RaY

Research at the University of York St John

A R T I C L E

the british
psychological society
promoting excellence in psychology

'An extra fight I didn't ask for': A qualitative survey exploring the impact of calories on menus for people with experience of eating disorders

Tanya Frances[1] | Kel O'Neill[2] | Kirsty Newman[3]

[1]The Open University, Milton Keynes, UK

[2]Independent Counselling and Psychotherapy Practice, UK

[3]York St John University, York, UK

Correspondence

Tanya Frances, The Open University, Walton Hall, Milton Keynes MK7 6AA, UK.
Email: tanya.frances@open.ac.uk

Abstract

Objectives: The UK government made it mandatory for large restaurants and cafes in England to display calorie labels on menus. Existing evidence identifies minimal potential for benefit, but significant potential for harm to those with eating disorders. To date, only one published study has directly explored the impact of this legislation on those with eating disorders. This study explores the impact of calorie labelling on menus on adults with experience of eating disorders in England.

Design: A qualitative online survey was designed and distributed, and 399 adults with current or past experience/s of eating disorders completed the survey.

Methods: Reflexive thematic analysis was used, informed by a critical realist approach.

Results: Six themes were developed: (1) impacts on relationships, (2) exclusion and increased isolation, (3) restricted freedom, (4) dis/embodiment, (5) anger and frustration at the perpetuation of diet culture and (6) we are all responsible for ourselves. Most participants felt calorie labels on menus is detrimental to their eating disorder and/or recovery. People are navigating multiple opposing cultural narratives around health, bodies and eating disorder recovery that can put additional barriers in place to developing a relationship with food and body that they would like.

Conclusions: Calorie labelling on menus is likely to adversely impact those with eating disorders. Menus with calories should be available separately but should not be the first or only one provided. People with experience of eating

disorders should be directly involved in the development of public health legislation and policy that is likely to affect them.

Statement of Contribution

What is already known on this subject?

- To our knowledge, there is currently only one published study that has directly explored the impact of menu calorie labelling on those with eating disorders (EDs).
- This legislation is rooted in a weight-centred health paradigm which is unlikely to be effective in improving public health, and instead, may have concerning implications for people with EDs.
- Limited evidence at present suggests calorie labelling on menus may exacerbate ED symptoms for those with EDs or vulnerable to developing EDs.

What does this study add?

- To our knowledge, this is the second study to explore the impact of calorie labelling on menus for those with EDs.
- Most participants (91%) reported significant challenges relating to calorie labels on menus.
- Opposing health messages about bodies, food and ED recovery can produce barriers to recovery.

INTRODUCTION

As part of the UK government's 'tackling obesity' strategy (UK Government, 2021), legislation from April 2022 requires large businesses, including takeaways, restaurants and cafes in England to provide the calorie content of food and drink items on the menu at the 'point of choice'. Underpinning the legislation is the idea that calorie information will 'help ensure people are able to make more informed, healthier choices' (UK Government Department of Health and Social Care, 2021) and that this will help people achieve what is deemed a 'healthier weight' (UK Government Department of Health and Social Care, 2021). This legislation is rooted in a weight-centred health paradigm which has received significant critique (O'Hara & Taylor, 2018; O'Reilly & Sixsmith, 2012) and has little evidence to show effectiveness in improving public health. Instead, it may have concerning implications for people with eating disorders (EDs).

Calorie labelling as a solution to the 'obesity epidemic'?

England is not the first country to use this strategy. It is also mandatory in parts of Canada (McGeown, 2019), parts of the United States (Zlatevska et al., 2018), and in some Australian states (Wellard-Cole et al., 2018). Despite the growing implementation of menu labelling in the Global North, there is little evidence to suggest it is effective in achieving its aims. A Cochrane Review found inconsistent findings and low-quality

evidence, showing that people most commonly seek out calorie information if they are seeking nutritional information, but there is no consistent or good quality evidence that shows menu labelling has the desired outcome of people making lower calorie menu choices; (Crockett et al., 2018).

This legislation is rooted in the assumption that weight is a reliable indicator of health, despite evidence which suggests it is not (Bacon & Aphramor, 2011). There is little evidence to suggest calories as a concept, or behavioural and weight-centred strategies of 'tackling obesity' is efficient or effective (Camacho & Ruppel, 2017). Instead, consistent evidence shows focusing on weight while centralizing the 'obesity epidemic' discourse has high potential to cause long-term negative consequences and perpetuate weight stigma (Berge et al., 2018; Lucan & Dinicolantonio, 2014). Through public health initiatives such as these, fat bodies become constructed as a medicalized and pathologized problem (Boero, 2006; Harrison, 2012). The 'problem' of obesity becomes located within the individual, failing to acknowledge broader systemic and structural contexts which shape how obesity is framed and discursively constructed (Boero, 2006). In the United Kingdom, this is a pervasive discourse whereby people who are labelled as obese become stigmatized and positioned as responsible for causing a strain on health care systems (Brookes, 2021). This raises significant issues. Experiencing weight discrimination or weight stigma is associated with almost a 60% increased risk of early mortality (Sutin et al., 2015). Even the anticipation of weight stigma or weight discrimination is associated with disordered eating (Hunger et al., 2020).

Calorie labelling and people with eating disorders

According to the Health Survey for England 2019 (NHS, 2020) almost one in five women, and one in eight men screened positive for a potential ED in 2019. This equates to around 9 million people. Additionally, both prevalence and severity of EDs has continued to rise during the COVID-19 pandemic (Ayton et al., 2022). Given the high prevalence of EDs, it is vital we consider the impacts on this group. It is important to note that our assumption is not to differentiate between those with EDs and those labelled as obese. People experience EDs at any body size, shape or weight and the prevalence of EDs for people with higher weight bodies is high (Ralph et al., 2022); in fact, it is 2–3 times higher than those in under or 'normal' weight bodies (Duncan et al., 2017).

At the time of writing this article, we were aware of no studies to date that had directly explored how those with EDs are impacted by calorie labelling on menus. However, during the process of peer review of this article, Duffy et al. (2023) published their small-scale interpretative phenomenological analysis of those with ED's experiences of calories on menus in England. Importantly, their findings demonstrate the significant potential for harm that such weight-centric public health campaigns present to those with EDs, including their capacity to amplify disordered thoughts and behaviours.

In addition to Duffy et al.'s (2023) study, minimal existing research points to the potential harm calories on menus may cause those with EDs. Haynos and Roberto (2017) conducted an online survey with adult undergraduate student women about the impact menu labelling had on hypothetical meal choices. In line with others (Raffoul et al., 2022) they tentatively concluded that calories on menus may exacerbate and trigger 'eating disorder tendencies' (Haynos & Roberto, 2017, p. 281). Additionally, Raffoul et al.'s (2022) mixed methods study was not conducted with participants with EDs exclusively, but some participants reported ED histories. They found that young women with ED histories felt guilt, regret, shame, a sense they had binged or over-indulged, and 'prolonged negative feelings' or 'greater pressure to alter their food purchasing and choices in the presence of others' (Raffoul et al., 2022, p. 7). It has also been suggested that people with ED histories may demonstrate both support for and scepticism of calorie labels (Raffoul et al., 2022; Roberto et al., 2013). For example, access to calorie information could help people to make informed choices and this may be helpful, but some express scepticism regarding the trustworthiness of calorie information and critique that structural barriers must be addressed, and individualistic calorie labelling policies will not sufficiently support people to make healthy choices.

At the time of writing this article, the government website provides a statement that reads: 'by only requiring large businesses to label calories on menus, it will not impact small, independent businesses and

will ensure those who might find the requirement more difficult are not impacted' (UK Government Department of Health and Social Care, 2021). However, ED activists and charities have resisted mandatory calorie labelling, arguing that calories on menus will have a harmful impact on those with or recovering from EDs, or those vulnerable to developing EDs (Beat, 2022; Finney, 2022). Existing evidence clearly identifies minimal potential for benefit as a result of calories on menus, but significant potential for harm to those with, and those at risk of, or in recovery from EDs. This current study addresses calls for research to explore the impact of calorie labelling on menus on people with EDs (Haynos & Roberto, 2017; Raffoul et al., 2022). This study aimed to explore the impact of calorie labelling on menus on those with experience of EDs in England.

METHOD

Design

We conducted a qualitative online survey using Qualtrics. Due to the current almost non-existent research in this area we wanted to reach a large number of participants using a qualitative methodology that would enable us to apply a 'wide angle lens' (Terry & Braun, 2017, p. 15). We designed a set of pre-determined open-ended questions which explored experiences of calorie labelling, any challenges faced, how they managed challenges, any positive impacts and what they noticed about the impact on others, their relationships or society.

There are some limitations of using online surveys, such as not being able to ask follow-up questions (De Vaus, 2013). However, we wanted participants to be able to anonymously participate at a time and pace that suited them. We felt due to the strong presence of ED communities online (Hockin-Boyers et al., 2021) social media recruitment could reach a large number of participants with a wide array of experiences. In this study, this meant collecting the experiences of not just those who are currently diagnosed with an ED and currently accessing treatment but a range of participants at all points of the ED experience. Given the current lack of research about this topic we felt this breadth of participants would be valuable.

Ethics

This study received ethical approval from The Open University's Human Research Ethics Committee (HREC/4508/BEETHAM). Recognizing that some questions may prompt participants to think about their ED which may be distressing, we discussed the relevance and sensitivity of our questions. As authors with lived experience of EDs, we felt we considered the questions sufficiently in terms of minimizing potential for distress. We provided signposting to ED support, and we applied a skip logic and open text boxes to maximize participant choice regarding their level of engagement.

Participants

A total of 399 participants completed the survey. We used social media and approached ED organizations and services who assisted us to recruit participants through their social media or mailing lists. The inclusion criteria were participants must be age 16 or over and must have experienced an ED in the past or currently. As we did not have direct contact with participants, we relied on self-reporting about participants' ED experience(s).

We applied a skip logic to all survey questions. Therefore, the majority but not all participants provided responses to demographic questions (Tables 1–3).

T A B L E 1 Participant gender identity.

Female	270 (91%)
Non-binary	15 (5%)
Non-conforming	5 (2%)
Male	5 (2%)
Preferred not to state	1 (<1%)

T A B L E 2 Participant race and ethnic background.

White English	195 (65%)
White British	43 (14%)
White background	34 (12%)
White and Asian	5 (2%)
Indian	3 (1%)
Arab	2 (1%)
Multiple/Mixed ethnic background	3 (1%)

T A B L E 3 Participant age ranges.

16–24	61 (20%)
25–34	142 (47%)
35–44	62 (21%)
45–54	22 (7%)
55–64	11 (4%)
65+	1 (<1%)

In addition to the above demographics, 39% of the sample that completed the demographic questions identified as LGBTQIA+.[1] In relation to clinical characteristics, 55% had experienced Anorexia Nervosa, 21% experienced Bulimia Nervosa, 8% experienced Binge Eating Disorder, 6% experienced Otherwise Specified Feeding and Eating Disorder (OSFED), 2% experienced Avoidant Restrictive Food Intake Disorder (ARFID), <1% experienced Rumination Disorder, and 7% reported their diagnosis as not listed. Of the 235 participants who supplied these data, 80% reported to have had their ED formally diagnosed. Participants described themselves as 'in recovery' (32%), 'still dealing with my eating disorder' (31%), 'recovered' (16%), 'in relapse' (9%), and 12% chose to self-describe the stage they were at, using descriptors such as 'I am a healthy weight currently but still struggling with anorexic thoughts' and 'Not in relapse but not okay'.

Data analysis

We used Braun and Clarke's (2019) Reflexive Thematic Analysis (RTA). We followed Braun and Clarke's (2019) six-phase RTA process, using the phases flexibly and iteratively. All authors individually coded the entire dataset, kept notes and engaged in team meetings during coding and theme development to discuss what sense we were making of the data. We coded the data manually, using comment boxes on shared Microsoft Word documents. We chose not to use qualitative analysis software as not all members of the research team had institutional access to the same software. Additionally, our use of manual coding was

---

[1]LGBTQIA+ refers to those identifying as Lesbian, Gay, Bisexual, Trans, Queer and/or Questioning, Intersex and Asexual.

a way of rejecting what might be seen as a realist and extractive way of thinking about analysis whereby one might use software to 'uncover' a real single truth (Braun & Clarke, 2022), instead of engaging critically with multiplicity and nuance—which is aligned with how we approached this research. We found that manual coding supported engagement with the data and reflexive collaborative dialogue within the research team in real time, for instance, via discussion in team meetings and in comments in a shared live document. We then discussed theme ideas before collectively deciding on final theme names, by discussing, writing and returning to data in an iterative way. We used an inductive approach, so that our codes were directed by the content of the data rather than a predetermined set of ideas. To explore the research question sufficiently we needed to allow for both descriptive (semantic) and interpretive (latent) exploration of the data, meaning that our coding and theme development reflected what was explicit in the data set and how we understood it as situated and socially located.

Our approach was underpinned by critical realism (Pilgrim, 2014), assuming that human experiences are not singular 'internal-to-us truths' (Braun & Clarke, 2019, p. 170), they are socially situated within particular contexts. That is to say, that language, culture and socio-structural conditions, have an impact on how we construct and understand our reality. In taking this philosophical position, we are also informed by feminist researchers who argue for the examination of both individual voiced/lived experiences *and* the situatedness and social locations of those accounts, knowledges and perspectives (Haraway, 1988). This position assumes there is no singular 'truth' but rather, a multiplicity of truths which are socially, personally and contextually located (Nencel, 2014).

Reflexivity

We view reflexivity as a central part of using an interpretative methodology (Finlay & Gough, 2003). Reflexivity was necessary, particularly given that the authors were each 'insider researchers' (Braun & Clarke, 2019, p.18) due to our own lived experiences of EDs. Team discussions and individual note-taking aided us in developing a shared understanding of the data and a more in-depth sense of how we were individually and collectively framing key concepts and developing themes.

ANALYSIS

We developed six themes; (1) impacts on relationships, (2) exclusion and increased isolation, (3) restricted freedom, (4) dis/embodiment, (5) anger and frustration at the perpetuation of diet culture and (6) we are all responsible for ourselves.

Impacts on relationships

Most participants felt calories on menus had impacted their relationships, including intimate partners, friendships, family members and colleagues. Strategies of dealing with the calories on menus included having others read the menu or choose the food for them. Using the support of others in this way was experienced as helpful, but it can also put a strain on relationships.

> It creates tension with extended family… having to ask other people at the table to stop discussing the calories which makes the rest of the meal very awkward and I'm sure people would rather just stop inviting me to stuff.

Many people said it has produced tension or strain on their relationships, because when they are seen to be struggling, they are likely to feel responsible for upsetting the people they are with. Some said it makes others worry about them more, and this produces feelings of guilt, shame and sadness.

> I HATE eating out. I know this upsets my partner because they love to go out for dinner.

Some participants explained they can feel exposed, especially if they ask for a menu without calories. This can lead them to feel judged or alienated, with a feeling they should be 'trying harder' at recovery.

> I might alienate myself by getting anxious about ordering and cause tension with those who know about my anorexia and expect/want me to try harder at recovery.

Most participants did not want to 'draw attention' to themselves. They described a feeling of exposure, or not wanting to 'out' themselves as struggling with an ED by having to ask for a menu without calories or explain themselves if they cannot join a social meal out.

> I initially asked restaurants to provide a calorie free menu, however this caused me to feel a lot of shame and embarrassment.

> I personally don't like to draw attention to the ED around friends. So asking for a no calorie on menu alternative feels like I'm shouting "I have an ED" and what if they say no … that they don't have one? Then my face and body language would give it away!

Exclusion and increased isolation

Many participants said they now avoid eating out or avoid certain restaurants when previously they had worked hard in recovery to be able to eat out. Additionally, many participants noticed the calorie labels make others talk about food, weight and diets, and it is triggering, leaving them unable to join in the conversation or sometimes feeling highly distressed. These combined factors have increased isolation. This isolation can make the ED 'spiral' more and some participants reported a sense of enforced exclusion that has serious implications.

> This forces me to isolate myself, making the ED even worse through the loneliness. Being surrounded by calories makes it feel impossible to move on. People need to realize that for us it is a matter of life and death.

Many participants noted that socializing or eating out is no longer possible and does not feel safe.

> It's definitely set my recovery back by a long way and I only feel safe eating at home now

Some emphasized this has increased social isolation as friends no longer invite them.

> my friends now go out without me. This is upsetting. I feel like I'm more isolated than ever

For many, this legislation has turned a social meal that they want to enjoy into a number-dominated experience. Some people felt recovery is about connecting with others and listening to their bodies, but the unwanted exposure to numbers makes this hard. Almost all participants reported that this takes the joy, pleasure and connection out of eating out.

> I eat out less and when I do I spend a long time looking for the least calorific item. There is no joy in eating out now.

Many participants also reported shame. Shame that others have seen them eat with the calorie value exposed, shame at what had previously been a safe food but had become unsafe due to finding out the calories, shame about having to ask for a non-calorie menu and shame at others seeing their struggle. Feeling exposed in their shame resulted in many participants no longer eating out or avoiding it where possible.

> One thing the ED loves is isolation. And eating out is a more popular thing to do with friends at my age … I now don't go out. This has made recovery even more difficult.

Even when participants were able to work through or tolerate enough of the shame and guilt to attend social meals the sense of isolation transformed into a sense of exclusion; of feeling 'left out' and 'different' to their peers.

One participant stated that '[s]ociety is progressively focusing on the wrong information' which highlights that the policy in question is in opposition to the advice given to those in ED treatment which often includes challenging the rhetoric that calories are bad and focusing on nutrition more widely.

Restricted freedom

Most participants referenced restricted freedom and feeling unable to make choices that are not governed by an ED or calories. One participant stated 'it is an extra fight I didn't ask for'. This 'extra fight' was explained as an inner conflict. Another participant stated: 'part of me is grateful for the calorific values and part of me finds it very stressful'.

This restricted freedom and sense of conflict is reflective of the experience of living with an ED. Some participants felt that access to calorie labels can reduce anxiety and be reassuring. Paradoxically, this can enable them to eat out with a sense of control and safety. However, while doing-so, the focus is on calories and numbers, and the number-centric experience simultaneously limits their freedom. As such, it is seen by many as a legislation which provides the illusion of safety and control, while long-term keeps them trapped and limits freedom.

> If I couldn't access those calorie details, I would not be able to anticipate or plan and as scary as that is, it would grant me more freedom.

> When they first came out it felt like Christmas for my eating disorder… I loved having all the extra information for everything, but it was clearly a very unhealthy and unhelpful habit to indulge.

This conflict was highlighted by most participants. One said: 'It aggregates the decision between what actually sounds appetising and what I feel allowed'. To illustrate how this has a knock-on impact on recovery, another participant noted the restriction it inevitably leads to: 'Eating out was my only reprieve from this restriction, but with calories staring me in the face I choose salad most of the time now and no dessert'. This has meant that ultimately, while it can sometimes be pleasing and reassuring to know the calories, what it results in is a lack of food freedom.

> I am looking for food freedom and peace and this is hugely detrimental to it

For some, it had triggered a relapse and meant they were much more likely to engage in ED behaviours such as restriction, bingeing, and/or purging. Even those feeling confident in recovery reflected this.

> If I was still purging I would definitely be vomiting immediately after without question if the calorie number was above what I considered acceptable (whereas not knowing could help me resist this).

Many participants highlighted that this legislation normalizes eating disorder behaviours, making recovery harder.

> I suddenly find myself in a situation where my eating disorder feels "normal" and my recovery itself seems unnecessary – when in actual fact I am quite unwell.

Some participants also reflected that while they define themselves as recovered, the calorie labels can trigger old unwanted and distressing memories.

> it directly impacts my food/drink choices in a way I find deeply challenging and quite upsetting, as it can trigger negative memories from when I was in the deepest point of my ED experience.

Many participants also illustrated how calorie labels directly counteract recovery, as the calories are thrown 'in your face'.

> It just seems to be thrust in our face constantly. You can't escape it. I keep being told calories don't matter and to eat what I want/fancy. But if they don't matter, why are they everywhere?

> It can make recovery a lot more difficult when they try to teach you not to count calories and then you're confronted with them everywhere

Dis/embodiment

Many participants highlighted how calorie information directed their focus away from what their body wanted or needed when making food choices and how this was detrimental to them. For some, this was described as a shift in focus, with attention drawn towards calories and how choices were difficult to make. Others stated an 'overbearing' presence of calories that can lead to choices which do not satiate their hunger.

> I choose food based on calories which is detrimental to my relationship with my body and food

> I have not eaten what I actually wanted. I've often ended up hungry afterwards because I've gone for something as light on calories as possible.

For some the calorie information dictated food choices above dietary restrictions, with some noticing that they question food choices which are needed due to medical conditions.

The impact of calories on menus was described by some as making it impossible to make an intuitive choice, and others are torn between what they want and the calorie content.

> I am trying to listen to what my body wants and honour my hunger, but several times I have made a decision on what it is I want and have then been faced with the calories and have felt unable to order it.

This conflict emphasizes the extra work that participants need to do to honour their body's needs. A few highlighted that calorie information was being used as a way to understand how much they were eating and described this as strengthening their ED.

> without the number I don't know how to make a decision. I think it has strengthened this aspect of my eating disorder, and the idea that I "need" to know that I'm not eating 'too much'

Additionally, the enjoyment of eating, not just the types of food but the spontaneity and socializing aspects, were highlighted by many as being disrupted and becoming an afterthought in the process of choosing and eating food. Some spoke to how the fun from eating out was gone and they were focused on the calories, while others noted that every enjoyment of eating out was gone.

> It has been a really awful experience. Going out and eating was a big part of my initial recovery: learning to not have to pre-look at a menu, being more spontaneous and enjoying socialising. Adding calories to the menu has removed a lot of fun from eating out and "counting calories" which I would do obsessively at home.

> I find it difficult to articulate exactly how much it has impacted what I had worked really hard over many years to manage; every enjoyment of eating out has now gone, which has led to an overspill of emotions about what I eat in my home too.

Disembodiment can be understood as a process in which participants describe different ways that their bodies needs, or pleasurable aspects of eating are being disrupted, distanced, or removed by calorie information.

Anger and frustration at the perpetuation of diet culture

A small number of participants (9%) did not think they had experienced challenges due to calorie labels. However, most participants expressed anger and frustration at the legislation, suggesting it is 'cruel' and 'ridiculous'. One participant stated: 'Remove the fucking calories information', others stated: 'take the bloody calories away' and 'don't force it down our throats when we are just trying to survive'.

This anger was, for some, justified by the knowledge that this legislation is not based on scientific evidence. They felt that calories are 'useless' and the daily recommended intake is ungeneralizable, inaccurate and triggers ED behaviours.

> information about calories of a single meal is completely useless outside of having a grasp of what the nutritional value of your other meals that day and week look like

They also expressed that low calories and thinness do not 'equal health', and some participants felt this legislation normalizes and encourages disordered eating.

> There is simply no positive impact calories on menus can have – even outside of the way in which their only "successful target" is encouraging disordered eating

Many participants directed their anger and frustration towards the government. They noted that broader societal and systemic issues should be addressed, as these are responsible for poor health outcomes.

> If the government wants to tackle the "obesity crisis," it needs to look into the research that problematises the direct links between fatness and ill health that this intervention relies on … Calories on menus is a moralising, fat shaming farce that does absolutely nothing positive for public health

> The gov has not addressed wide scale societal and intergenerational trauma which is what causes eating and drinking numbing behaviours

Some criticism extended to food production industries. One participant claimed that 'calorie counting does not work long term, it's big business, money making for all diet companies'. Another said:

if they were serious about improving national eating habits they would support healthy fresh produce industries and curb the multi-billion pound processed food industries. But money talks louder…

Participants felt that 'shaming does not work', will not help anybody build a healthier relationship with food, and that this legislation is 'fuelled the "be good be healthy" brigade'. One participant said: 'it feels like a step backwards, like 90's diet culture is returning to harm another generation'. Another pointed out, it 'plays more into the thin ideal'. Additionally, some participants highlighted that shaming strategies will only deepen suffering for those that already experience weight stigma.

> Doing this in the name of tackling "the obesity epidemic" shows a wilful ignorance on be-half of the government … I worry that this will have the worst impact on fat people, who already suffer disproportionately from eating disorders and public shaming.

Notably, a very small number of participants did align their views with dominant discourse that 'it will help some people lose weight' or it would increase public awareness of what they are eating. These participants felt that while it had not had an impact on them, there are other people for whom they think it might help.

We are all responsible for ourselves

Some participants recognized that access to calorie labels could provide safety, comfort and reassurance. While many recognized this sense of safety and control may be part of their ED, a small number of people felt it helps keep them accountable in recovery and saw this as a positive. One participant reflected: 'I like it. It makes me feel more in control'. While many participants explained a number-centric meal meant they could not relax or enjoy their meal, a very small number of participants felt the opposite.

> I can enjoy myself while I am there and I do not spend hours worrying about what to eat, the calories in the meal

Some saw it as helpful, enabling them to stay on track with a meal plan.

> It allows me to go out and eat rather than having to meticulously track my calories at home and guess outside.

Participants also noted this can be a 'disordered' kind of safety and control.

> It was nice to be able to eat in a I sometimes. It gave me a sense of control, though that's not really a good thing, as I need to learn that I don't need to control my food.

A smaller number of participants felt this legislation presented opportunities to challenge themselves and take responsibility for their recovery.

> Calories on menus puts the responsibility onto me when choosing a meal. I feel in recovery this is an important factor. To hold responsibility and acknowledge the food in-front of me.

Most participants felt harmed by diet-talk prompted by calories on menus, but a small number felt this could open opportunities to disrupt harmful narratives.

> I actively try to counteract that narrative with HAES[2] friendly language and concepts because I don't want to see this passed down to another generation

DISCUSSION

Our findings suggest that most people with experience of EDs find calories on menus worsen their ED, often increasing distress, guilt, shame and anxiety. Our findings build on existing research which suggests calories on menus may exacerbate and trigger EDs (Haynos & Roberto, 2017; Raffoul et al., 2022). For example, isolation is common for people with EDs, and even more-so over recent years as the COVID-19 pandemic increased social isolation, often worsening ED symptoms (Branley-Bell & Talbot, 2020; Brown et al., 2021). Isolation may be exacerbated by the calories on menus legislation as most people either stop eating out or choose to eat in independent cafés and restaurants that do not display calories. Isolation can be understood as an impact of a legislation that is seen as excluding those with EDs. For instance, even if people go to efforts to avoid calorie labels, diet-talk at the table can be challenging, often putting strains on relationships, and producing a sense of not belonging or exclusion. This is not just during mealtimes, but the impact on recovery can 'spill out' at home and in other areas of people's lives. We might understand this as a process of 'othering'. That is, where discrimination based on difference occurs, and power inequalities are reinforced and reproduced through individual actions that are enabled by particular social contexts (Johnson et al., 2009). This sense of exclusion can be understood as an othering process whereby those with or with a history of EDs become positioned as different and therefore 'othered'.

A small number of people may find that calorie information helps them challenge the ED, take responsibility for their recovery and make an informed decision about their meal. This minority reflects existing literature which suggests some people with EDs like having calories on menus (Roberto et al., 2013). Raffoul et al. (2022) suggested this may be because having access to calorie information could help people to make informed choices and this may help to reduce the shame or guilt they might experience. Participants in our study did not refer to this reduction of guilt or shame. Instead, our analysis suggests there can be a sense of control and reassurance that comes with knowing the numbers but ultimately, and paradoxically, for most, this is an illusion of safety, limits food freedom, and is seen as a barrier to recovery. We understand this as a process of disembodiment, whereby people find themselves unable to connect to their bodies and feel this is counter-productive in recovery because they choose food based on calories rather than hunger or 'true' wants. Within the context of ED recovery, positive embodied practices are gaining traction within research as they can support attunement to physiological, emotional and cognitive needs which in turn supports healing between mind and body (Launeanu & Kwee, 2018; Piran & Teall, 2012). This is a movement away from quantified recovery indicators (such as counting calories) and other practices that disrupt a positive engagement with the body as a source of knowledge (Cook-Cottone, 2020; Estey et al., 2022).

Participants were critical of the accuracy of calorie labels and the usefulness of calories as a unit of measurement. This reflects evidence that calorie counts and daily recommended guidelines are inaccurate (Ndahimana & Eun-Kyung, 2017; Ravelli & Schoeller, 2020) and adds to existing research suggesting people with EDs may be sceptical about the trustworthiness and accuracy of calorie labels on menus (Raffoul et al., 2022). Notably, some participants in our study felt it will increase awareness of calories and might help obese people lose weight. However, most people took up a counter-cultural anti-diet movement position (Au & Cosh, 2022), rejecting this logic, suggesting that low calorie does not equal health, but this strategy promotes disordered eating and moralizes food. This tension is commonly reported by those with EDs who may find it overwhelmingly

---

[2]Health At Every Size (HAES) approach is a paradigm that proposes: (1) encouragement of body acceptance, (2) support for intuitive eating, and (3) support for active embodiment (Penney & Kirk, 2015).

difficult to find ways of counteracting and resisting dominant cultural narratives promoting thinness and restriction (LaMarre & Rice, 2016).

After working in recovery to challenge 'ED rules', being confronted with calories and weight-centric ideologies can bring about an unwelcome entanglement of self-surveillance. This makes ED recovery particularly challenging in a culture where moralizing discourses on health, food and bodies are culturally normalized and promoted (LaMarre & Rice, 2016). People are facing incongruent sets of messages about how to manage their bodies in a culture that prizes restraint and thinness and that simultaneously promotes indulgence and consumerization (LeBesco, 2011). This self-surveillance under neoliberal public health regimes, as it intersects with experiencing an ED can be challenging when people are caught between opposing discourses and prescribed messaging relating to health and recovery (LaMarre & Rice, 2016). This kind of bodily surveillance reflects neoliberal regimes of self-surveillance and self-governance (Surtees, 2009). Considered in this way, this legislation appears to encourage self-surveillance through the quantification and moralization of food, and as such, the self, which mirrors the experiences of many with EDs (Surtees, 2009).

Our findings highlight empirical critiques of weight-centred policies and paradigms that are not new. These critiques reflect a wealth of literature which suggests these policies and interventions are based on inaccurate assumptions and can cause iatrogenic harm (Bacon & Aphramor, 2011; O'Reilly & Sixsmith, 2012) and contribute to weight stigma (Rice, 2007) and long-term poor health outcomes (Berge et al., 2018). While these arguments are not new, this study suggests that people with experience of EDs are experiencing significant challenges as a direct result of this legislation while also maintaining a critical position and scepticism. This study also suggests that people with EDs are taking up ideological critiques (see O'Hara & Taylor, 2018) of this policy, highlighting that everybody should have a right to eat with freedom and choice, free from harm.

Individuals are navigating entanglements of self and government responsibility. Some participants noted the government's responsibility to minimize harm and address social problems that underpin poor public health outcomes. While they framed the government as responsible for the negative impacts of this legislation, they also responsibilized themselves for managing their own reactions. This points to the way that individualization and neoliberal responsibilization shapes how people manage their ED recoveries. LaMarre and Rice (2016) noted:

> in an age of individual responsibilization, in which we are all expected to self-monitor and apply health teachings—not only do instructions about recovery come from those in power, but they also come through self-instruction as individuals search for, negotiate, and strive to enact "recovery" bodily practices (p. 2)

This negotiation becomes apparent when we consider how participants appeared to be navigating health teachings about restraint and thinness, recovery teachings about freedom and removing the 'healthy self' from the 'ED voice' (Voswinkel et al., 2021), and counter-cultural movements such as anti-diet culture, intuitive eating and anti-weight stigma (Au & Cosh, 2022; Jovanovski & Jaeger, 2022). These tensions can be understood as situated in a culture which privileges self-responsibilization in ED recovery. ED recovery can become challenging to enact when recovery narratives about freedom and anti-diet culture movement narratives, oppose health narratives that privilege restraint and thinness.

Limitations

There are some limitations to this study. The skip logic built into the survey meant not all participants provided demographic data, and we were unable to ascertain the diversity of the sample as a whole. The majority of the sample are white and identify as female, however, our sample demonstrates LGBTQIA+ representation and representation of participants at different points in relation to their ED (i.e., in

recovery/recovered). This study was completed 8 months after the introduction of the calories on menus and therefore represents early impact on individuals rather than long term. Additionally, once we closed the Qualtrics survey to responses, the survey automatically removed incomplete responses, retaining responses from those who had completed the survey but opted to skip particular questions. Therefore, we were unable to include incomplete responses in our analysis.

We used manual coding via comment boxes in shared Microsoft Word documents, and we did not to use qualitative data analysis software programmes such as Nvivo. We recognize both manual and electronic methods come with their own challenges and opportunities, and one is not better than the other (Braun & Clarke, 2022). We were mindful of critiques that there can be an automatic trustworthiness of technologies that claim to assist researchers in working to uncover 'truth' in their data quickly and efficiently (Zhao et al., 2016). With this in mind, we wanted to engage and think with each other and with the data in a rich and dialogical way, to enable reflexive discussion in real time. Our chosen approach aligned with our feminist and reflexive orientation, to be interested in a multiplicity of truths and a dialogical, engaged process of working with the data. However, we appreciate the potential for different analytic possibilities that could have come from using software programmes, such as organizing a large data set, potentially enabling us to work with different patterns of coding or ways of making sense of it, as we developed themes.

Lastly, beyond one closed question where we asked participants whether they had experienced challenges due to having calories on menus (91% said 'yes'), we have not quantified particular codes or words from the qualitative data. Quantifying data in this way may have provided what might be seen as robustness of analysis, particularly if coming from a non-reflexive positivist orientation. However, coming from a critical qualitative perspective, we found that most participants' accounts were nuanced and multi-layered and quantification and categorization in this way would have flattened out this nuance. It was important our analysis acknowledged these multiple truths and realities. For example, that calories on menus can be experienced as both harmful and safe, both a comfort and a source of distress, and it can legitimize dominant cultural messaging and a sense of control, while at the same time, increasing unwanted self-surveillance and eating disordered thoughts and behaviours.

CONCLUSIONS

This is the second published study we are aware of that directly explores how people with EDs experience calorie labelling on menus. This legislation is adversely impacting many people with experience of EDs, including those that regard themselves as well established in recovery. Specifically, our findings suggest those with EDs can find themselves in situations that feel exposing, distressing and excluding. The vast majority of participants felt strongly that calories on menus should be removed, or at least made available by opt-in choice. While some feel calorie labels are helpful, individuals are negotiating a multiplicity of conflicting cultural messages about bodies, health and ED recovery. This is experienced as both helpful and harmful. At times, it may be useful to feel a sense of control and safety by knowing calories and choosing food and drink accordingly. Simultaneously, it can also be experienced as restrictive, disembodying, increasing self-surveillance, and for many, works against and produces significant barriers to ED recovery.

RECOMMENDATIONS

In recognizing the complexity of the issue, participants said that calorie information should still be available, but menus without calories should be the primary one provided to customers. Participants suggested calorie information could be available via QR codes, online or by request for those wanting it. More broadly,

our study strongly indicates a need to directly consult people with lived experience of EDs and actively and meaningfully involve them in the development of policies and legislation that is likely to impact them.

AUTHOR CONTRIBUTIONS

Tanya Frances: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; supervision; writing – original draft; writing – review and editing. **Kel O'Neill:** Conceptualization; formal analysis; methodology; writing – original draft; writing – review and editing. **Kirsty Newman:** Conceptualization; formal analysis; methodology; writing – original draft; writing – review and editing.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are not available due to privacy or ethical restrictions.

ORCID

Tanya Frances https://orcid.org/0000-0003-0757-0287

REFERENCES

Au, E. S., & Cosh, S. M. (2022). Social media and eating disorder recovery: An exploration of Instagram recovery community users and their reasons for engagement. *Eating Behaviors*, *46*, 101651. https://doi.org/10.1016/J.EATBEH.2022.101651

Ayton, A., Viljoen, D., Ryan, S., Ibrahim, A., & Ford, D. (2022). Risk, demand, capacity and outcomes in adult specialist eating disorder services in south-east of England before and since COVID-19. *BJPsych Bulletin*, *46*(2), 89–95. https://doi.org/10.1192/BJB.2021.73

Bacon, L., & Aphramor, L. (2011). Weight science: Evaluating the evidence for a paradigm shift. *Nutrition Journal*, *10*(1), 1–13. https://doi.org/10.1186/1475-2891-10-9/TABLES/2

Beat. (2022). Beat's response to Government plan for calorie counts on menus. https://www.beateatingdisorders.org.uk/news/beats-response-government-plan-calorie-count/

Berge, J. M., Winkler, M. R., Larson, N., Miller, J., Haynos, A. F., & Neumark-Sztainer, D. (2018). Intergenerational transmission of parent encouragement to diet from adolescence into adulthood. *Pediatrics*, *141*(4), 1–8. https://doi.org/10.1542/PEDS.2017-2955/37784

Boero, N. (2006). All the news that's fat to print: The American "obesity epidemic" and the media. *Qualitative Sociology*, *30*(1), 41–60. https://doi.org/10.1007/S11133-006-9010-4

Branley-Bell, D., & Talbot, C. V. (2020). Exploring the impact of the COVID-19 pandemic and UK lockdown on individuals with experience of eating disorders. *Journal of Eating Disorders*, *8*(1), 1–12. https://doi.org/10.1186/S40337-020-00319-Y/TABLES/4

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., & Clarke, V. (2022). *Thematic analysis*. Sage Publications.

Brookes, G. (2021). 'Lose weight, save the NHS': Discourses of obesity in press coverage of COVID-19. *Critical Discourse Studies*, *19*(6), 629–647. https://doi.org/10.1080/17405904.2021.1933116

Brown, S. M., Opitz, M. C., Peebles, A. I., Sharpe, H., Duffy, F., & Newman, E. (2021). A qualitative exploration of the impact of COVID-19 on individuals with eating disorders in the UK. *Appetite*, *156*, 104977. https://doi.org/10.1016/J.APPET.2020.104977

Camacho, S., & Ruppel, A. (2017). Is the calorie concept a real solution to the obesity epidemic? *Global Health Action*, *10*(1), 1289650. https://doi.org/10.1080/16549716.2017.1289650

Cook-Cottone, C. P. (2020). *Embodiment and the treatment of eating disorders: The body as a resource in recovery*. W. W. Norton & Company.

Crockett, R. A., King, S. E., Marteau, T. M., Prevost, A. T., Bignardi, G., Roberts, N. W., Stubbs, B., Hollands, G. J., & Jebb, S. A. (2018). Nutritional labelling for healthier food or non-alcoholic drink purchasing and consumption. *Cochrane Database*

of Systematic Reviews, *2018*(2), 1–104. https://doi.org/10.1002/14651858.CD009315.PUB2/MEDIA/CDSR/CD009315/IMAGE_N/NCD009315-CMP-010.01.SVG

De Vaus, D. A. (2013). *Surveys in social research* (6th ed.). Routledge.

Duffy, F., Peebles, I., Maloney, E., Robertson, M. D. A., & Sharpe, H. (2023). Individuals with restrictive eating disorders' experience of the introduction of calories on menus in England: An interpretative phenomenological analysis study. *European Eating Disorders Review*, 1–11. https://doi.org/10.1002/erv.3007

Duncan, A. E., Ziobrowski, H. N., & Nicol, G. (2017). The prevalence of past 12-month and lifetime DSM-IV eating disorders by BMI category in US men and women. *European Eating Disorders Review*, *25*(3), 165–171. https://doi.org/10.1002/ERV.2503

Estey, E. E. E., Roff, C., Kozlowski, M. B., Rovig, S., Guyker, W. M., & Cook-Cottone, C. P. (2022). Efficacy of eat breathe thrive: A randomized controlled trial of a yoga-based program. *Body Image*, *42*, 427–439. https://doi.org/10.1016/J.BODYIM.2022.07.009

Finlay, L., & Gough, B. (2003). *Reflexivity: A practical guide for researchers in health and social sciences*. Blackwell Science.

Finney, C. (2022, April 1). Putting calories on menus won't solve obesity, but it will harm those of us with eating disorders | Clare Finney | The Guardian. https://www.theguardian.com/commentisfree/2022/apr/01/calories-menus-obesity-eating-disorders

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*, *14*(3), 575–599. https://doi.org/10.2307/3178066

Harrison, E. (2012). The body economic: The case of 'childhood obesity'. *Feminism & Psychology*, *22*(3), 324–343. https://doi.org/10.1177/0959353512445357

Haynos, A. F., & Roberto, C. A. (2017). The effects of restaurant menu calorie labeling on hypothetical meal choices of females with disordered eating. *International Journal of Eating Disorders*, *50*(3), 275–283. https://doi.org/10.1002/EAT.22675

Hockin-Boyers, H., Pope, S., & Jamie, K. (2021). #gainingweightiscool: The use of transformation photos on Instagram among female weightlifters in recovery from eating disorders. *Qualitative Research in Sport, Exercise and Health*, *13*(1), 94–112. https://doi.org/10.1080/2159676X.2020.1836511

Hunger, J. M., Dodd, D. R., & Smith, A. R. (2020). Weight discrimination, anticipated weight stigma, and disordered eating. *Eating Behaviors*, *37*, 101383. https://doi.org/10.1016/J.EATBEH.2020.101383

Johnson, J. L., Bottorff, J. L., Browne, A. J., Grewal, S., Hilton, B. A., & Clarke, H. (2009). Othering and being othered in the context of health care services. *Health Communication*, *16*(2), 255–271. https://doi.org/10.1207/S15327027HC1602_7

Jovanovski, N., & Jaeger, T. (2022). Unpacking the 'anti-diet movement': Domination and strategies of resistance in the broad anti-diet community. *Social Movement Studies*, 1–18. https://doi.org/10.1080/14742837.2022.2070736

LaMarre, A., & Rice, C. (2016). Normal eating is counter-cultural: Embodied experiences of eating disorder recovery. *Journal of Community & Applied Social Psychology*, *26*(2), 136–149. https://doi.org/10.1002/casp.2240

Launeanu, M., & Kwee, J. L. (2018). A non-dualistic and existential perspective on understanding and treating disordered eating. In H. L. McBride & J. L. Kwee (Eds.), *Embodiment and eating disorders: Theory, research, prevention, and treatment* (pp. 35–52). Routledge.

LeBesco, K. (2011). Neoliberalism, public health, and the moral perils of fatness. *Critical Public Health*, *21*(2), 153–164. https://doi.org/10.1080/09581596.2010.529422

Lucan, S. C., & Dinicolantonio, J. J. (2014). How calorie-focused thinking about obesity and related diseases may mislead and harm public health. An alternative. *Public Health Nutrition*, *18*(4), 571–581. https://doi.org/10.1017/S1368980014002559

McGeown, L. (2019). The calorie counter-intuitive effect of restaurant menu calorie labelling. *Canadian Journal of Public Health*, *110*(6), 816–820. https://doi.org/10.17269/S41997-019-00183-7

Ndahimana, D., & Eun-Kyung, K. (2017). Measurement methods for physical activity and energy expenditure: A review. *Clinical Nutrition Research*, *6*(2), 68–80. https://doi.org/10.7762/cnr.2017.6.2.68

Nencel, L. (2014). Situating reflexivity: Voices, positionalities and representations in feminist ethnographic texts. *Women's Studies International Forum*, *43*, 75–83. https://doi.org/10.1016/j.wsif.2013.07.018

NHS. (2020). Health Survey for England 2019 [NS] – NHS Digital. https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2019

O'Hara, L., & Taylor, J. (2018). What's wrong with the 'war on obesity?' A narrative review of the weight-centered health paradigm and development of the 3C framework to build critical competency for a paradigm shift. *SAGE Open*, *8*(2), 1–28. https://doi.org/10.1177/2158244018772888

O'Reilly, C., & Sixsmith, J. (2012). From theory to policy: Reducing harms associated with the weight-centered health paradigm. *Fat Studies*, *1*(1), 97–113. https://doi.org/10.1080/21604851.2012.627792

Penney, T. L., & Kirk, S. F. L. (2015). The health at every size paradigm and obesity: Missing empirical evidence may help push the reframing obesity debate forward. *American Journal of Public Health*, *105*(5), e42. https://doi.org/10.2105/AJPH.2015.302552

Pilgrim, D. (2014). *Understanding mental health: A critical realist exploration. Understanding mental health: A critical realist exploration*. Routledge.

Piran, N., & Teall, T. (2012). The developmental theory of embodiment. In G. L. McVey, M. P. Levine, N. Piran, & H. B. Ferguson (Eds.), *Preventing eating-related and weight-related disorders* (pp. 169–198). Wilfrid Laurier University Press.

Raffoul, A., Gibbons, B., Boluk, K., Neiterman, E., Hammond, D., & Kirkpatrick, S. I. (2022). "Maybe a little bit of guilt isn't so bad for the overall health of an individual": A mixed-methods exploration of young adults' experiences with calorie labelling. *BMC Public Health*, *22*(1), 1–10. https://doi.org/10.1186/S12889-022-13364-W/TABLES/2

Ralph, A. F., Brennan, L., Byrne, S., Caldwell, B., Farmer, J., Hart, L. M., Heruc, G. A., Maguire, S., Piya, M. K., Quin, J., Trobe, S. K., Wallis, A., Williams-Tchen, A. J., & Hay, P. (2022). Management of eating disorders for people with higher weight: Clinical practice guideline. *Journal of Eating Disorders*, *10*(1), 1–42. https://doi.org/10.1186/S40337-022-00622-W

Ravelli, M. N., & Schoeller, D. A. (2020). Traditional self-reported dietary instruments are prone to inaccuracies and new approaches are needed. *Frontiers in Nutrition*, *7*, 1–6. https://doi.org/10.3389/FNUT.2020.00090

Rice, C. (2007). Becoming "the fat girl": Acquisition of an unfit identity. *Women's Studies International Forum*, *30*(2), 158–174. https://doi.org/10.1016/J.WSIF.2007.01.001

Roberto, C. A., Haynos, A. F., Schwartz, M. B., Brownell, K. D., & White, M. A. (2013). Calorie estimation accuracy and menu labeling perceptions among individuals with and without binge eating and/or purging disorders. *Eating and Weight Disorders*, *18*(3), 255–261. https://doi.org/10.1007/S40519-013-0035-X

Surtees, R. (2009). Food for thought: Embodied slimness and nursing within an eating disorders unit. In H. Malson & M. Burns (Eds.), *Critical feminist approaches to eating dis/orders* (1st ed.). Routledge.

Sutin, A. R., Stephan, Y., & Terracciano, A. (2015). Weight discrimination and risk of mortality. *Psychological Science*, *26*(11), 1803–1811. https://doi.org/10.1177/0956797615601103

Terry, G., & Braun, V. (2017). Short but often sweet: The surprising potential of qualitative survey methods. In V. Braun, V. Clarke, & D. Gray (Eds.), *Collecting qualitative data. A practical guide to textual, media and virtual techniques*. Cambridge University Press. https://doi.org/10.1017/9781107295094

UK Government. (2021). The Calorie Labelling (Out of Home Sector) (England) Regulations 2021. https://www.legislation.gov.uk/uksi/2021/909/made

UK Government Department of Health and Social Care. (2021, May 12). Calorie labelling on menus to be introduced in cafes, restaurants and takeaways – GOV.UK. https://www.gov.uk/government/news/calorie-labelling-on-menus-to-be-introduced-in-cafes-restaurants-and-takeaways

Voswinkel, M. M., Rijkers, C., van Delden, J. J. M., & van Elburg, A. A. (2021). Externalizing your eating disorder: A qualitative interview study. *Journal of Eating Disorders*, *9*(1), 1–12. https://doi.org/10.1186/S40337-021-00486-6/TABLES/3

Wellard-Cole, L., Goldsbury, D., Havill, M., Hughes, C., Watson, W. L., Dunford, E. K., & Chapman, K. (2018). Monitoring the changes to the nutrient composition of fast foods following the introduction of menu labelling in New South Wales, Australia: An observational study. *Public Health Nutrition*, *21*(6), 1194–1199. https://doi.org/10.1017/S1368980017003706

Zhao, P., Li, P., Ross, K., & Dennis, B. (2016). Methodological tool or methodology? Beyond instrumentality and efficiency with qualitative data analysis software. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, *17*(2), 1–21. https://doi.org/10.17169/fqs-17.2.2597

Zlatevska, N., Neumann, N., & Dubelaar, C. (2018). Mandatory calorie disclosure: A comprehensive analysis of its effect on consumers and retailers. *Journal of Retailing*, *94*(1), 89–101. https://doi.org/10.1016/J.JRETAI.2017.09.007