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Research Paper

Caught in a loop: Glucagon-like peptide-1 agonists and weight loss technology as a commercial determinant of health

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We examined how companies that manufacture weight loss pharmaceuticals, Glucagon-like peptide-1 agonists, along with the non-profits they sponsor and their public facing websites, operate as commercial determinants of health through the discourses they produce online. Data were extracted from organization websites and uploaded into NVivo 15 for multimodal critical discourse analysis. Discourses identified were not new but recursively constructed 'obesity' through a medicalized discourse grounded in scientific authority, as diseased, and needing treatment, which reproduces discourses of other weight loss 'cures'. The Body Mass Index was presented as an objective, but limited, metric to classify bodies, rendering health risk quantifiable. Structural determinants of health were acknowledged but absorbed into a medicalized framework. Across all sources, healthcare professionals were positioned as saviours, guiding individuals toward successful outcomes. A final discourse, present only on pharmaceutical and non-profit sites, framed commercial pharmaceutical intervention as necessary to ease the economic burden of 'obesity' on public services. In conclusion, these websites contribute to the pharmaceuticalization of weight and the commercialization of bodily dissatisfaction and health. Although they attempt to project themselves as anti-stigmatizing, these discourses remain highly individualized, clinically focused, and reproduce and reinforce weight-based stereotypes.

Introduction

The relationship between weight and disease has long been debated (Jutel 2006, Jutel 2009, Kwan & Graves 2013). In the 21st century, fatness was categorized into 'risky' and 'diseased' categories through

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the Body Mass Index (BMI), a simplistic measure of weight (not fat per se) in kilograms over height in metres squared (Gard & Wright 2005, Health Canada 2019, Jutel 2006, Jutel 2009). 'Obesity'[1] is defined as a BMI of ≥ 30 (Health Canada 2019, Rubino et al. 2025), but is known, amongst other limitations, to misclassify people's state of healthiness or mortality risk (Flegal et al. 2013, Tomiyama et al. 2016). Critical views of weight science, including opposition to the presumption that all those with elevated BMIs are necessarily unhealthy and need to lose weight, body positivity movements, and more radical fat activist social justice movements, gained at least moderate traction in recent decades (Bacon & Aphramor 2011, Bombak et al. 2019, Cooper 2016, Kwan & Graves 2013, Monaghan et al. 2022, Tylka et al. 2014, Yates-Doerr 2013).

However, the recent introduction of Glucagon-like peptide-1 agonists (GLP-1s), like semaglutide, for weight loss has reignited the dispute around the medicalization of weight, its nuances, and its implications. The process of considering whether or not something is relevant to the medical domain and its intervention is known as medicalization (Conrad 2005). This can include labeling new phenomenon as pathological or expanding diagnostic criteria (Conrad 2005, Conrad & Tan 2014).

Via medicalization, diagnostic criteria can absorb what was previously considered a risk factor. Risk and disease are especially likely to become conflated when etiologies are complicated, uncertain, multivariate, and perceived to be rooted in modifiable behaviour, such as when diseases are non-communicable (Bell 2016, Lupton 1995, Petersen & Lupton 1996). This includes 'obesity', with its contingent links between lifestyle, fatness, fitness, and healthiness (Bacon & Aphramor 2011, Bombak 2014, Gard & Wright 2005, Monaghan et al. 2022). Indeed, conventional 'obesity' scientists have argued that weight science has been hampered for too long by an overreliance on taken-for-granted-assumptions (Casazza et al. 2013, Hebert et al. 2013).

Pharmaceuticalization is related to medicalization, which involves, amongst other processes, expanding circumstances wherein pharmaceuticals may be perceived as desirable or needed, including those for states in which pathology is not necessarily evident (Williams et al. 2011). Williams and colleagues (2011) developed a framework for processes of pharmaceuticalization that included: redefining health issues as needing medication; reframing depictions of pharmaceutical use in media; expanding pharmaceuticals into non-medical markets like cosmetic augmentation; altering pharmaceutical governance; changing how patient groups identify and advocate regarding drugs; and shaping future expectations pertaining to pharmaceuticalization. The introduction and visibility of GLP-1s to achieve thinness for appearance or as a prophylaxis against age-related, stress-related, post-natal, and menopausal weight gain (Kollewe 2025, Manavis 2024) has accelerated the pharmaceuticalization of weight. It is essential to consider the potential of this rapid pharmaceuticalization to produce iatrogenic harms and/or weight stigma, thus diminishing the social justice aims of body acceptance (Bacon & Aphramor 2011, Bombak et al. 2019, Cooper 2016, Kwan & Graves 2013, Monaghan et al. 2022, Tylka et al. 2014). Previous iterations of weight loss medicalization and pharmaceuticalization have included prescribing amphetamines, constructing 'obesity' as a form of addiction, and the deadly off-label prescribing of fenfluramine/phentermine (Fen-Phen) (Basinger & Watford 2026, McPhail 2017, Mundy & Rosenberg 2001, Rasmussen 2012, Rasmussen 2015).

In considering these dangers, we must be aware of the commercial determinants of health. The commercial determinants of health are 'the systems, practices and pathways through which commercial actors drive health and equity' (Gilmore et al. 2023, p. 1195). In this regard, GLP-1 manufacturers Novo Nordisk and Eli Lilly are powerful corporate entities and generate considerable revenue from the sale of GLP-1s. Mialon (2020) categorizes several practices commercial actors may engage in to influence health, such as coalition and information management. Novo Nordisk and Eli Lilly build alliances through the

[1] Higher-weight and fat are used in this article as neutral descriptors; obese/obesity (BMI ≥ 30) are presented in quotes (outside direct quotations and organization names) to emphasize the debated nature of the pathologization of body size (Meadows & Daníelsdóttir 2016).

sponsorship of health organizations, for example, Obesity Canada and the Obesity Action Coalition. These strategies may intersect with 'argument-based discursive strategies', another category of practices described by Mialon (2020), which seek to reframe the health issue and/or promote industry-aligned resolutions. This has important implications for health organizations, universities, and public health practitioners in managing their industry partnerships or acceptance of pharmaceutical industry funding, particularly given how pervasive these entanglements are (Weatherall 2000). Often conflicts of interest are obscured as funding is tied to institutions rather than individuals (Holden 2000). In this regard, the University of Toronto has accepted $20 million in funding from Novo Nordisk (U of T News 2021). While industry may not actively shape narratives of health organizations, their financial contributions can amplify these narratives, potentially overpowering competing perspectives, such as those from critical weight scholars, as described above. Importantly, health organizations, with their affiliated academics, carry considerable social and structural power to shape knowledge systems and public discourses. Guthman (2024) similarly reflects on how neoliberalism has shaped public expectations for innovative 'solutions', which also generate revenue for businesses. Through these pathways, commercial actors can influence and shape dominant narratives and norms, which we sought to explore.

The purpose of this study was to examine how Novo Nordisk and Eli Lilly, non-profits they sponsor (Obesity Canada and the Obesity Action Coalition), and their public facing websites (the Truth About Weight) are discursively and structurally operating as commercial determinants of health. We included both the Canadian versions of the public-facing sites and pharmaceutical sites and generic/global versions where available. The research questions we sought to address were: in what ways are: a) 'overweight/obesity', fat(ness), size; b) health, risk, weight; and c) weight loss, gain, treatment, and management, constructed in the sources? We chose online sources to explore pharmaceuticalization due to having: a) an abundance of discourse readily available for analysis; b) websites being purposefully cultivated for specific audiences; and c) the popularity of online health information in North America (Canadian Medical Association & Abacus Data 2025, Wang & Cohen 2023). In our discussion we argue that the rapid uptake of pharmaceuticals for weight loss, well-funded by industry, is a mechanism of recursion; a recursive logic that locks in dominant discourses to reproduce what counts as a healthy body. This looping works to reinforce and intensify interlocking discourses that pathologize fat bodies, and stalls significant advances in alternative public discourses, funding in other areas, or advancements in different health paradigms.

Methods

This analysis is part of a larger project that examines the influence of the commercial determinants of health through a case study of the pharmaceutical industry and their marketing of GLP-1s. The present analysis, focused on medicalization, is the first paper. Medicalization is an important foundational lens. Subsequent analyses will focus on constructions of stigma and hunger/eating. We established with the University of New Brunswick's Research Ethics Board that the study was exempt from review as all sources are publicly available. We extracted data from the sources between May to July 2025 and uploaded them into NVivo 15. Where pages required input on our behalf in the form of demographic or health information, we created vignettes to generate and extract the greatest possible series of extractions. As an estimate, our analytical sample included, across 130 web pages, 678 captures (generally in the form of screen shots), which included 52 images and a total of 32,417 words.

From July to December 2025, three analysts coded the sources using multimodal critical discourse analysis (MCDA). We deployed a variety of rigour checks such as writing reflexive memos, investigator triangulation, peer debriefing, and documenting an audit trail that facilitated observing any 'code drift' during analysis (Creswell & Poth 2017, Kaczynski et al. 2014). MCDA is undertaken to explore how 'common knowledge' is developed and negotiated through texts including words, audio, videos, and images, which reinforce or challenge oppressive power structures (Fairclough 1989, Foucault 1975,

Machin & Mayr 2012). Each source was examined by an analyst line by line and assigned to inductive code(s) according to the language used and meaning emerging from the data and/or deductive code(s) based on pre-existing methodological, substantive, or theoretical literature. All sources were ultimately read by another analyst and summarized as a rigour check. Any interpretative conflicts were settled by the first author. Alike coding categories were collapsed into discourses according to our research questions and applying a pharmaceuticalization framework (Williams et al. 2011).

We selected our sources because Novo Nordisk and Eli Lilly are the manufacturers of GLP-1s; the Truth About Weight is Novo Nordisk's trademarked, and tellingly-named, public-facing website that appears to be aimed at patients; and Obesity Canada (n.d.-b) and Obesity Action Coalition (n.d.) are large non-profit entities sponsored by Novo Nordisk and Eli Lilly composed of patients, researchers, clinicians, and advocates invested in 'obesity'-related treatment, education, and research. Obesity Canada also produced the Canadian Adult Obesity Clinical Practice Guidelines with the Canadian Association for Bariatric Physicians and Surgeons (Obesity Canada n.d.-a, Wharton et al. 2020), in which we have previously explored conflicts of interest (Bombak et al. 2022). Importantly, according to the Guidelines, 45% of adults in Canada are eligible to be prescribed GLP-1s, based on analysis we conducted (currently under review).

The analysis revealed four discourses in all three categories of sites (pharmaceutical, public-facing, and non-profit sites), and one additional discourse that was found exclusively in pharmaceutical and non-profit sites. The four discourses found in all sites were *Medicalization Through Scientific Authority*, *BMI and the Illusion of Bodily Classification, Biomedical Reframing of Culture and Suffering,* and *Healthcare Professionals as Saviours*. The additional discourse on the pharmaceutical and non-profit sites was *Rationalizing How to Ease the Burden.* Findings are reported below in the form of summaries of the discourses and evidentiary quotes from the analyzed sites. The tables in Appendix I include a summary of each discourse and associated codes, with descriptions/quotes from the various websites.

Medicalization Through Scientific Authority

Across the sources, 'obesity' is medicalized and this construction is presented as grounded in scientific authority. This positions weight as a biomedical condition that requires expert-led, clinical intervention. 'Obesity' is purposefully described using terminology such as 'complex', 'chronic', 'relapse', and 'disease', to link it with genetic, hormonal, or physiological explanations rather than individual behaviour or social systems. Importantly, as described in The Truth about Weight Canada website, the evidence base is 'indisputable':

> Together, these findings provide indisputable evidence that genetics and obesity are closely related. Some evidence suggests obesity is between 40% to 70% determined by genetics. This means that the genes you inherit from your parents may increase your risk of developing obesity.

Further explicit references are made to genetics, appetite hormones, and biological 'defences' against weight loss that frame body weight as influenced by internal mechanisms resistant to personal control. Together, this language creates a sense of urgency for consumers to adopt medicalized intervention. The framing of 'obesity' as a biomedical condition is reinforced by claims of scientific certainty and evidence-based medicine. Healthcare professionals are positioned as essential in the treatment of 'obesity' and medical interventions are described as necessary and other methods as 'unachievable', 'insufficient', or 'unsustainable'. This is shown in the Canadian Obesity Clinical Practice Guidelines, available on the Obesity Canada website:

> Healthy eating and physical activity are fundamental to successful weight management…Healthy behaviour changes alone generally achieve only a 3%-5% weight loss, which is most often not sustained over the long term. Pharmacotherapy for obesity management should be considered to

> decrease weight and optimize health when healthy eating and physical activity alone have been ineffective, insufficient or without sustained benefit.

Across sources, science serves to normalize medical intervention, justify expanded treatment access, and reframe toward a condition best understood, managed, and governed within medical systems.

BMI and the Illusion of Body Classification

BMI is presented as a clear, objective, and reliable metric to classify bodies, rendering health and risk quantifiable via a single numeric threshold, particularly on public-facing and non-profit sites. BMI calculators are routinely positioned as an authoritative 'first-step' in weight assessment, using 'standardized' cut-offs to categorize bodies, and important for both healthcare providers and the individual themselves to be aware of. For example, on the Truth About Weight website, knowing one's BMI is framed as a source of empowerment.

> It's important to remember that living with obesity doesn't necessarily mean you're unhealthy, just as being at a "normal" weight doesn't mean you're healthy. Your BMI doesn't define you, but knowing and understanding your BMI can be a powerful tool for taking charge of your own health.

The repeated emphasis on BMI's objectivity produces the impression that complex health states can be captured through a single number, and its complexity may necessitate an expert to unravel. While limitations related to muscle mass, fat distribution, racialization, gender, ethnicity, and age, are sometimes noted – most commonly in the non-profit sites – they are often framed as a secondary consideration to take note of rather than a fundamental validity error inherent to the BMI. The Obesity Action Coalition specifically suggests that social determinants merely modify risk related to BMI:

> Please note: The body mass index (weight in kg/height in meters^2) is used to screen for obesity, but it does not displace clinical judgment. BMI is not a measure of body fat. Social determinants, race, ethnicity, and age may modify the risk associated with a given BMI. Please talk with your healthcare provider about understanding BMI.

As a result, lived experiences of health, embodiment, and wellbeing are displaced by numerical categorization, and bodies are rendered comparable, governable, and actionable as a result. This discourse ultimately normalizes BMI as a neutral and scientifically grounded measure, obscuring its historical, cultural, and population-specific constraints while reinforcing its central role in defining health and risk. The manner in which socioeconomic factors are captured by such messaging, but ultimately subsumed, is addressed within the next discourse, the biomedical reframing of culture and suffering.

Biomedical Reframing of Culture and Suffering

Across the sources, cultural, environmental, and structural factors are acknowledged as shaping individuals' relationships with body image and weight; however, these influences are largely positioned as contextual considerations rather than as primary social determinants capable of challenging medical authority. For example, one site encouraged individuals to 'recognize' how cultural food practices affect weight-management goals and to personally 'address' these challenges, reinforcing an individualized locus of responsibility. Cultural food practices are rarely named but are mentioned alongside images of African Americans. Environmental conditions — including the widespread availability of cheap processed foods, sedentary lifestyles, and limited access to safe spaces for physical activity — are similarly framed as 'obesogenic environments' that exacerbate weight-management difficulties. Although these sources

recognize the role of structural conditions, such factors are reframed in ways that further legitimize medical intervention by depicting modern environments and social determinants as fundamentally incompatible with human biology.

Socioeconomic inequities affecting low-income and marginalized communities are frequently cited, including reduced access to healthy foods, safe neighbourhoods, and equitable healthcare, as well as the underrepresentation of ethnic minorities in clinical trials. The Obesity Action Coalition states: 'Some neighborhoods have little or no access to fresh, healthy foods'. Rather than prompting a reorientation toward structural or policy-level attempts to address disparities and the social determinants of health, these inequities are used to justify expanded access to healthcare treatments, pharmacotherapy, and professionally guided weight-loss care, although Novo Nordisk does position themselves as involved in community efforts. Novo Nordisk Canada claims 'building on more than ten years of experience with urban health promotion and disease prevention programming, we see that improving health equity can be a formidable defence against obesity and other chronic diseases'.

Even deeply embodied experiences of trauma, chronic stress, and psychosocial adversity are framed as 'obesity'-contributory factors that ultimately funnel individuals toward clinical assessment and intervention. Some discourses appear to pathologize culture itself, such as the following from The Truth About Weight, 'Some things from one's culture, like certain food and activities, may impact weight-management goals. Recognize which ones are challenging. Personally work to address them.' Although this webpage is no longer publicly accessible, the quoted content reflects material archived and coded by the research team on July 28, 2025. In this way, cultural and structural forces are acknowledged as relevant to wellbeing but absorbed into a weight-medicalized framework that prioritizes diagnosis, treatment, and individualized management, effectively translating social suffering and inequity into clinical risk factors to be addressed within healthcare systems.

Healthcare Professionals as Saviours

Across all sources, healthcare professionals are consistently positioned as saviours in the management of 'obesity'. Particularly, healthcare professionals are portrayed as central to, and necessary for, guiding individuals toward successful weight outcomes. Weight management is rarely framed as achievable independently; instead, the emphasis is placed on the necessity of 'partnering' with a healthcare provider as the first and most critical step. Within this discourse, clinicians are portrayed as defenders against 'obesity' by providing interventions that 'combat' against the body's natural resistance to weight loss. Language surrounding defence and protection is used to construct healthcare professionals as active agents who guarantee success whereas the individuals' efforts are framed as insufficient or vulnerable to relapse. This saviour framing is further reinforced through narratives of hope and transformation, including personal testimonies in which medical intervention is described as life-altering. Tools for finding local physicians, letter templates advocating for coverage, and scripts for conversations with healthcare professionals are provided.

In contrast, the non-profit sources position healthcare professionals as educational and emotional supports, rather than saviours. These sources emphasized providers' responsibility to educate patients, correct public misunderstanding, and mitigate stigma and guilt associated with 'obesity'. For example, the Canadian Obesity Clinical Practices Guidelines (Obesity Canada n.d.-a) state 'Health care providers are in a good position to address the shame and guilt felt by some children and families, especially if they view obesity as a personal choice and moral failing.' Collectively, these representations construct healthcare professionals as indispensable gatekeepers to successful treatment, centralizing medical expertise as the primary pathway to manage and overcome 'obesity'.

Rationalizing How to Ease the Burden

Within non-profit and pharma sites, 'obesity' is consistently framed as exerting significant and unsustainable strain on healthcare and social systems. Some sources emphasize the 'staggering' direct and indirect costs associated with 'obesity', extending its implications beyond individual health to national economic wellbeing. This framing is reinforced through the quantification of the burden including healthcare costs and productivity losses. Similarly, disability-related unemployment among 'obese' adults is mobilized to highlight the downstream impact on public systems, claiming that reduced numbers in the workforce may cost the government millions annually. The Obesity Canada website indicates: '45% of adults living with obesity, and an associated disability, did not work in the last year, potentially costing the Canadian Pension Plan millions annually.'

Finally, the strain of 'obesity' on finances is reiterated with service delivery being referred to as 'resource-intensive' and economically demanding for both systems and families. Pharmaceutical sites profit from this discourse by framing treatment coverage decisions through return-on-investment logic, which in turn, allows them to emphasize the need for access to medicalized weight loss treatment. This framing is most clearly exemplified by this quote from the Eli Lilly website:

> "Every major medical organization and establishment recognizes obesity as a chronic disease, yet insurance and federal programs do not systematically cover people living with obesity for medical care — this needs to change," said Patrik Jonsson, executive vice president and president of Lilly Cardiometabolic Health and Lilly USA.

Interestingly, there was no or limited mention of the cost or strain of 'obesity' on public-facing sources. Collectively, these sources construct 'obesity' as a societal problem that requires urgent intervention as a necessary response to economic and systemic pressures. This framing appears designed to legitimize calls for expanded treatment coverage, pharmaceutical involvement, and policy reform through appeals to financial responsibility and system sustainability.

Discussion

In our analysis of how Novo Nordisk and Eli Lilly are discursively and structurally operating as commercial determinants of health, via their online sites, the non-profits they sponsor (Obesity Canada and the Obesity Action Coalition), and their public facing websites, we found five prominent discourses that illustrate how corporate actors are using GLP-1s to recursively disseminate familiar understandings of 'obesity' and weight loss. Our framing of these discourses as recursive borrows from the work of McKittrick (2021), who uses recursivity to critically map the ways in which dominant knowledge systems fold back on themselves to operate as recurring algorithms. Using recursivity to explain how anti-Blackness is normalized through the power of 'recursive loops' of scientific racism and biocentric classifications of Black bodies, and drawing on Black scholars and writers, she argues that biocentric science:

> is an analytical system that is closed … colonial and racial narratives are attached to and extend from the body outward, stabilize white supremacist logics, classify black life as unworthy, and loop back to mark the black body as an unworthy script that validates white, supremacist logics (McKittrick 2021, pp. 132-33).

This recursive system, she suggests, is normalized, inconspicuous and so 'ubiquitously ordinary' we do not notice its repetition. Strings (2019) demonstrates the work of biocentric science in her history

of the racial project of fatphobia, and here we extend recursivity as an analytic framework to make visible the ways in which looping discourses are enfolded into the pharmaceuticalization of weight loss.

Basinger and Watford (2026) also found recursive narratives of fatness and pharmaceuticals similar to those we identified with respect to Fen-Phen and GLP-1s. In their essay on the way history repeats itself, they identified the following narratives: fatness is fundamentally unhealthy, immoral, a disease, and should be eradicated – all of which are very much in line with the data we analyzed from GLP-1-linked websites. Pharmaceutical discourses position biomedicine as the authority on health and the body and profit-driven pharmaceuticals as the solutions to the expensive burden of 'obesity' by intervening when individuals' biologically faulty willpower fails them. Such recursive framing, especially its durability and ubiquity, enables pharmaceuticalization to act as a powerful commercial determinant of health.

Our findings indicate that sponsored non-profits rely on the same narratives perpetuated by pharmaceutical companies; therefore, they are operating in accordance with established industry strategies to shape public discourses towards favourable policy and practice environments (Mialon 2020). It is important for the field of public health to be mindful of the history of such partnerships. In Batt's (2019) study on breast cancer advocacy, she found *critique of treatments* could be stifled when industry partnerships became normalized; instead, advocacy was redirected to *promoting access to treatments*. When pharmaceutical companies are re-energizing discourses that were used to sell deadly drugs (Fen-Phen), we must be wary, especially when they argue their approach is in line with anti-stigma advocacy and supported by the community affected (Bombak 2023).

The BMI recurs endlessly in the discourses we examined despite ongoing controversy, playing a powerful role in classifying bodies as deviations from the 'norm' and contributing ultimately to biologizing 'obesity' (Hacking 1995). Indeed, even before concluding our analysis we found that Obesity Canada's (2023) website now includes a Consensus Statement on the BMI. Despite its widespread use, the BMI has been heavily criticized for its historical inaccuracies across racial and ethnic groups, particularly for Black women, who were frequently visually depicted on sites. Developed from nineteenth-century studies of white European men and women, BMI does not account for differences in age or body composition (Chamarthi & Daley 2025). This is significant given that non-Hispanic Black women tend to have lower body fat percentages and higher lean muscle mass compared to white women of the same BMI, often leading to misclassification as 'overweight' or 'obese' despite having healthy body compositions (Alexis 2021). Consequently, the continued use of BMI can be understood as both scientifically flawed and racially exclusionary, maintaining a 'one-size-fits-all' standard that fails to capture the diversity of human bodies. The sites we analyzed included critique of the BMI and the difficulties in trying to capture health through body size but not something as radical as a weight-neutral approach to health (Tylka et al. 2014). As weight loss is so culturally and medically positioned as 'a good outcome', any configuration of the BMI is trapped in a recursive loop. There have long been attempts to easily assign 'obesity' to a racialized/class status, rather than critically consider complicated realities of deprivation; diverse lifestyles and health statuses across weight trajectories; and fat embodiment among all socioeconomic gradients (Colls & Evans 2014, Farrell et al. 2016, Godley & McLaren 2010, Kirkland 2011, Medvedyuk et al. 2018, Meeuf 2016, Monaghan et al. 2018, Monaghan et al. 2022, Warin & Zivkovic 2019). Classing and racializing 'obesity' deflects sociopolitical and economic quandaries onto a stigmatized population, which can be 'saved' by taking an injection or swallowing a pill. Among the sources we studied, there is little or no inclusion of fat activism/studies (Brady & Beausoleil 2018, Cooper 2016, Farrell 2011, LeBesco 2004, Strings 2019), which could have helped enrich the sites' critical engagement and disrupted recursive medicalized reproduction of problematic racialization and classed discourses of bodies.

Problems in understanding how to conceptualize and measure 'obesity' pose a difficulty for medicine being perceived as authoritative or healthcare providers as saviours. This remains embedded in confounding biomedical discourses. As just one example of this outside our own data, consider a recent widely reported commission in *The Lancet*, which incorporates more than metabolic health in their new definition of clinical 'obesity' (Rubino et al. 2025). This definition includes linking adiposity to respiratory,

musculoskeletal, and cardiovascular issues, presenting 'obesity' as a comprehensive somatic risk state. The authors' industry ties occupy nearly two pages of the manuscript. During the commission process, one author became the Senior Vice President for and a shareholder in Eli Lilly. These authors contend they can divorce medicine from its social context and motivations as follows:

> Whether obesity is a disease or not is quintessentially a medical question. As such, it should be addressed with the rigour of scientific inquiry, using arguments grounded in clinical and biological evidence. The response to the question should therefore be objective, consistent with the rest of medicine, and not driven by the pursuit of other objectives, no matter how noble, well intended, or desirable. (Rubino et al. 2025, p. 15)

By contrast, we argue that ignoring the social implications and contexts of medical processes comes at our peril, and we question the realism of such a statement, given the stated industry ties of the authors involved (Mialon 2020).

Discourses were uniformly quite similar across the sites we analyzed, with the exception that there was limited discussion of the risks of stigma on public-facing sites, and that pharmaceutical sites exclusively spoke about the financial implications of fatness. Perpetuating the idea that fatness is an expensive, dangerous disease in need of a privately generated 'solution' is an enormously profitable scenario for GLP-1 manufacturers (Guthman 2024). For example, between November 2024 and November 2025, Novo Nordisk made $17,744,065 Canadian Dollars for sales of 'obesity' care products alone (Novo Nordisk n.d.). At the same time, the public-facing sites we analyzed did not emphasize the purported expense of fatness. This is despite the Clinical Practice Guidelines that Obesity Canada helped produce indicating that 45% of adults in Canada would meet criteria for being prescribed a GLP-1, based on analysis we conducted (under review). Such framing would contradict their patient-centric orientation and minimization of personal blame. When necessary, the costly doom of 'obesity' is invoked for readers of pharmaceutical websites, but messaging that exhorts blameless individuals to accept their disease and seek gentle, understanding professional help is used on public-facing sites.

Studying already-known side effects, discovering new ones, and identifying the long-term effects of GLP-1s is essential. Still, clinical trials of GLP-1s are limited by their homogenous samples, a substantive concern given their global spread (Nature Medicine 2024). Semaglutide has been linked to thyroid cancer in rodents, pancreatitis, gastrointestinal and gallbladder problems, kidney failure, depression/thoughts of suicide, and stomach paralysis (Novo Nordisk 2023, Shu et al. 2022, Sodhi et al. 2023). A population-based, retrospective cohort study in Ontario found 6-month GLP-1 use in individuals with diabetes ≥ 66 years of age was associated with double the risk of neovascular age-related macular degeneration (Shor et al. 2025).

Furthermore, the ultimate effects of GLP-1s are largely to be determined. Weight loss among those taking GLP-1s appears to plateau (Davies et al. 2021, Rubino et al. 2021). When people stop treatment, as most will after one-two years (Gleason et al. 2024a, Gleason et al. 2024b, Liss et al. 2023), they regain weight, and cardiometabolic improvements dissipate (West et al. 2026, Wilding et al. 2022). Weight regain is a well-known pattern after weight loss (Fothergill et al. 2016, Gaesser 2009, Ikeda et al. 2005, MacLean et al. 2011, Mann et al. 2007). *Sustained* weight loss is the only real indicator if weight loss has been achieved and involves complicated biological compensation mechanisms (Fothergill et al. 2016, Hall et al. 2012, MacLean et al. 2011).

Indeed, weight regain after pharmaceutical (including GLP-1) use may occur faster than among those who lost weight without drugs (West et al. 2026). In the media, users and clinicians expressed concerns regarding weight regain, lack of agency respecting users' control over drug intake, and 'food noise' re-emerging (Clegg & Jennings 2025). The National Institute for Health and Care Excellence (2025) in the United Kingdom recommends a minimum of one year of advice, monitoring, and guidance on GLP-1 discontinuation. In addition to calling into question how revolutionary GLP-1s truly are, these early indications reaffirm the need for updated studies on weight cycling, as there will be many more

people regaining weight in the future (Quinn et al. 2020). New research suggests patients and providers rely on 'tinkering' processes regarding GLP-1 expectations, dosages, and usages; navigate continual moralization of weight; and deal with unmet weight loss goals and side effects (Jensen et al. 2025), implying GLPs are more 'same old, same old' than 'salvation'. Given these research gaps, health organizations, public health practitioners, and academics should consider how health messaging may be *shaped* and *amplified* by industry funding.

Conclusion

We conducted a MCDA on how Eli Lilly and Novo Nordisk, manufacturers of GLP-1s, disseminate medicalizing and pharmaceuticalizing discourses online that pertain to weight. We found that these technological interventions do not simply solve the 'problems' of fatness, but they participate in constituting them as part of a highly profitable mechanism through which to maintain and re-energize attention around body size. The categorization of 'obesity' as a medical problem requiring pharmacological solutions operates through a series of recursive loops that replicate dominant knowledge systems: discourses on the authority and power of healthcare providers; the social and economic burden of 'obesity'; and that 'obesity' is a disease, which must unequivocally be diagnosed and treated by a healthcare professional. The recursive perpetuation of the discourse that a 'solution' to bodily diversity can be found in a marketable product is a potent commercial determinant of health. The rapid and widespread uptake of GLP-1s around the globe feeds this recursivity, as the more people use these drugs, the more thinness is normalized, which drives further demand, and entrenches and intensifies thinness as the norm. More attention to the commercial and social determinants of health, the mechanisms through which they operate, and how they work to construct discourses, is essential for critical public health scholarship and for patients and health advocates.

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Conflicts of interest

The authors declare they have no conflicts of interest.

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Appendix I – Summary of each discourse and associated codes, with descriptions / quotes from the various websites

Table 1. *Examples of Medicalization Through Scientific Authority Discourse*

Web Page Name [Organization]	Exemplar Quote
	Public-Facing Sites
Is Obesity Genetic [CA] [a]	Together, these findings provide indisputable evidence that genetics and obesity are closely related. Some evidence suggests obesity is between 40% to 70% determined by genetics. This means that the genes you inherit from your parents may increase your risk of developing obesity.
Hunger Hormones and How They Affect Appetite [G][b]	This is where a team of appetite hormones comes in. These hormones signal to the brain to help manage appetite, including hunger and the feeling of fullness. The body's response to weight loss can make weight management as challenging as actually losing the weight.
7 Key Factors That Influence Weight Gain [CA]	If treatment is discontinued, the condition can come back. Evidence-based behavioural therapy has been demonstrated, if continued long term, to offer a defence against weight regain. Obesity medications (OMs) work by defending against an individual's biology. OMs defend against increased appetite and dampen the subconscious motivation for calorie intake (wanting). If OMs are discontinued or poorly complied with, the defence against weight regain is lost and the biology does the rest.
	Non-Profit Sites
About Obesity (Causes and Classifications) - Obesity Action Coalition [OAC][c]	Obesity is a treatable disease and a worldwide health concern associated with having an excess amount of body fat. It is caused by a combination of genetic and environmental factors and can be challenging to manage through dieting alone.
Commercial Programs – Obesity Action Coalition [OAC]	As with all diet options, it is best to talk with your healthcare provider before you begin one. You may have nutritional or health needs that will not fit with all programs.

Our Beliefs and Demands – Obesity Action Coalition [OAC]	Obesity is a complex chronic disease that requires serious action, access to science-based treatment and comprehensive obesity care to improve the quality of health and life.
11-Canadian-Adult-Obesity-CPG-Pharmacotherapy-CPG-2022 [OC][d]	Pharmacological treatments are an effective and scalable approach to treating obesity. As with any chronic disease, such as type 2 diabetes (T2DM) or hypertension, pharmacotherapy is an important pillar in the management of obesity.
11-Canadian-Adult-Obesity-CPG-Pharmacotherapy-CPG-2022 [OC]	Healthy eating and physical activity are fundamental to successful weight management…Healthy behaviour changes alone generally achieve only a 3%-5% weight loss, which is most often not sustained over the long term. Pharmacotherapy for obesity management should be considered to decrease weight and optimize health when healthy eating and physical activity alone have been ineffective, insufficient or without sustained benefit.
E372.full [OC] (Managing obesity in children: a clinical practice guideline)	There is no evidence to support a stepwise approach whereby pharmacologic and surgical interventions should be offered only if behavioural and psychological interventions prove ineffective.
Managing your obesity – Obesity Canada [OC]	If the treatment is not covered, don't take 'no' for an answer from your plan or your partner's. Sometimes, exceptions can be made. Ask why your treatment is not covered.
	Pharmaceutical Sites
Lilly's tirzepatide superior to Wegovy (semaglutide)... (CEL)[e]	Obesity is much more than just excess weight. It is a chronic condition associated with over 200 complications affecting an individual's health, including type 2 diabetes mellitus, heart disease, high blood pressure, certain types of cancer, as well as decreased life expectancy.
Lilly's tirzepatide superior to Wegovy (semaglutide)... (CEL)	Obesity is recognized as a chronic disease by all major medical associations worldwide. It is time for our government to acknowledge this as well, so that individuals living with obesity who meet specific criteria can have the option to access appropriate treatments.
Lilly's approach to obesity (EL)[f]	We know that lifestyle choices alone often are not successful over the long term. But now it's possible to empower people with tools like intensive behavioral therapy, anti-obesity

	medications and surgery that allow them to take control of their disease.
Discover the science to obesity for HCPs (NN)[g]	The number of people living with obesity continues to rise, highlighting the need to provide medical professionals with evidence-based tools to tackle the growing global obesity epidemic.
What is obesity (EL)	The recognition of obesity as a disease also distinguishes obesity as something to be taken seriously; for most people suffering from obesity, simply eating less and moving more will not result in sustainable long-term weight loss.
How stigmas and misperceptions impact comprehensive obesity care (EL)	People with obesity deserve access to comprehensive care, like other chronic and metabolic diseases. There's a critical need for the healthcare community to broadly accept obesity as a treatable disease with effective pharmacological options.

[a]Truth About Weight Canada (truthaboutweight.ca); [b]Truth About Weight Generic (truthaboutweight.com); [c]Obesity Action Coalition (obesityactioncollation.org); [d]Obesity Canada (obesitycanada.ca); [e]Eli Lilly Canada (www.lilly.com/en-CA/); [f]Eli Lilly Generic (www.lilly.com); [g]Novo Nordisk Generic (www.novonordisk.com)

Table 2. *Examples of BMI and the Illusion of Body Classification Discourse*

Web Page Name [Organization]	Exemplar Quote
	Public-Facing Sites
BMI Result Normal Weight [CA][a]	Remember, BMI is used as a screening tool; however, if you find yourself in the higher BMI categories, you might want to try some new habits while you are waiting to talk to your healthcare professional.
BMI Result Obesity V [CA]	Having a BMI of 30 and above may mean that you have obesity and may be at risk of other weight related complications. It is recommended that you consult your healthcare professional or another healthcare provider trained in obesity management.

Check your BMI [CA]	It's important to remember that living with obesity doesn't necessarily mean you're unhealthy, just as being at a "normal" weight doesn't mean you're healthy. Your BMI doesn't define you, but knowing and understanding your BMI can be a powerful tool for taking charge of your own health.
How to choose a Dietary Approach [CA]	Whole grains can be good for your weight and BMI.
More About Obesity [CA]	BMI is an objective way to classify underweight, normal weight, overweight, and obesity in adults. Within the official obesity definition, there are different classifications of the disease.
Insurance Coverage for Obesity Care [G][b]	The Affordable Care Act requires insurance companies to cover obesity screening and counseling at no cost to you. If your initial screening shows a BMI that is over 30, you may qualify for additional services as well.
Obesity and Your Health [G]	Knowing your BMI is a great first step when starting the conversation about weight management with a health care provider.
Non-Profit Sites	
Measuring My Weight – Obesity Action Coalition [OAC][c]	Please note: The body mass index (weight in kg/height in meters^2) is used to screen for obesity, but it does not displace clinical judgment. BMI is not a measure of body fat. Social determinants, race, ethnicity, and age may modify the risk associated with a given BMI. Please talk with your healthcare provider about understanding BMI.
About Obesity (Causes and Classifications) - Obesity Action Coalition [OAC]	Diagnosing obesity and measuring body fat directly can be challenging, which is why body mass index (BMI) is often relied upon for insights. BMI measures the relationship between height and weight. It is essential to note that measuring BMI does not replace clinical judgment. To calculate BMI, one needs to divide their weight in kilograms by their height in meters squared, following the formula BMI = kg/m2.
11-Canadian-Adult-Obesity-CPG-Pharmacotherapy-CPG-2022 [OC][d]	BMI and waist circumferences that correlate with comorbidities vary by ethnicity…The prescribing physician may elect to interpret the recommendations in this chapter with ethnicity-specific BMI criteria in mind. Ethnic minorities are underrepresented in clinical trials of pharmacotherapy for weight management; having balanced ethnic representation is important for future pharmacotherapy trials.

	Pharmaceutical Sites
Discover the science to obesity for HCPs (NN)[e]	Obesity impacts 813 million adults (aged 20 years and over), a number predicted to rise to 1.5 billion by 2030. It has a substantial health impact with 200+ possible complications affecting many organs and systems. Cardiovascular disease is the leading cause of mortality in people with obesity. There is clear association between BMI, hypertension (high blood pressure) and heart failure. For example, the prevalence of hypertension increases with increasing BMI.
Is intermittent fasting good for me? (NN)	For some people, intermittent fasting can lead to a reduction in BMI, although despite its widespread use in the medical community, BMI alone as an indicator for obesity has limitations that you should be aware of when using the indicator as a measurement of health.

[a]Truth About Weight Canada; [b]Truth About Weight Generic (.com); [c]Obesity Action Coalition; [d]Obesity Canada; [e]Novo Nordisk Generic (.com)

Table 3. *Examples of Biomedical Reframing of Culture and Suffering Discourse*

Web Page Name [Organization]	Exemplar Quote
	Public-Facing Sites
Impact of Culture on Weight [G][a]	Some things from one's culture, like certain food and activities, may impact weight-management goals. Recognize which ones are challenging. Personally work to address them.
Impact of Culture on Weight [G]	Our culture is shaped by traditions dating back to our ancestors. It impacts a variety of things in our lives, including body image, food, eating, and weight.
How Environment Affects our Health [CA][b]	Food manufacturers, supermarkets, restaurants and fast-food chains have picked up on our food preferences. They now offer a huge variety of cheap, delicious and energy-rich foods that combine salt, sugar and fat. This is a powerful combination for our senses—far more powerful than our brains have evolved to deal with.
Impact of Culture on Weight	When making decisions about a weight-management plan with your health care professional, feelings of hesitation may arise. That's OK...

[G]	Be sure to share how traditions, family, and foods impact your weight-loss goals
7 Key Factors that Influence Weight Gain [CA]	The brain defends against weight loss because of an old biological play book. If our ancestors lost weight, it was not to look good for a wedding or because of bathing suit season. Back then, weight loss was either because of illness or an interrupted food supply. Simply put, defending against weight loss was defending against death.
How Environment Affects our Health [CA]	Our environment 50,000 years ago "Eat or be eaten!" Imagine living 50,000 years ago in the Stone Age. All our ancestors cared about was chasing calories through hunting, gathering or fishing. That, and avoiding becoming the meal of the day for large predators.
My Obesity Journey – From Comfort Eater to Plus Size Model [CA]	I comfort ate. In order to deal with the trauma, I would have a bar of chocolate. I would go to my room and even though I was going through those emotions, feelings and pain, I would eat my bar of chocolate and feel a bit of comfort. I was also gaining weight, and wondering what was actually going on with me. My brothers were slim and athletic, and we all ate the same breakfast, dinner and snacks. The one thing I did differently was to eat chocolate for comfort.
Non-Profit Sites	
Obesity Statistics – Obesity Action Coalition [OAC][c]	Socioeconomic status plays a significant role in obesity. Low-income minority populations tend to experience obesity at higher rate and are more likely to be overweight.
About Obesity (Causes and Classifications) - Obesity Action Coalition [OAC]	Some neighborhoods have little or no access to fresh, healthy foods.
11-Canadian-Adult-Obesity-CPG-Pharmacotherapy-CPG-2022 [OC][d]	Ethnic minorities are underrepresented in clinical trials of pharmacotherapy for weight management; having balanced ethnic representation is important for future pharmacotherapy trials.
Pharmaceutical Sites	
Cardiometabolic health (EL)[e]	However, innovation in cardiometabolic health has to go beyond the development of new medicines. We're working to reduce systemic barriers to ensure medicines and health solutions for cardiometabolic diseases—a leading cause of death worldwide —reach those who need them most. So everyone has a chance at better health.

How stigmas and misperceptions impact comprehensive obesity care (EL)	Beyond demonstrating that people living with obesity and overweight desire their "dream" or "goal" weight reductions, the survey also found that gender, BMI category and race and ethnicity played a role in preferred weight reductions. For instance, younger and middle-aged adults, women and lower-income individuals desired more weight reductions. Since findings also showed that people with obesity or overweight facing weight-self stigma* were more likely to desire a greater preferred weight reduction, health care providers and people living with obesity may benefit from a shared decision-making that considers patients' preferences for weight reduction outcomes.
Risk factors for obesity (EL)	Health is influenced by the conditions in which people live, learn, work, and play. Health can also be influenced by forces and policies that shape these conditions. These factors affect a person's ability to make healthy choices and influence their risk of gaining excess weight and developing obesity.
Obesity and overweight (NN)[f]	In most cases obesity is a multifactorial disease due to obesogenic environments, psycho-social factors and genetic variants. In a subgroup of patients, single major etiological factors can be identified (medications, diseases, immobilization, iatrogenic procedures, monogenic disease/genetic syndrome). The obesogenic environment exacerbating the likelihood of obesity in individuals, populations and in different settings is related to structural factors limiting the availability of healthy sustainable food at locally affordable prices, lack of safe and easy physical mobility into the daily life of all people, and absence of adequate legal and regulatory environment. At the same time, the lack of an effective health system response to identify excess weight gain and fat deposition in their early stages is aggravating the progression to obesity.
Obesity and overweight (NN)	Many low- and middle-income countries face a so-called double burden of malnutrition. While these countries continue to deal with the problems of infectious diseases and undernutrition, they are also experiencing a rapid upsurge in noncommunicable disease risk factors such as obesity and overweight. It is common to find undernutrition and obesity co-existing within the same country, the same community and the same household.
Preventing chronic diseases (NN)	Obesity and other serious chronic diseases pose a significant threat to global well-being, affecting millions of people and straining healthcare systems. These health challenges disproportionately impact vulnerable populations, revealing a stark inequality in living healthily. Building on more than ten years of experience with urban health promotion and

	disease prevention programming, we see that improving health equity can be a formidable defence against obesity and other chronic diseases.

[a]Truth About Weight Canada; [b]Truth About Weight Generic (.com); [c]Obesity Action Coalition; [d]Obesity Canada; [e]Eli Lilly Generic (.com); [f]Novo Nordisk Generic (.com)

Table 4. *Examples of Healthcare Professionals as Saviours Discourse*

Web Page Name [Organization]	Exemplar Quote
	Public-Facing Sites
Management – Best Exercises [CA][a]	It's really important to partner with your healthcare professional before you start any weight management program. They can give you advice about any modifications or limitations that you need to bear in mind.
Managing your Weight [CA]	But don't lose hope or think that you have to do it on your own! By partnering with your healthcare professional, you can get the support you need and reap the health benefits that come with weight loss. Get started with an obesity management program that's tailored to your goals, needs and lifestyle.
More About Obesity [CA]	If you live with obesity or are overweight, you may have experienced weight bias or had stigmatized conversations with a healthcare professional in the past. This is because obesity as a disease is a relatively new area of scientific research and development. This has led to a long period of misunderstanding by society and healthcare professionals alike. The important thing to remember is that obesity is becoming a priority for healthcare teams all over the world. In fact, some countries now have specialized weight management clinics for treating obesity.
More About Obesity [CA]	To understand if you are living with obesity and get professional advice, it is important to talk to your healthcare professional or to an obesity specialist. By seeking professional help, you will be better equipped to manage your weight and symptoms of obesity in a healthy and sustainable way.

Supporting People Living with Obesity [CA]	If you're looking for ways to support people living with obesity in your life, try to focus on positive actions and encouragement. You can also support them by referring them to trained obesity care providers so that they get the help they need.
Develop a Weight-Management Plan [G][b]	To effectively manage your weight long term, you need a health care provider who will approach your needs head-on. Finding the right match for you is an important first step in losing weight and maintaining it.
Understanding the Link Between Obesity and Heart Disease [G]	In one study, people who partnered with a health care provider lost 5 times more weight than those who did it alone. Find a treatment plan that can work for you. Ask a health care provider how to manage weight today.
Non-Profit Sites	
E372.full [OC][c] (Managing obesity in children: a clinical practice guideline)	Children with obesity face substantial bias and stigma, which may have negative long-term effects on health outcomes and can discourage children and their families from accessing health services for managing pediatric obesity.
E372.full [OC] (Managing obesity in children: a clinical practice guideline)	Health care providers are in a good position to address the shame and guilt felt by some children and families, especially if they view obesity as a personal choice and moral failing.
E372.full [OC] (Managing obesity in children: a clinical practice guideline)	Health care providers should acknowledge that obesity is a complex, chronic, and relapsing disease that requires establishing a positive relationship with children and families, and includes providing long-term support for obesity management for children and families.
1-Canadian-Adult-Obesity-CPG-Reducing-Weight-Bias-Stigma – Obesity Canada [OC]	Patients who experience weight bias in healthcare settings may delay or forgo essential preventive care, like breast, cervical and colorectal cancer screening, for fear of receiving disrespectful treatment and negative attitudes from providers.
Pharmaceutical Sites	

How Stigmas and Misperceptions Impact Comprehensive Obesity Care (EL)	People with obesity deserve access to comprehensive care, like other chronic and metabolic diseases. There's a critical need for the healthcare community to broadly accept obesity as a treatable disease with effective pharmacological options.
Final Quebec Obesity Campaign Press Release (CNN)	'Obesity is about more than just BMI. It's influenced by a range of factors beyond personal control such as genetics, hormones and stress. We need a healthcare approach that reflects this complexity,' said Dr. Yves Robitaille, internal medicine specialist at the Centre de Médecine Métabolique de Lanaudière and the CISSS de Lanaudière

[a]Truth About Weight Canada; [b]Truth About Weight Generic (.com); [c]Obesity Canada; [d]Eli Lilly Canada; [e]Novo Nordisk Generic (.com)

Table 5. *Rationalizing Easing the Burden Discourse*

Web Page Name [Organization]	Exemplar Quote
Non-Profit Sites	
Cost of Inaction in Treating Obesity – Obesity Canada [OC][a]	With nearly one in three Canadians living with obesity, both the direct and indirect costs are staggering and illustrate that living with this disease has profound implications that go beyond the individual.
Cost of Inaction in Treating Obesity – Obesity Canada [OC]	Obesity Canada is calling for urgent action. Investing in effective obesity treatment and prevention strategies is not only the right thing to do for Canadians living with the disease, but is crucial for the economic well-being of Canada.
Cost of Inaction in Treating Obesity – Obesity Canada [OC]	45% of adults living with obesity, and an associated disability, did not work in the last year, potentially costing the Canadian Pension Plan millions annually.
Cost of Inaction in Treating Obesity – Obesity Canada [OC]	The report found the incremental annual cost on Canada's healthcare system due to obesity was $5.9 billion, associated with 19 million more physician visits among other care and support needs. Beyond direct healthcare implications, workplace productivity costs were more than three times higher, reaching an estimated $21.7 billion due to increased absenteeism and presenteeism, reduced productivity, and lower workforce participation, among other causes.

Pharmaceutical Sites	
How Stigmas and Misperceptions Impact Comprehensive Obesity Care (EL)[b]	In order to cover AOMs [anti-obesity medications], these employers agreed they would need to see more evidence supporting AOM coverage, such as demonstrated return on investment (79%), reduction in premiums or claims (78%) and clear clinical and financial benefit of AOMs from insurance providers (73%).
Lilly launches additional Zepbound vial doses and offers new savings for self-pay patients (EL)	'Every major medical organization and establishment recognizes obesity as a chronic disease, yet insurance and federal programs do not systematically cover people living with obesity for medical care — this needs to change,' said Patrik Jonsson, executive vice president and president of Lilly Cardiometabolic Health and Lilly USA. 'Lilly is committed to working with all parties to solve this problem, and in the meantime, we'll continue to implement new options that improve the affordability and availability of our safe, approved and studied Zepbound for patients who are being asked to pay out-of-pocket.'
What is Obesity (EL)	In 2014, obesity was estimated to cost the United States $1.42 trillion, using up 14.3% of healthcare spending dollars and resulting in 320,000 deaths.
Final Quebec Obesity Campaign Press Release (CNN)[c]	According to the Léger poll, nearly half of Quebecers (48 per cent) believe the government should reassess obesity medications for coverage.

[a]Obesity Canada; [b]Eli Lilly; [c]Novo Nordisk Canada (www.novonordisk.ca)