

The information presented in this white paper is based on publicly available or aggregated information as presented to or researched by Four Corners Property Trust, Inc., and its employees and affiliates (collectively, “FCPT”). While all efforts have been made to ensure the accuracy and completeness of this information, FCPT cannot guarantee its absolute accuracy. FCPT makes no representations or warranties of any kind, express or implied, as to the accuracy, completeness, or timeliness of the information presented. FCPT is not expressing any opinion on the impact of GLP-1 and other similar semaglutide drugs on its operations, its tenants and their operations, or future performance. This white paper is for informational purposes only and should not be construed as an offer to sell or a solicitation of an offer to buy any securities of FCPT.

GLP-1 and Other Semaglutide Drugs

Interest in Ozempic, Wegovy, Rybelsus, Mounjaro, and other GLP-1 anti-obesity drugs have surged due to recent headlines, social media, and investor chatter. With ~70% of the U.S. population considered overweight or obese and ~40% considered obese according to the National Institutes of Health¹, there could be a meaningful impact on the U.S. consumer if GLP-1 drugs are used widely. Currently, its intended medical use is for the treatment of type 2 diabetes (affecting ~34 million people or ~11% of the population of the United States), but both treatment and coverage are likely to expand as the health effects are better understood and clinical studies prove these drugs effective at reducing medical risks related to obesity, such as cardiovascular disease, cancer and sleep apnea. By 2030, the global market for anti-obesity medications could grow to \$100 billion from \$6 billion this year, as estimated by Goldman Sachs Research.²

How do these drugs work?

According to NovoMedlink³, Semaglutide drugs are antidiabetic medications largely used today for the treatment of type 2 diabetes (adult onset).

- Semaglutide, the active ingredient in many GLP-1 drugs, works by mimicking a naturally occurring hormone called glucagon-like-peptide-1 (GLP-1) that lowers blood sugar levels and regulates insulin.
- This allows the body to store less excess glucose as fat while also making users feel fuller for longer by slowing the stomach’s emptying of food into the intestines, thereby decreasing appetite.
- As a result, the reduction in users’ appetite and food intake increases weight loss.

What is the efficacy?

According to recent [studies](#) published on the JAMA Network (American Medical Association), semaglutide drugs have been very effective for weight loss.

¹ <https://www.niddk.nih.gov/health-information/health-statistics/overweight-obesity>

² <https://www.goldmansachs.com/intelligence/pages/anti-obesity-drug-market.html>

³ <https://www.novomedlink.com/diabetes/products/treatments/ozempic/about/mechanism-of-action.html>

- Patients lost ~6% of body weight in 3 months and ~11% in 6 months, with some losing as much as 20% of their body weight.
- However, the efficacy of these semaglutide drugs greatly diminishes after discontinuation and [studies](#) have found that most will regain two-thirds of their weight loss back within a year.
- According to a recent Fortune article, there have been concerns surrounding the reduction in muscle mass compared to conventional weight loss. Many doctors recommend other lifestyle changes such as fitness to counteract this.
- According to Cleveland Clinic⁴, side effects can also include nausea, diarrhea, stomach pain, constipation, and vomiting. Some hospitals have even reported a spike in emergency room visits in the wake of Ozempic’s adoption, per News Nation⁵.

How much do these drugs cost? ⁶

GLP-1 drugs need to be prescribed by a doctor, are currently expensive, and are not currently covered by insurance for weight loss purposes. It is not clear if any of the foregoing might change in the coming years.

- According to the Wall Street Journal⁷, if a patient qualifies for insurance coverage, Ozempic can be as little as \$0-\$25 for a monthly supply. Without insurance, it is typically \$900-\$1,000 a month. Similarly, without insurance, Wegovy costs ~\$1,350 a month, Mounjaro \$1,000-\$1,200 a month, and Rybelsus between \$1,000-\$1,300 a month.
- While they are not covered by insurance when prescribed for weight loss, they are much more likely to be covered for those with type 2 diabetes. However, these all depend on the individual’s healthcare insurance plan.
- Most Medicare plans will cover for type 2 diabetes and some Medicaid plans will as well.
- According to the NIH⁸, there is also growing data on the positive impact on kidney / cardiovascular health where we can likely expect prescription coverage to expand.

When will patents expire and how will pricing change?

There are two schools of thought on the future pricing of GLP-1 and other semaglutide drugs:

- According to a CNN article⁹, given the demand of semaglutide drugs for weight loss, availability has been more limited and some believe this demand will drive prices up even further. Prescriptions are also up 300% since 2020, per the Financial Times¹⁰.
- Others believe that increased competition will drive prices down. According to a recent paper by the American Enterprise Institute, the “net” cost insurers are paying to Novo Nordisk (the manufacturer of Ozempic and other GLP-1 drugs), is \$300 a month for Ozempic, \$700 a month for Wegovy, and \$215 a month for Mounjaro. While these prices may change, this may be closer to the “true cost” of the drugs.¹¹
- According to DrugPatentWatch.com¹², the earliest for generic entry for Ozempic and Wegovy will be December 5, 2031; however, these patents could be extended. Rybelsus’ patent expires March 15, 2033 and Mounjaro on May 13, 2026.

⁴ <https://my.clevelandclinic.org/health/treatments/13901-glp-1-agonists>

⁵ <https://www.newsnationnow.com/health/ozempic-related-er-visits-spike-experts-warn-side-effects/>

⁶ <https://www.goodrx.com/classes/glp-1-agonists/>

⁷ <https://www.wsj.com/articles/no-more-shots-pill-versions-of-ozempic-like-drugs-are-coming-ca286ca2>

⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10258236/>

⁹ <https://www.cnn.com/2023/10/06/health/ozempic-mounjaro-supply>

¹⁰ <https://www.ft.com/content/b5b4cfc8-1d20-47a6-840f-ff84f0e067f7>

¹¹ <https://www.nytimes.com/2023/10/22/health/ozempic-wegovy-price-cost.html>

¹² <https://www.drugpatentwatch.com/>

How are these drugs taken?

- While Ozempic, Wegovy, and Mounjaro are still administered as shots, Rybelsus is available in tablet form ingested daily.¹³
- Ozempic and Wegovy have existed for some time. Recent developments have made the shot (subcutaneous injection) long-lasting where it could be administered once a week instead of daily, according to Novo Medlink.¹⁴

Impacted Sectors

- According to the National Institute of Diabetes and Digestive and Kidney Diseases¹⁵, it's estimated that ~11% of the U.S. population has diabetes (largely type 2). If adoption of anti-obesity medication in the US reaches around 15 million people, that would erase 2-3% of the population's caloric intake. Various narratives have spun out since the GLP-1 headlines:
 - "Long" Narratives: Pharmaceuticals, lab space (more research), senior housing (people live longer), apartments, etc. to even apparel (new clothes), airlines (lighter passengers), live events (smaller seats), and dating apps (heightened body confidence).
 - "Short" Narratives: Grocery/consumer goods (less food consumption), food delivery, restaurants, dialysis (healthier humans), gyms/fitness (less demand), cold storage (less demand for packaged food), etc.

¹³ <https://www.rybelsus.com/>

¹⁴ <https://www.novomedlink.com/diabetes/products/treatments/ozempic/about/mechanism-of-action.html>

¹⁵ <https://www.niddk.nih.gov/health-information/health-statistics/diabetes-statistics>

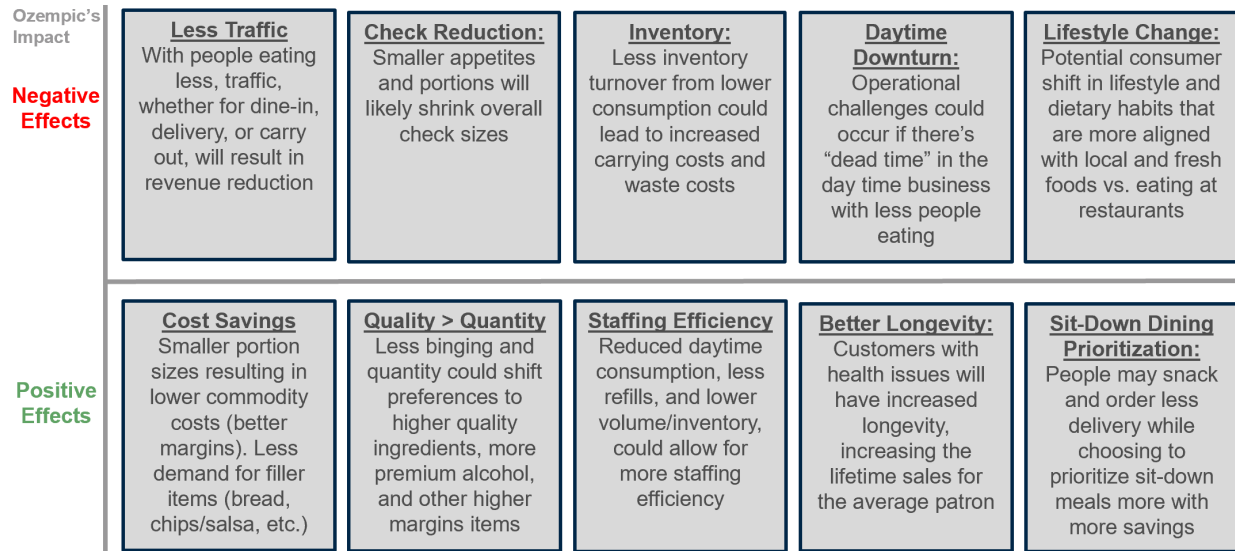
Questions to keep in mind to track further developments:

1. What will the adoption and actual penetration of semaglutide drugs be in the future? Who will be covered and who can afford to purchase it without coverage?
2. What are the long-term health ramifications of taking semaglutide drugs for years or decades, if any?
3. What is the likelihood that Ozempic, Wegovy, and Mounjaro will follow Rybelsus and produce an ingestible pill / tablet instead of an injection? Will that encourage or deter more patients from using?
4. Other than Eli Lilly's Mounjaro, most of these are not approved for weight loss specifically. When the FDA eventually does approve them for weight loss specifically, will that encourage wider adoption?
5. Will there be a longer-term solution in the future or will these medications act similar to a statin where cessation would not be recommended? Will this deter patients from using?
6. How will costs evolve as both demand increases and patents start to expire?
7. How will the efficacy of the drug evolve with further research and adoption by a larger population, especially those without type 2 diabetes?
8. What other lifestyle shifts will these drugs cause if weight loss is achieved? Will patients be more active, less impulsive, or adopt other behaviors?
9. How will restaurants adapt as semaglutide further develops?
10. What will the geographic impact be across adoption? Correlation of various regions with obesity prevalence, wealth, access to healthcare, etc.

GLP-1's Potential Effects on American Food Consumption Trends

Source: FCPT

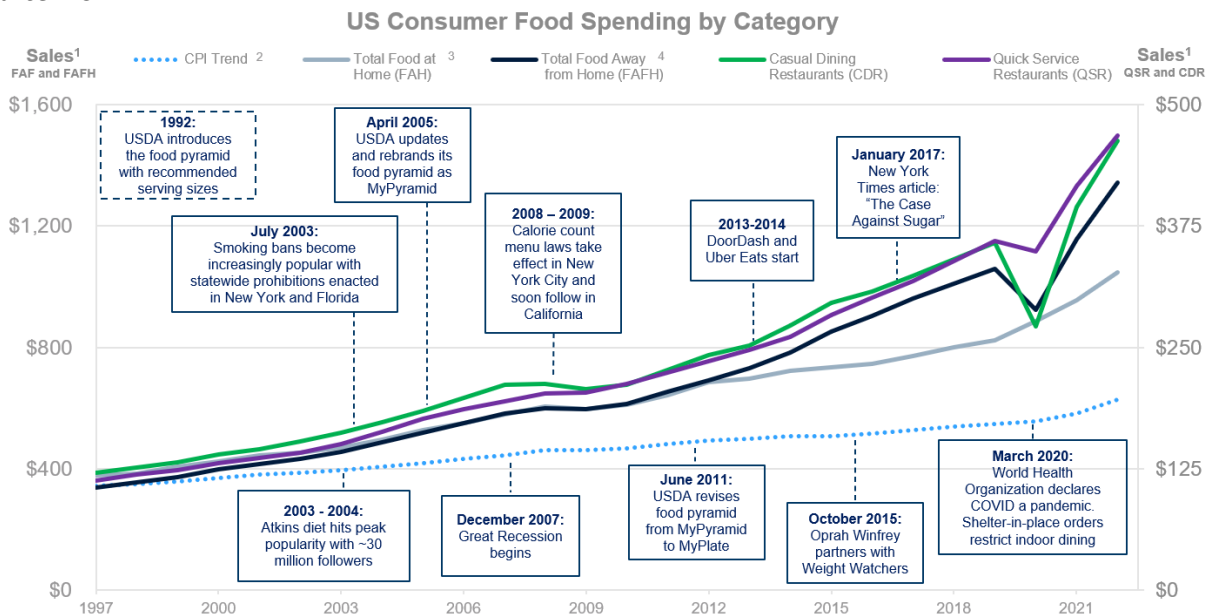
The rise of Ozempic and similar GLP-1 drugs has the potential to someday change and reduce American food consumption trends



The effects of Ozempic on restaurants shown above assume high drug efficacy and continued treatment

Time Series of Consumer Spending on Food

Source: FCPT



Source: U.S. Department of Agriculture, Economic Research Service.

1. Figures in billions.

2. CPI data from Federal Reserve Bank of St. Louis.

3. "Food at Home" includes food expenditures from grocery stores; convenience stores; other food stores; warehouse clubs and supercenters; mail order and home delivery; direct selling by farmers, manufacturers, and wholesalers; and home production.

4. "Food Away from Home" includes food expenditures from full service restaurants (casual dining); limited-service restaurants (quick service); drinking places; hotel and motels; retail store sales; recreational places; school and colleges; and other sources.

Sources:

<https://www.novomedlink.com/diabetes/products/treatments/ozempic/about/mechanism-of-action.html>

<https://www.niddk.nih.gov/health-information/health-statistics/overweight-obesity>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8736331/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10258236/>

<https://dom-pubs.onlinelibrary.wiley.com/doi/10.1111/dom.14725>

<https://www.goodrx.com/classes/glp-1-agonists>

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2796491>

<https://www.nytimes.com/2022/11/22/well/ozempic-diabetes-weight-loss.html>

<https://www.nytimes.com/2023/10/22/health/ozempic-wegovy-price-cost.html>

<https://www.wsj.com/articles/no-more-shots-pill-versions-of-ozempic-like-drugs-are-coming-ca286ca2>

<https://www.promegaconnections.com/semaglutide-for-weight-loss-and-diabetes/>

<https://ro.co/weight-loss/ozempic-cost-without-insurance/b/>

<https://www.niddk.nih.gov/health-information/health-statistics/diabetes-statistics>

<https://www.goldmansachs.com/intelligence/pages/anti-obesity-drug-market.html>

<https://www.rybelsus.com/>

Appendix: Equity Research

*Weigh To Go: How a Lighter/Healthier Population Could Change Real Estate [excerpt]
Jefferies Research 9/25/2023*

Healthcare REIT Impacts

- A lighter population would likely have a lower prevalence of heart disease, diabetes, and respiratory problems. Presumably, this would **drive fewer doctor visits**, reducing demand for Medical Office space. (PEAK, HR, DOC)
- The potential for these obesity drugs to be the next blockbuster drug for pharma companies could drive more investment in new drug research as pharma companies look for the next big pot of gold. This could **drive incrementally more demand** for lab space. (ARE, PEAK)
- A healthier, lighter population is more likely to live longer. This would **increase the need for private pay senior housing**, supporting demand for those property types. (WELL, VTR, SBRA)

Retail REIT Impacts

- We expect **increased foot traffic to malls and shopping centers** as consumers upgrade their wardrobes from weight loss, increasing conversion & higher rents. (SPG, FRT, MAC)
- We expect **lower restaurant traffic**, especially quick service, as consumer lose their appetite for addictive, fatty foods. Grocer sales could contract, as sales of junk food and shelf-stable items decline. (ROIC, REG, NNN)
- On the one hand, membership to gyms could shrink for those who sought memberships primarily for weight maintenance or weight loss. On the other hand, **demand for traditional and medical spas** could increase as a thinner population becomes vainer & more image-conscious. (KIM, SRC, BRX).

Residential REIT Impacts

- Longer lifespans suggest a higher aging-in-place population, which would weigh on housing supply and keep renters in place for longer, aiding residential landlord pricing power. (AIRC, EQR, AVB, ESS, UDR, etc)
- A lighter, slimmer population is likely more active & social. This **supports demand for amenitized apartments** with shared spaces & pools near walkable urban & suburban neighborhoods. (EQR, AVB, AIRC, MAA, UDR)

Other Potential Impacts

- Less money spent on food/healthcare **increases disposable income** and thus allows for more spending on discretionary items and rents on apartments and self-storage.
- A healthier population should **prolong the average life expectancy** in the U.S., allowing people to work to an older age, which would increase the demand for office real estate.

*Markets and Anti-Obesity Medication [excerpt]
Morgan Stanley Research 10/18/2023*

Interest in GLP-1 anti-obesity drugs has surged this year as Ozempic and Wegovy made headlines and dominated social media. In the United States, 70% of the population is considered obese and 45% is considered overweight. Our research analysts estimate 7% of the US population, 24 million people, will use these drugs by the end of 2035. Patients using the drugs see a 10-20% reduction in body weight and a substantial decrease in appetite. Patients on anti-obesity medications see a meaningful reduction in calorie consumption of 20-30%. GLP-1 drugs have already been moving the market across a number of industries –

1. **Packaged Food:** In the packaged food industry, growth in anti-obesity medications presents an incremental headwind to a low-growth industry. MS research shows that patients experience significant behavioral changes while they are on the drugs, as they reduce their consumption across most food categories, but cut back the most on foods that are high in sugar and fat such as confections, baked goods, and salty snacks, as well as sugary drinks and alcohol. Companies with a weight management/BFY portfolio appear best positioned, while there could be greater negative impacts on snacking/confections companies, heightening the need to continue reshaping their portfolios toward better-for-you categories.
2. **Restaurants:** Fast food restaurants are most at risk from a pullback in demand led by anti-obesity drug adoption. Full service restaurants are also at moderate risk given their exposure to customers with obesity. Fast casual brands tend to have healthier offerings and could stand to benefit. They also have lower exposure to customers with obesity and have a younger customer base. Across restaurant types, brands with greater menu flexibility and variety should fare better versus those whose menus are concentrated around a single category (ex chicken wings, donuts, etc.).
3. **Apparel:** Increased use of anti-obesity medication could be a headwind for plus size retailers but could benefit sportswear apparel and casual attire brands. Survey work shows users of the drugs began exercising more and spending more on athletic apparel. They also experienced a change in clothing size and purchased more casual apparel.

A substantial amount of risk from GLP-1 drugs has already been priced into exposed stocks. Further price movement on this theme could come from broader insurance coverage. Currently, insurance coverage of these drugs comes primarily through the commercial channel. Medicare part-D is currently prohibited from coverage of obesity drugs but this could change with the Treat and Reduce Obesity Act (TROA) which has been introduced in Congress.

*Assessing GLP-1 Risk Through BMI Index Values [excerpt]
Barclays Research 10/24/2023*

Since 1 July, several US consumer stocks have had notable moves based on their perceived exposure to the anti-obesity drug risk factor; the narrative has been driven primarily by surveys and anecdotal patient reporting of behavioral changes, with market participants extrapolating company implications based on exposure to categories they perceive as being at risk.

This fails to account for two things: 1) the behavior of the early GLP-1 drug patients may not be representative of emergent consumer behavior as penetration increases; and 2) geographic exposure is likely a key determinant as to whether a company's customer base is impacted in the near or medium term.

We focus on geography in this report, intentionally focusing on a quantitative assessment of 'exposure', rather than designating categories and companies 'winners' or 'losers'. Category can be layered on as an additional vector in response to emerging trends.

Geography as a key variable: Obesity prevalence is much higher in English-speaking countries and North America than elsewhere, while Japan and several emerging markets (EMs) have very low prevalence. To put it simply, a food company that is more exposed to a category, or set of categories, that investors believe to be at risk from GLP-1 – say MDLZ in snacking – may in fact be less at risk when viewed through a geographic lens: only 30% of the company's sales are in the US, while 40% of sales are in emerging markets, where average BMIs are far lower and affordability likely poses a much larger impediment to ultimate adoption.

Defining BMI index values: We define BMI index values as a relevant business metric (revenue/EBIT/EPS/asset value/restaurant count etc.) weighted by country and then further adjusted for the obesity prevalence in each country. Companies with a high BMI index value (27+) have higher exposure to the GLP-1 drug risk factor: this could be positive or negative based on underlying category and emergent patient behavior over time.

'Exposure' can be a tailwind or a headwind: The BMI index value only indicates 'exposure'. Of course, patients taking GLP-1 drugs will decrease their consumption of certain categories and likely increase their consumption of others. From a staples stand-point, HFSS food categories, alcohol and tobacco have been in the spotlight, due to patient reporting of reduced consumption while taking GLP-1 drugs. Those companies that have a high BMI index value and are over-exposed to such categories (for example, Altria) are likely to experience headwinds as GLP-1 drug penetration increases. Conversely, 'healthy' categories (such as those that aid with muscle retention e.g. protein shakes, yoghurt) and have a high BMI index value may be beneficiaries. For many sectors, the impact is more nuanced; for example, clothing retailers may benefit from consumers changing weight, while athleisure brands could benefit from patients making healthier lifestyle and increasing physical exercise.

Underlying category dynamics are still evolving: Based on emerging data from numerous sources (surveys, Nielsen, Numerator etc.), investors are thinking of entire categories as winners or losers. **We would caution against forming judgements on incipient data as the samples are small, and consumer behavior regarding persistence/churn on GLP-1 drugs is still evolving**, which means consumption patterns might evolve month to month. How these trends evolve will depend not only on the penetration of GLP-1 drugs within the population, but the socio-demographic make-up of patient cohort; **for example, currently we see interest in the drug class skewed towards wealthy, female, and middle-aged** (see: Global Pharmaceuticals: Trending topic or transformative treatment? Update on obesity drugs social media data). So, we do not layer in category level dynamics in this initial discussion of BMI index values. As the category dynamics become more established, investors can then introduce a third vector of category weight to further refine these values (which could shift this BMI ranking for a particular company more favourably or unfavourably).

Companies will not stand still: We do not attempt to factor in any mitigating efforts by companies over time (package or product innovation, reformulation work, portfolio optimisation, etc.). **Many staples companies have proven agile and resilient in the face of consumer behaviour shifts during the course of many decades (and centuries, for some)**. We posit that our BMI index framework provides a useful tool in analysing top-line and cost-base initiatives in response to emerging GLP-1 drug patient consumption trends.