays will help embed healthier diet and prevent childhood obesity.

2. Impact of Social and Commercial Determinants

Commercially readily available foods high in caloric density, fat, saturated fat, salt and sugar contribute toward the persistence of unhealthy diets. Market competition and commercial pressures for profitability drive these, more affordable less nutritious foods toward consumers, displacing healthier foods from the diet. These conditions are compounded by social factors such as food insecurity, where financial burdens can pressure people to opt for cheaper, less perishable and energy-dense foods [6]. Emotional stress and excessive work burden, parental pressures, academic pressures, and poor sleep can contribute toward convenience eating of energy dense foods, increasing the risk of weight gain and obesity [2].

More over, the social environment, including cultural norms and lifestyle habits, further reinforces the consumption of unhealthy foods.

- In England, the Gateshead local authority significantly reduced the density of fast-food outlets using planning restrictions, demonstrating a 'planning for health' approach can be implemented at a local level [7].

With the consensus that numerous system approaches are required to reverse the obesity problem additional system level measures may be required to reduce inequalities in Gateshead before we observe reversed obesity trends.

- In the Millennium Cohort Study in England there was a significant relationship between fast food outlet density and obesity for children ages 7 to 14 but only among those with maternal education below degree level [8]. The evidence suggests certain groups are more vulnerable to the health disruptive environment attributing to obesity suggesting need for multiple system wide interventions.

Food insecurity has increased over the recent years, being impacted by COVID-19 and more recently by the cost-of-living crisis. Paradoxically, those who are food insecure are more likely to be living with obesity. People in the most deprived areas spend approximately 50% of their disposable income to meet the Eatwell Guidance for healthy eating, compared to 11% for the least deprived, according to research by The Food Foundation. This disparity impacts directly on people being able to access healthy, sustainable diets and has the potential to impact on obesity rate and health outcomes.

Recent data has shown that for people living with obesity and food insecurity that price/ incentivisation interventions and not education on what constitutes a healthy diet are the preferred actions to help them to eat a healthier diet.

Social deprivation has a profound impact on purchasing power. Although a commendable 'first step', efforts to minimise the purchase of energy dense foods by limiting products at store entrances and checkouts. In addition, legislating against discounted prices and 'buy one get one free' offers are likely to have minimal impact when implemented alone [9]. If energy dense convenient foods continues to be more affordable than healthier alternatives (e.g. wholegrains and vegetables) the

market will continue to tilt purchasing choices toward obesity promoting eating habits. Legislative and subsidy efforts to balance prices across the food groups will improve the likelihood of healthier eating, according to experimental research [10] and consumers[11].

Working in partnership with supermarkets and grocery stores may offer the opportunity to guide purchases by balancing product prices. Such partnerships could also 'nudge' consumers healthier food purchases via choice architecture techniques and be further enhanced by changing in-store marketing messages that promote healthier foods [12] [13] . Policies to restrict unhealthy food advertising have been shown to be effective in supporting healthier consumer food purchasing behaviour. Transport for London restrictions on high fat, salt, sugar food advertising demonstrated decreased weekly household purchases of unhealthy products by an estimated 1000 calories **[14]**.

To assist decision making processes for the prevention and management of obesity refer to the modelling tool presented in the WHO Acceleration Plan to Stop Obesity.

3. Pregnancy, maternal and childhood obesity

Excessive gestational weight gain occurs in approximately 50% of pregnancies and women who may have started their pregnancy with a BMI in the healthy range may find themselves with a raised BMI after pregnancy. Post-partum weight retention (PPWR) is an important contributor to parity-related weight gain. Around 20% of women will retain 4kg or more at one-year post-partum and any PPWR increases the likelihood of long-term maternal weight retention and is a strong predictor of obesity in later life, increasing the risk of developing obesity-related conditions in the mother [15].

Téllez Rojo and colleagues, et al, 2019 [16] compared the growth-trajectories and children's energy intake according to maternal post-partum BMI classification. They found that:

- At 42 months of age, infants from mothers that remained overweight during the first year post-partum had, on average, 0.61 SD higher weight-for-height z score (WHZ) than those from mothers who were a healthy BMI in the same period.
- At 60 months of age, children´s prevalence of obesity was almost twice in the maternal overweight group (14.2% and 7.3% respectively).
- Chances for a child of having an excessive energy intake were 36.5% (95% IC: 6.6%, 74.8%) and significantly greater among children from overweight mothers.
- A concurrent ethnographic study with the study subjects suggested differences in the food landscape might contribute to childhood obesity beyond having an overweight mother. The post-partum and pre-conceptual period, for some, can be a continuum with the post-partum period from one pregnancy being the preconception period for the next.

The ability to return to a healthier weight during the interpregnancy interval will depend on post-partum diet quality, energy intake and expenditure – the latter which may be influenced by the duration and exclusivity of breastfeeding. The post-partum period is generally overlooked in current healthcare provision and yet represents an important time in the life-stage where good nutrition and appropriate weight management support may improve maternal and infant outcomes for subsequent pregnancies.

- The SWAN study aimed to determine whether a weight management programme is feasible and effective at helping women lose weight and improve their lifestyle after giving birth [17]. Almost 200 women, living with overweight or obesity, from an ethnically diverse inner-city population were invited to take part in the SWAN study. Half of the women were given normal care, and the other half were offered weight management support which included

lifestyle advice and access to a local community group for 12 weeks. The results showed that women offered the weight management programme saw a 13% reduction in their weight at 12 months post-partum, compared to 4.2% weight reduction among the women offered normal care. Women who attended at least 10 sessions saw the greatest benefit.

- Harrison and colleagues evaluated clinical practice guidelines (CPGs) for weight management and weight-related behaviours across preconception, pregnancy, and post-partum [18]. Their review found significant ambiguity in guidance and absence of important considerations, including targeting weight gain prevention and limiting excess gestational weight gain. The findings emphasise the need for robust, comprehensive, and high quality guidelines on healthy lifestyle and weight management across these formative reproductive life stages.

The evidence provides the rationale for interventions and digital applications to improve maternal healthy diet and we welcome the development of the The Foodwise in Pregnancy App by dietitians in Wales.

4. Stigma and Discrimination

Obesity-related stigma and discrimination are widespread across society. Negative stereotypes about people living with obesity are prominent in public discourse, which often present people living with obesity as lazy, undisciplined, unintelligent, and immoral [19][20]. Consequently, obesity-related stigma and discrimination is observed in almost every area of life, including employment [21], educational [22], and medical settings [23]. Obesity-related stigma and discrimination add to the implications of obesity for health, through:

- Healthcare avoidance. People living with obesity may delay or avoid seeking medical treatment for fear of stigmatizing interactions with doctors [24].
- Reduced physical activity. People living with obesity may avoid exercising in public for fear of shaming and abuse [25][26].
- Consuming more high-calorie foods [27] and weight gain over time [28].
- Reduced efficacy of weight-control measures [29].
- Psychological effects, including higher levels of depression, even in children and adolescents [30].
- Internalized weight stigma. This is when people come to agree with negative obesity related stereotypes and apply them to themselves, often leading to reduced self-worth [31].

Obesity-related stigma does not only harm people living with obesity. Internalized weight stigma can also affect individuals whose body weight is low (BMI <18.5kg/m2) or within the recommended range (BMI 19.5-24.9kg/m2) where it is linked with disordered eating and drive for thinness [32].

Wales has stark health inequalities between socioeconomic groups, genders, and ethnicities, which costs NHS Wales approximately £322 million a year [33]. Obesity stigma disproportionately impacts already disadvantaged groups and is therefore likely to exacerbate health inequalities. Obesity stigma is likely to worsen health inequalities in several ways:

- Obesity is more common among disadvantaged groups, including adults and children living in more deprived areas, and some minority ethnic groups. Consequently, obesity stigma disproportionately impacts already marginalized populations.
- Even comparing people of the same weight, research shows psychological impacts of weight stigma may be worse for several disadvantaged groups [34]. At a given weight, a person is more likely to 'internalize' weight stigma if they are: female, have spent more time not in education, employment or training (NEET) and are not heterosexual.

- Since women, people who have been unemployed [35] and sexual minorities [36] are already at higher risk of mental illness, the psychological impacts of weight stigma are likely to compound these health inequalities.
- Stigmatization of obesity is closely intertwined with stigmatization of poverty, which is independently linked to poor health outcomes [37]. For example, people with stigmatizing attitudes about obesity also tend to stigmatize people receiving state benefits [38]. This reflects a prominent narrative in media and politics, which links obesity and poverty as similar kinds of moral failure, or as resulting from poor choices.

Initiatives aiming to address obesity can inadvertently add to stigma, with counterproductive results. Some public health initiatives which aim to reduce obesity may contribute to weight stigma [39]. One example is using graphic warning labels with negative imagery of obesity to reduce purchases of sugar sweetened beverages. In experiments, such labels have been shown to increase feelings of disgust towards people living with obesity, and to reduce self-esteem among people living with obesity [40]. Such approaches are also likely to be counterproductive: in experiments, exposure to weight stigmatizing content causes people to consume more high-calorie foods [41], and people who report more experiences of weight stigma in everyday life have been shown to gain more weight over time [42].

Furthermore, the manner weight is brought up and discussed within healthcare appointments can further exacerbate feelings of stigma. When discussing weight, neutral terms such as “weight” and “unhealthy weight” are preferred, with the terms “obese”, morbidly obese” and “fat” being disliked [43] [44]. We therefore recommend (in healthcare and across sectors) the use of person first language instead, such as “person living with obesity” not “obese person”.

Particular care must be taken when designing measures aimed at children and adolescents: evidence suggests that stigmatizing messages about weight at age 13 can continue to impact psychological health almost two decades later [45]. Unintended consequences can be broad: a quasi-experimental study showed that sending ‘weight report cards’ to UK children aged 10-11 did not lead to weight loss, but did cause children with overweight to skip breakfast.

Impact on breakfast skipping was more pronounced in single-parent and low-income families, and among children with overweight from deprived neighbourhoods, who were also more likely to feel tired and unhappy at school following the intervention. In the context of a youth mental health crisis, where 1 in 5 children and young people have a probable mental disorder, and 1 in 5 women aged 17-19 have an eating disorder, it is paramount that measures taken to address obesity do not add to these problems.

Ways to avoid increasing weight stigma may include:

- Not using imagery which presents people with obesity in a dehumanising manner, such as headless, in unflattering positions, or with negative facial expressions [46]. Refer to the World Obesity Federation image bank for examples of appropriate imagery.
- Using respectful and person-centred language when discussing obesity and body weight more widely [47]. For detailed guidance, refer to Language Matters: Obesity
- To access a new learning hub challenging weight stigma, refer to Public Health Scotland’s virtual learning hub.

Training for health professionals to understand weight stigma and be able to challenge their own biases is fundamental to changing perceptions and obesity related communication skills. A scoping review looking at training for healthcare professionals to reduce weight stigma suggests weight

stigma needs to be addressed early on and continuously throughout healthcare education and practice, by teaching the genetic and socio environmental determinants of weight, and explicitly discussing the sources, impact and implications of stigma [48].

4. Access to Support and Treatment Services

Dietitians have a fundamental and leading role in the development and implementation of dietary and health interventions across all tiers of the All Wales Weight Management Pathway.

The updated pathway in 2021 and accompanied Welsh Government funding was a fundamental step in enhancing patient access to weight management treatment services and support. Six of the seven health boards in Wales have now implemented a Tier 3 Adult Weight Management Service (T3-AWMS). High patient demand, however, is leading to capacity issues and long waiting lists highlighting the need for increased funding and resources.

In addition to the strong demand for T3-AWMS resulting with long waiting lists, 'bariatric surgery tourism / private bariatric surgery' is further increasing demand and blurring the traditional boundaries of post-bariatric surgery medical care access. For example, traditionally in South Wales, the first 2-years post-bariatric surgery medical care is typically conducted at the Welsh Institute of Metabolic Surgery in Swansea. With their service designed to support the patients accessing surgery via their traditional NHS referral 'gateway' via T3-AWMS, increased demand following private bariatric surgery is exceeding capacity.

The alternative, offering post-bariatric surgery medical care via tier 3 services in Wales, will lead to longer overall waiting times in each health board. This consequence will disproportionately affect people from the most deprived areas, who arguably may gain more medical and social benefit from bariatric surgery but they are unable to self-fund. To prevent this widening inequality, new funding streams and innovative service provision (potentially digital group-based interventions [49], will be required to manage patient demand and prevent 'queue jumping'.

A vulnerable group requiring attention are people with extreme obesity, a significant percentage of people who may not access weight management treatment but require help at home from community health and social care services. There are significant evidence gaps affecting other areas of their care and there is scant investment into alleviating this problem with health service operation generally focusing on intervention for the greatest number of cases, potentially leaving vulnerable groups behind [50] [51].

Older adults are also at increasing risk of the comorbidities of obesity and may present earlier with chronic disease.

- Dietary and physical activity interventions promoting weight-loss especially also need to promote healthy aging and account for risks of sarcopenia, which is strongly associated with frailty and falls [52] [53].
- Conversely, The National Institute of Health and Clinical Excellence, recognise that slightly higher BMI in older people can have a protective effect (for example, reduced risk of all-cause mortality) because they are less likely to be experiencing undernutrition [54].

Professionals, therefore, need to evaluate the balance of these risks when interpreting BMI – and "Interpret BMI with caution in people aged 65 and over, taking into account comorbidities,

conditions that may affect functional capacity and the possible protective effect of having a slightly higher BMI when older."

Recent pharmacological innovations in weight management, most notably, GLP-1 receptor agonists, are increasing demands for T3-AWMSs and changing patient pathways. It's effectiveness for short-term weight-loss and reduction in risk factors is understood. For our views, please refer to The British Dietetics' Position Statement.

Effectiveness of T3-AWMSs in Wales is largely unknown with scant evidence published to date. Only one study from Wales was reported in a systematic review [55] and although notable, the investigation was qualitative with general self-reported outcomes [56]. No validated measures or anthropometric outcomes were included. In regards to Children and Young Persons Tier 3 Weight Management Services in Wales, the group is unaware of any published peer reviewed articles to date.

The lack of published reports suggests the need to address structural issues and research and evaluation skills in Wales. Data collection can be cumbersome on staff and without adequate administrative and coordinator staff effective evaluation is less likely. Additionally, as outlined in the recent 'Research matters – What excellence looks like in NHS Wales' document, academic collaboration and strong leadership is essential to enable effective research and evaluation that impacts and improves T3WMS in Wales. Collaborative efforts to improve reporting and data management will enable value-based health care in Wales. Indeed, partnership working between academia, weight management services, and value base health care is instrumental in enabling safety, equality of access and improved outcomes.

Early examples of implementing research into practice in T3-AWMS are emerging in Wales. The Cwm Taf Morgannwg University Health Board T3-AWMS began in 2023 and a research group with academic collaborators across all the major South-Wales universities was established. The group has four studies in development, including an overarching evaluation study awaiting ethical approval at the time of writing.

To help drive, collate and foster obesity related research, the development of registry (or simple webpage) for obesity related studies in Wales would be welcome. Perhaps similar to the one held by Health and Care Research Wales for rapid reviews?

5. Relationship Between Obesity and Mental Health

A bidirectional link exists between obesity and mental health, increasing the likely need for a mental health and/or weight management intervention.

Paradoxically, research in a tier 2 wales weight management service including people with self-reported history of anxiety and depression, were twice as likely to dropout early from a weight management intervention compared to people without mental health problems [57]. As completion of a weight management intervention determines patient weight loss success (e.g., weight loss of 5-10% body weight) intervention dropout could lead to exacerbation of comorbidities, especially type 2 diabetes.

Anxiety and depression can lead to difficulties adhering to diabetes treatment and obesity further exacerbates this issue, leading to higher rates of diabetes treatment failure [58]. The case for minimising service dropout is strengthened by McLean and colleagues, [59] who reported that in a

weight management service with targeted psychological treatment, the participants with significant anxiety and depression *who did* complete their intervention achieved similar or greater weight loss compared to people with no history of anxiety and depression.

The bidirectional link between obesity and mental health conditions such as anxiety and depression significantly influences treatment outcomes and service attendance. The evidence supports the case for enhancing psychology provision in weight management services in Wales and for collaborative working across traditional service boundaries between mental health and weight management services. Addressing both obesity and mental health concurrently through integrated treatment approaches can improve adherence, outcomes, and overall quality of life of patients.

Ways to improve patient mental wellbeing and enhance treatment outcomes may include:

- Including targeted psychological treatment in weight management programmes for people with a history of anxiety and depression. Psychosocial weight management interventions may also improve outcomes for adolescents [60].
- Enabling opportunities to develop peer relationships within group interventions and into the maintenance stages of weight management may help with retention and better longer term health outcomes [61][62].

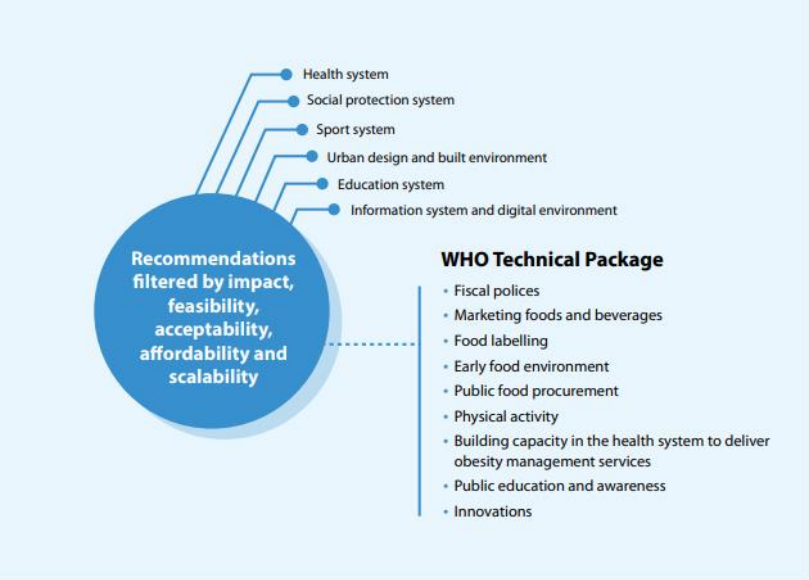
People with severe mental illness and intellectual disabilities based in secure units have scant access to weight management services Wales and the UK. Many of these people require anti-psychotic medications, which are strongly associated with weight gain. Healthy eating provision is limited in such units with few specialist dietitians in place to assist people with severe mental illness with behaviour changes.

- Holistic interventions with social or competitive components that involve patients with severe mental illness in decision-making may more acceptable and feasible to implement according to a mixed-methods systematic review [63].

6. International Examples of Success

Successful international strategies often involve multi-level action, community participation, and strong leadership. The WHO Acceleration Plan to Stop Obesity (2023) recommendations emphasize the need for multi-sectoral policies and actions beyond the health sector with figure 1 providing an overview.

Figure 1. Act across multiple setting and scale up impactful interventions (WHO, 2023)



Notable international multi-sectoral initiatives include:

- Amsterdam Healthy Weight Approach (AHWA) implemented a whole-systems approach, with community engagement initiatives, collaborative learning networks while utilising an adaptive design with continuous evaluation and responsive actions. Following this multi-pronged approach, obesity trends in 2-18 year olds have reversed by 2.3%, a trend that is rarely observed. Follow-up studies will be crucial in evaluating the long-term outcomes of the approach [64].
- Massachusetts Childhood Obesity Research Demonstration (MA-CORD) Project. Based in Massachusetts, USA, the project involved stakeholders from different community sectors (schools, afternoon programs, health clinics, and public parks) to enhance parent engagement and awareness in childhood obesity prevention and control [65].
- Seinajoki: Overcoming Obesity Programme in Finland is a comprehensive initiative aimed at reducing childhood obesity involving various sectors of the community, including schools, healthcare, urban planning and community services. The programme reports reverse obesity trends in children up to 5 years old in Seinajoki. Additional outcomes include improved health metrics and sustainable lifestyle changes across the family [66].

Although these are notable examples, the studies had limited information on how each project's implementation was sensitive toward the risks of perpetuating obesity stigma. We therefore draw your attention back to our recommendations regarding obesity stigma when you consider the approaches of the notable initiatives above.

Conclusion

There is growing recognition of the need for a comprehensive global governance strategy to address obesity. National governments have employed a variety of legal strategies, including tax measures, food labelling, advertising restrictions, and community-based interventions. These efforts highlight the importance of a strong leadership in a coordinated approach to effectively alleviate obesity.

It is imperative that Welsh Government strategies are not only responsive but also proactive, and lead in addressing the root causes of obesity by incorporating a holistic view that includes social, economic, and environmental factors. The diversity of experiences and expert opinions, including those from international perspectives, are crucial in shaping a robust approach to alleviating obesity in Wales.

We thank you for the opportunity to respond to the consultation and look forward to seeing outcome.

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