# Meat Demand Monitor: Meal Locations and Protein Consumption of GLP-1 Users

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## **Background**

Glucagon-like peptide-one (GLP-1) receptor agonists are increasingly used to manage bodyweight, suppressing users' appetites and resulting in lower aggregate caloric intake. This has important implications for consumers' food purchasing behavior, with industry practitioners noting shifts in where households purchase their food and what types of products they buy as a household member begins GLP-1 use (Circana, 2024, 2025; Wainer, 2025). Intuitively, this may be due to differing caloric content and diet qualities between food outlets (Todd et al. 2010) and the need for nutrient-dense foods to maintain healthy diets as calories are restricted. High-protein diets, specifically, may be attractive to GLP-1 users as these diets are associated with elevated fat loss and the retention of lean muscle mass during weight loss (Halton and Hu, 2004; Paddon-Jones et al., 2008; Leidy et al., 2015). In that context, this report leverages the latest twelve months of Meat Demand Monitor (MDM) survey data to better understand current food purchasing trends related to GLP-1 use. Specifically, we document where GLP-1 users are consuming their meals across various food-at-home (FAH) and food-away-from-home (FAFH) locations, what protein sources they are including in those meals, and how their meal choices differ from non-users.

### **Data**

This report uses MDM responses from July 2024 through June 2025. Survey responses are weighted to be representative of the U.S. population in terms of sex, age, income, education, race, and region of residence. Responses are filtered according to the MDM project methodology statement (Tonsor, 2020) to ensure the quality of the data. Responses are additionally filtered if 1) respondents do not provide a complete prior day recall of their meal location and protein consumption choices or 2) they do not provide information related to their GLP-1 use. In all, this report reflects 32,407 MDM respondents. Approximately 14.4 percent of the total usable sample indicated that they currently use a GLP-1 medication to aid in weight loss or to treat diabetes. We summarize the characteristics of these GLP-1 users in a previous report.<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> This report is available on AgManager.info at https://www.agmanager.info/livestock-meat/meat-demand/monthly-meat-demand-monitor-survey-data/meat-demand-monitor-protein-glp-1.

### **Meal Locations**

In the MDM survey, respondents are asked to report where they consumed breakfast, lunch, and dinner the day before. The available meal location options are listed in Table 1.

**Table 1. Meal Location Descriptions** 

Outlet Name	Description
FAH Retail	Meal consumed at home; ingredients purchased in-person
FAH Online Retail	Meal consumed at home; ingredients purchased online
FAH Other	Meal consumed at home; prepared outside the home (e.g., meal service) or purchased elsewhere
FAFH Fine	Meal consumed away from home; fine dining
FAFH Casual	Meal consumed away from home; casual dining
FAFH Quick	Meal consumed away from home; fast food or quick service
FAFH Other	Meal consumed away from home; some other source
Skip	Meal was skipped

Note: A FAH meal may be eaten at the workplace.

Figure 1 depicts the relative frequencies of each meal location, and separately by meal type (i.e., breakfast, lunch, and dinner) and GLP-1 use. As an example interpretation, MDM respondents who report that they do not use GLP-1 weight loss medications consume 64 percent of their breakfast meals in FAH Retail, while respondents who do use the medications consume 58 percent of their breakfast meals in FAH Retail. The second most frequently selected breakfast option for non-users is skipping the meal (17 percent), and for users is FAH Online Retail (17 percent). Only between 7 and 8 percent of breakfast meals are consumed in the FAFH locations across both consumer groups.

Moving into lunchtime decision making, non-users shift out of FAH Retail (45 percent) and Skip (13 percent), facilitating higher frequencies of selecting the FAFH locations as consumers elect to eat out during the workday. FAFH Quick represents 16 percent of this consumer groups' lunch meals. Regarding GLP-1 users, there is a large degree of dispersion in lunch location reporting. FAH Retail is the most frequently selected option at 22 percent (36 percentage points lower than in breakfast meals), followed closely by FAFH Quick (18 percent), FAFH Fine (17 percent), and FAFH Casual (16 percent). The skip meal option for GLP-1 users remains at 13 percent.

Non-Users - Breakfast GLP-1 Users - Breakfast 13% 17% 1% FAH Retail FAH Online Retail 4% 2% ■ FAH Other 4% FAFH Fine FAFH Casual FAFH Quick 64% 17% ■ FAFH Other ■ Skip Non-Users - Lunch GLP-1 Users - Lunch 13% 13% 22% 5% 18% 16% 17% 16% 5% 4% Non-Users - Dinner GLP-1 Users - Dinner 14% 29% 4% 42% 7%

Figure 1. Meal Location Relative Frequencies by Meal Type and GLP-1 Use

Note: This figure reflects 27,726 non-users and 4,681 GLP-1 users.

FAH Retail regains some share of dinner meals, with non-users and GLP-1 users consuming 59 percent and 29 percent of their dinners in this food outlet, respectively. Skipping dinner is the second most frequently selected option for both consumer groups. For non-users, this is 14 percent of dinner

meals, while for users it is a remarkable 42 percent. By formally considering consumers' ability to skip a meal, we reveal that GLP-1 medications may not just spur users to consume less in a meal, but may cause them to skip meals entirely.<sup>3</sup>

### **Protein Inclusion**

In addition to meal location reporting, MDM respondents are asked to provide the number of yesterday's meals (from zero to three) that contained beef, chicken, pork, seafood, and alternative protein.<sup>4</sup> This measure of protein consumption accounts for meal-inclusion frequency but not for volume (i.e., we do not know the portion sizes of protein consumption). We pair this information with respondents' meal location reporting in Figure 2.

As another example interpretation, among *only* the breakfast meals consumed by non-users in FAH Retail (i.e., the leftmost columns in the upper-left pane), roughly 12 percent contained beef, 10 percent contained chicken, 23 percent contained pork, 3 percent contained seafood, and 26 percent contained alternative protein. We can compare these protein inclusion frequencies to GLP-1 users who, in breakfast meals consumed in FAH Retail, included beef at a rate of 41 percent, chicken at 17 percent, pork at 20 percent, seafood at 13 percent, and alternative protein at 25 percent. Thus, only pork was consumed by GLP-1 users in FAH Retail breakfast meals at a lower rate than non-users. In FAH Online Retail breakfast meals consumed by GLP-1 users, beef was included 52 percent of the time, followed by alternative protein (29 percent) and chicken (27 percent). Protein inclusion rates in other breakfast locations are not particularly insightful, as these locations were seldom reported by MDM respondents (see Figure 1).

In lunchtime decision making, chicken is the most commonly consumed protein source across all meal locations and consumer groups, and is included in between 35 percent (GLP-1 Users, FAH Other) to 68 percent (GLP-1 Users, FAFH Fine) of meals. This chicken inclusion rate is generally several percentage points higher for GLP-1 users than for non-users (with the exception of FAH Other). Beef is typically, though not uniformly, the second most frequently consumed protein source in lunch meals with inclusion frequencies ranging from 16 percent (GLP-1 Users, FAFH Fine) to 38 percent (Non-Users, FAFH Quick). Interestingly, GLP-1 users' beef inclusion rate is higher than non-users' in the FAH locations but lower in the FAFH locations. We have no definitive explanation currently for this result.

Moving into dinnertime meals, chicken and beef are again typically the most commonly consumed protein sources across each meal location and consumer group, though now the choice frequencies between the two are more comparable than in lunch meals. Beef's elevated inclusion rate observed in dinner meals (compared to other protein sources) may reflect the sector's long-running efforts to promote consumption through the "Beef. It's What's For Dinner" campaign. Finally, though differences exist in protein inclusion between GLP-1 using and non-using groups, consistent trends are

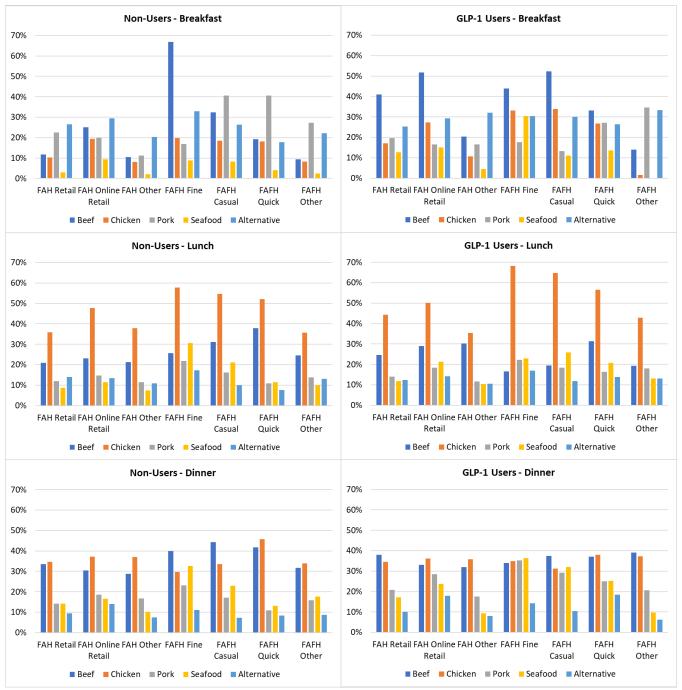
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<sup>&</sup>lt;sup>3</sup> Note our assessment here is on meal frequency rather than consumption volume. Future work using other data is encouraged to consider volume adjustments, as some non-skipped meals may be partially offsetting skipped meals once considering volume effects.

<sup>&</sup>lt;sup>4</sup> The most commonly consumed food item in the "alternative protein" category is eggs.

not observed (beyond the large percentage of skipped dinner meals among GLP-1 users as reflected in Figure 1).

Figure 2. Protein Inclusion Frequencies by Meal Type, Meal Location, and GLP-1 Use



Note: This figure reflects 27,726 non-users and 4,681 GLP-1 users. The heights of the columns reflect the percentage of meals consumed in a specific food outlet that contained the protein source. The percentages will not sum to one because multiple protein sources may be consumed in a single meal.

# **Conclusions**

Meal location and protein intake are important considerations for consumers who attempt weight loss through the use of GLP-1 medications. We find that GLP-1 users elect to skip a plurality share of their dinner meals (42 percent), reflecting a notable risk for physical food retailers as this shift toward non-consumption necessitates a corresponding shift out of physical retail-sourced food consumption. Beyond meal location decisions, we observe that chicken is by far the most commonly consumed protein source during lunch, and that GLP-1 users consume chicken during lunch at a rate exceeding that of non-users. In dinner meals, chicken and beef are generally consumed most frequently and their consumption frequencies do not appear to vary substantially across meal locations or GLP-1 use status.

Moving forward, food manufacturers, retailers, and foodservice should be cognizant that GLP-1 use not only impacts their intensive margin (i.e., how much food is consumed in a meal, how much money is spent during a shopping trip), but also their extensive margin (i.e., how many meals are consumed, how many shopping trips occur). This has important implications for total food spending and store patronage. However, and on a more optimistic note, protein appears to remain an important component of GLP-1 users' diets, as reflected by the consumption frequencies reported above. Continued data collection and reporting is needed to assess the dynamic nature of the GLP-1 situation and to evaluate potential impacts on the U.S. meat industry.

# References

- Circana. (2024, March). Transforming Food & Beverage Choices: Insights from GLP-1 Medication Users. Circana. https://www.circana.com/intelligence/reports/2024/transforming-food-beverage-choices-insights-from-glp-1-medication-users/
- Circana. (2025, January). Circana Report Highlights the Role of Personalization in Supporting GLP-1 Weight-Loss Users. Circana. https://www.circana.com/intelligence/press-releases/2025/circana-report-highlights-the-role-of-personalization-in-supporting-glp-1-weight-loss-users/
- Halton, T. L., & Hu, F. B. (2004). The Effects of High Protein Diets on Thermogenesis, Satiety and Weight Loss: A Critical Review. Journal of the American College of Nutrition, 23(5), 373–385. https://doi.org/10.1080/07315724.2004.10719381
- Leidy, H. J., Clifton, P. M., Astrup, A., Wycherley, T. P., Westerterp-Plantenga, M. S., Luscombe-Marsh, N. D., Woods, S. C., & Mattes, R. D. (2015). The Role of Protein in Weight Loss and Maintenance. The American Journal of Clinical Nutrition, 101(6), 1320S-1329S. https://doi.org/10.3945/ajcn.114.084038
- Paddon-Jones, D., Westman, E., Mattes, R. D., Wolfe, R. R., Astrup, A., & Westerterp-Plantenga, M. (2008). Protein, Weight Management, and Satiety. The American Journal of Clinical Nutrition, 87(5), 1558S-1561S. https://doi.org/10.1093/ajcn/87.5.1558S
- Todd, J., Mancino, L., & Lin, B.-H. (2010). The Impact of Food Away From Home on Adult Diet Quality (No. 90; Economic Research Report). U.S. Department of Agriculture Economic Research Service.
- Tonsor, G. T. (2020, March 5). Meat Demand Monitor—Project Methodology. AgManager.Info. https://agmanager.info/livestock-meat/meat-demand/monthly-meat-demand-monitor-survey-data/meat-demand-monitor-project
- Wainer, D. (2025, March 28). Is Ozempic Really the Reason Americans Are Snacking Less? The Wall Street Journal. https://www.wsj.com/business/retail/snack-sales-down-big-food-glp-1-economy-1b2a6cb6?st=EqhtzM

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