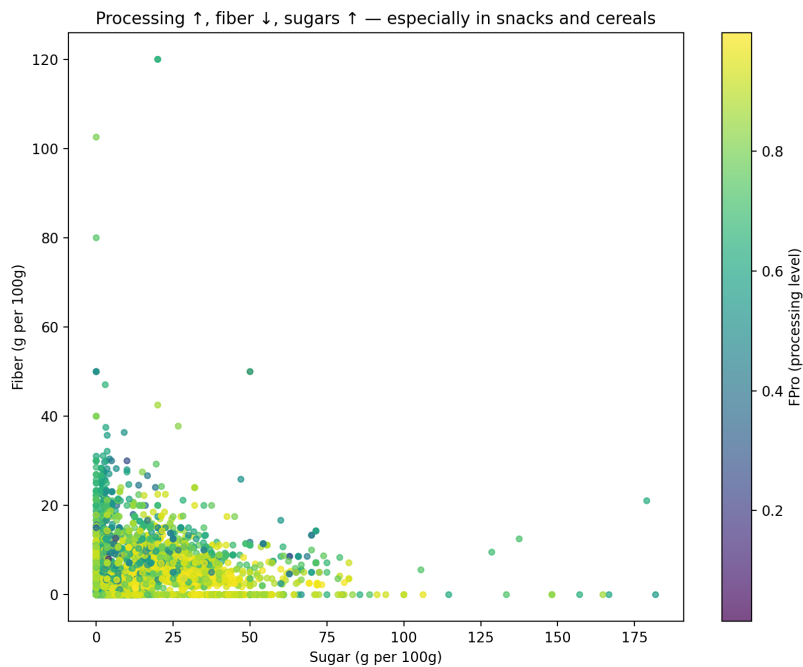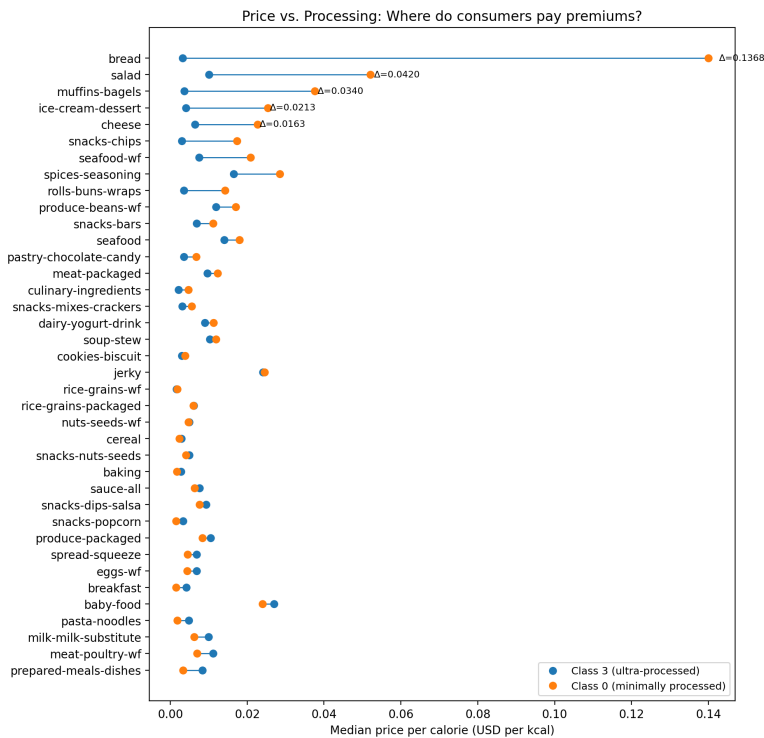# Project #1 - Checkpoint

Fall 2025 / DSC 209R / 25A06A
By Dongting Cai (David)

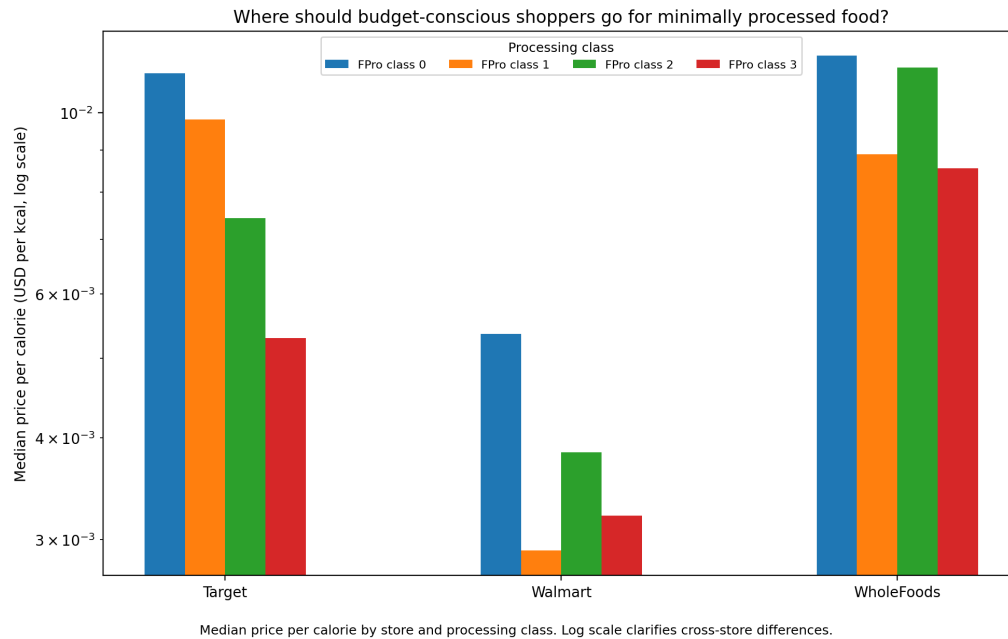## Plot Idea #1: Processing ↑, Fiber ↓, Sugars ↑ — *especially in snacks and cereals*

Filtered to snacks*, cereal, and drink* categories (n=6880). Each point is a product.

Plot Idea #2: Price vs. Processing – Where Do Consumers Pay Premiums?

Δ = median(Class 0) – median(Class 3) price_percal; beverages excluded to avoid $/kcal inflation.

Plot Idea #3: Where Should Budget-Conscious Shoppers Go for Minimally Processed Food?

Median price per calorie by store and processing class. Log scale clarifies cross-store differences.

Among these options, my preferred visualization is Plot Idea #1: "Processing ↑, Fiber ↓, Sugars ↑, especially in snacks and cereals." I think this scatterplot effectively communicates the key message about the data. By plotting fiber against sugar content and using color to indicate processing level, it clearly shows the trade-off between nutrition and processing in one view. The design makes it immediately obvious that the most processed foods (highlighted in warm colors) are grouped where fiber is low and sugar is high - a crucial insight for health-conscious readers. Additionally, highlighting snacks and cereals draws attention to familiar product categories that illustrate this trend, making the main point more relatable.

* The plots shown above are still drafts and in development. They only provide insight and will be improved in the final submission.