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# EXAMINING FOOD PURCHASE BEHAVIOR AND FOOD VALUES DURING THE COVID-19 PANDEMIC

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# COVID-19 CONTINUES TO DISRUPT THE FOOD SYSTEM

- Stockouts (early on)
- Increases in food prices
- Continued restrictions on food away from home (FAFH) purchases in many states



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# THESE CHANGES COULD IMPACT HOUSEHOLDS IN A NUMBER OF WAYS...

- Shifts in food at home (FAH) and food away from home (FAFH) purchases
  - Shifts in food acquisition behaviors (e.g., shopping online)
  - Shifts in the importance of certain attributes to food purchases, or food values
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- The purpose of our research was to examine changes in household food purchasing behavior and food values during the early weeks of the Covid-19 pandemic
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# DATA COLLECTION STRATEGY

- We employ a rapid panel design
- Households surveyed 4 times (approx. every 2 wks) from mid-March to late April, 2020

Round 1  
March 13  
*Stocking Up*

Round 2  
March 27  
*Shelter in Place*

Round 3  
April 10  
*CARES Payment  
Distribution*

Round 4  
April 24  
*Reopening Plans  
Released*

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# KEY QUESTIONS OF INTEREST

- Food acquisition questions pulled from Flexible Consumer Behavior Survey (FCBS) Module of 2017-2018 NHANES.
  - During the past (X) days, how much money did your family or did you spend:
    - At supermarkets or grocery stores? (FAH)
    - On food at stores other than grocery stores (gas stations, corner stores, etc., but *not* restaurants)? (FAH)
    - Eating out? (FAFH)
    - On food carried out or delivered? (FAFH)
  - *Note:* Respondents could answer on a weekly (7 days) or monthly (30 days) basis; all results converted to weekly spending.
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# KEY QUESTIONS OF INTEREST

- We also asked about purchases of specific food products.
- Because of Covid-19, how have you changed food purchases this week compared to a typical week?
  - Washed and packaged salad greens
  - Frozen vegetables
  - Shelf-stable, not refrigerated milk
  - Canned fish or meats
  - Eggs
  - Dry staples (rice, pasta, etc.)

*Response Options:*  
Bought a lot less  
Bought a little less  
Bought the same as before  
Bought a little more  
Bought a lot more  
Never Purchase

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# KEY QUESTIONS OF INTEREST

- Food values questions adapted from 2009-2010 FCBS
  - When you buy food from a grocery store or supermarket, how important is...
    - How easy the food is to prepare? (Convenience)
    - Nutrition?
    - Price?
    - How well the food keeps after it is bought? (Storability)
    - Taste?
  - *Note:* Each value rated on a 5-point scale where 1=Not at all important and 5=Extremely important.
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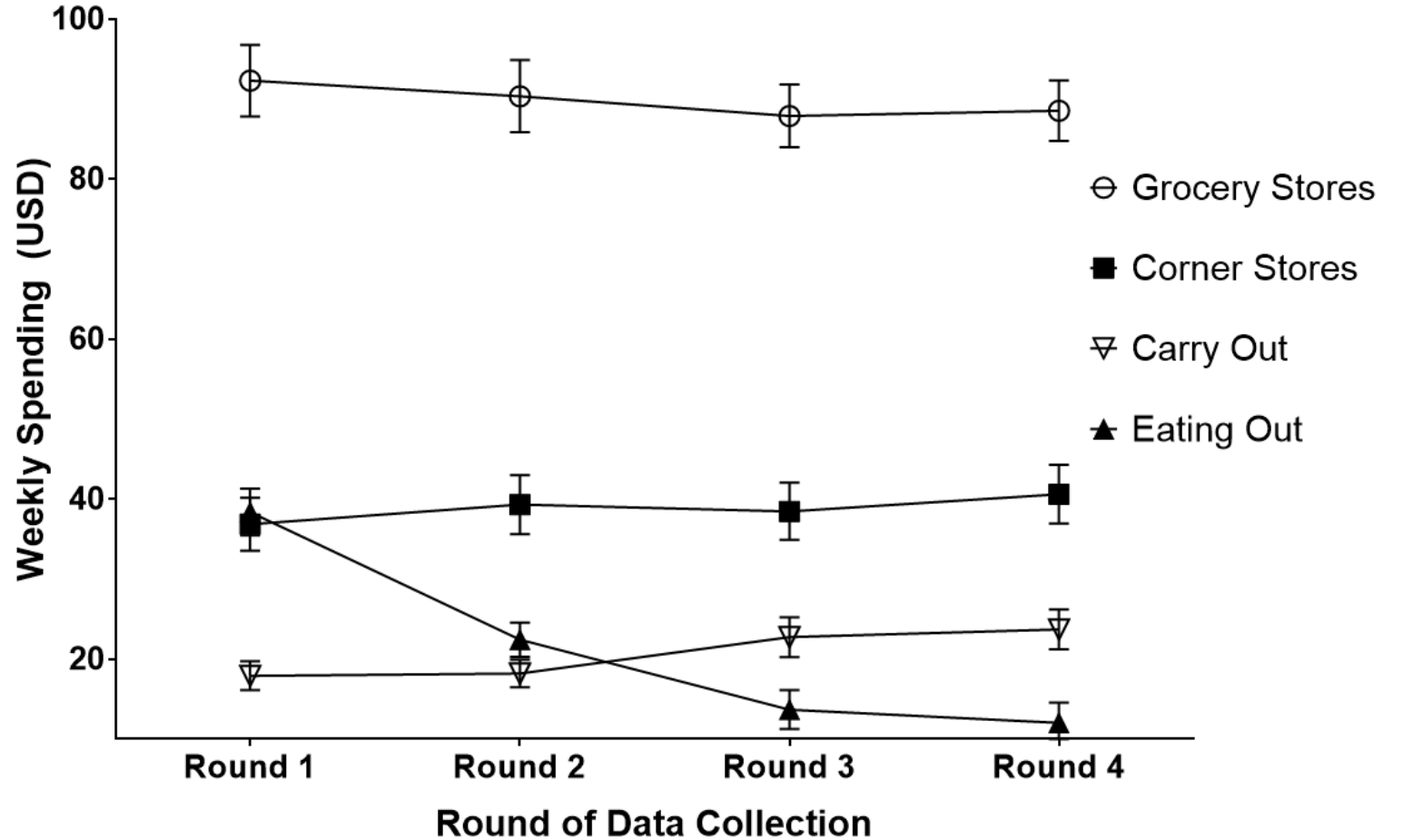
# RESPONDENT CHARACTERISTICS

- $N = 1,370$  respondents
  - 58.7% male
  - 58.3% have a Bachelor's degree or higher
  - Race
    - 66.5% White/Caucasian
    - 9.9% Black/African American
    - 11.5% Hispanic or Latino/a
  - Older sample relative to U.S. population
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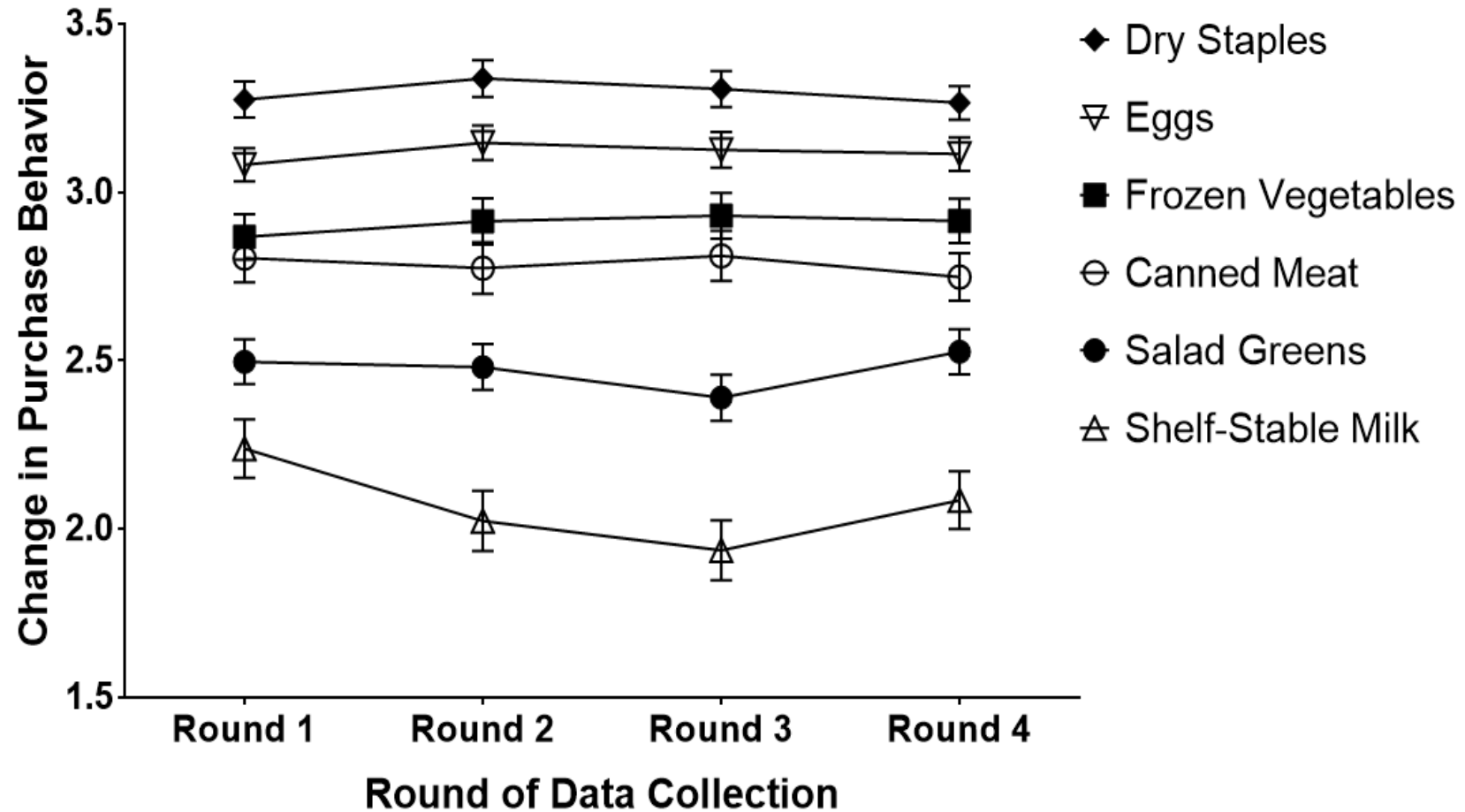
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# RESULTS – FAH AND FAFH SPENDING (USD/WEEK)



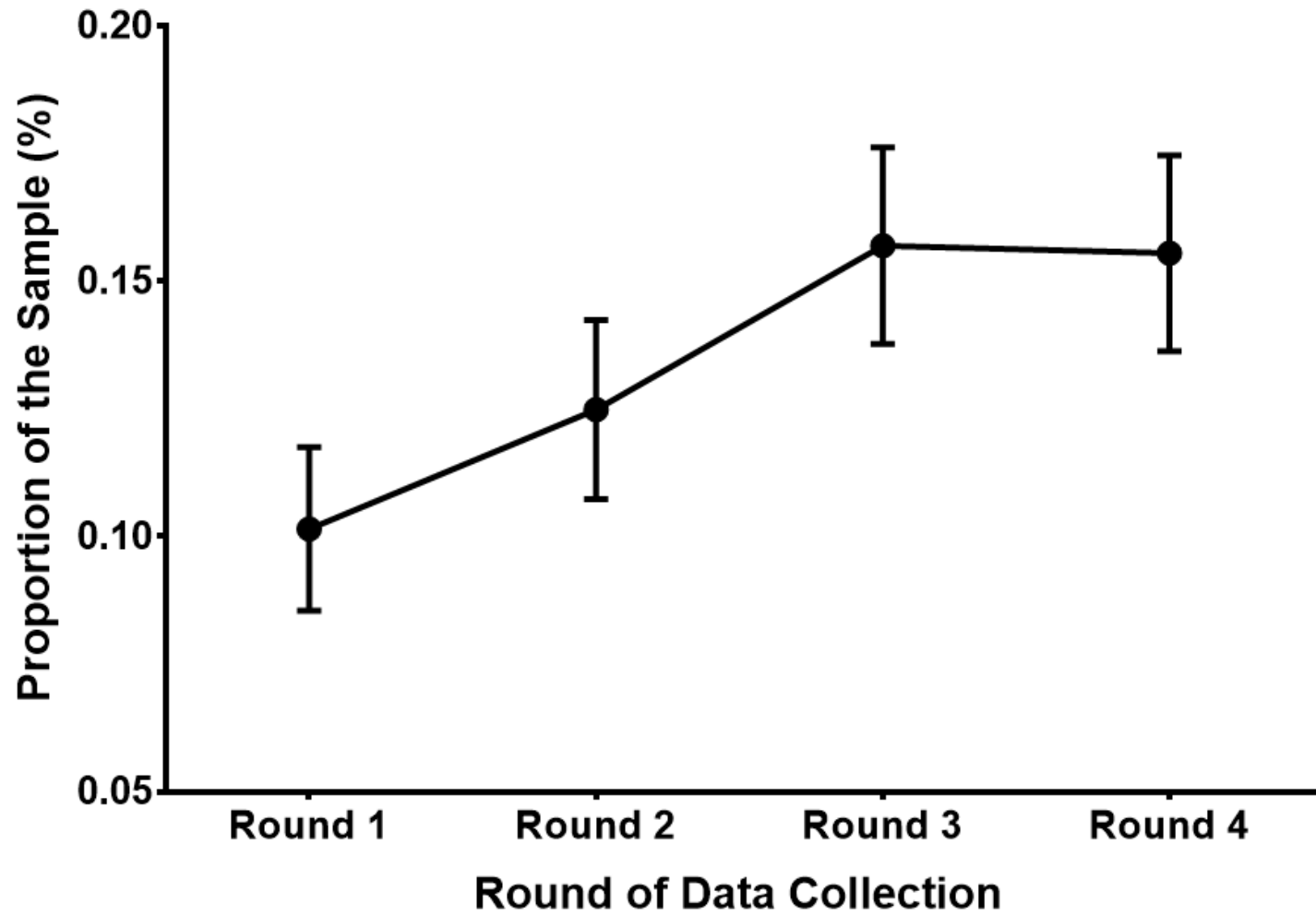
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# RESULTS – SPECIFIC FOOD PURCHASES

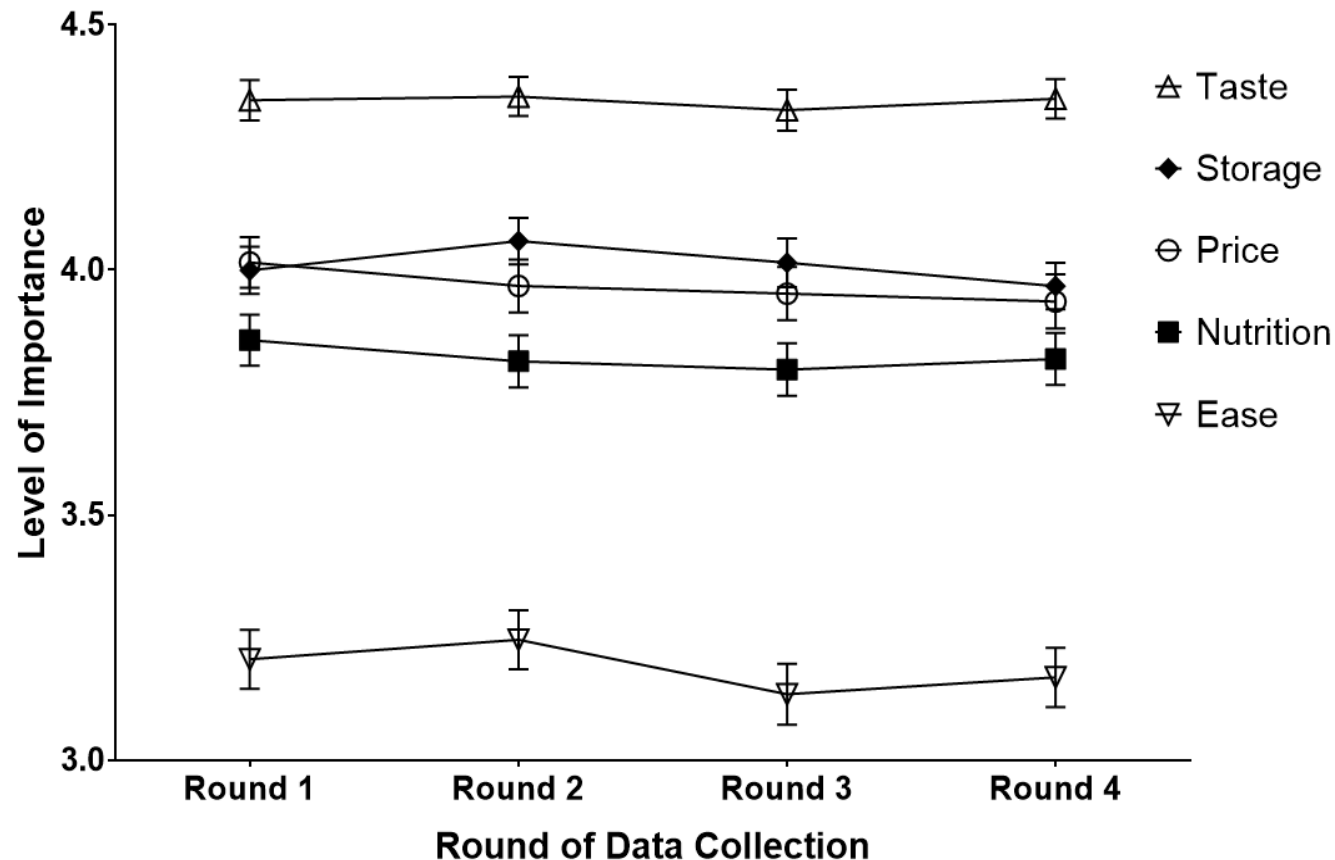


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# RESULTS – PREVALENCE OF ONLINE GROCERY SHOPPING



# RESULTS – FOOD VALUES



*How does this compare to pre-Covid times?*

Burton-Freeman et al. (2017) report % of people ranking each value as very or somewhat important from FCBS data:

Taste: 81%

Nutrition: 79%

Price: 73.4%

Storage: 71.5%

Ease: 63.6%

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# TAKEAWAYS

1. Food expenditures changed. Decreases in FAFH driven by less eating out, partially offset by increased carry out.
    - Coincides with introduction of shelter in place orders for many states
    - Reopening over summer could have allowed for some rebound in FAFH but winter surge has likely erased any such rebound effects
  2. Significant increases in online shopping behavior; likely to continue through winter.
  3. Food values appeared fairly stable over the 4 survey rounds; however, ordering does look different from pre-Covid times. Storability elevated above price, nutrition.
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# MORE TO THINK ABOUT...

- Heterogeneity in food acquisition and purchasing behavior across households
    - Geographic region
    - Household income/employment status
  - How has dietary quality changed?
  - The number of households experiencing food insecurity has increased significantly. What are long-term consequences for food access and nutrition?
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# THANK YOU!

Published paper available at: <https://doi.org/10.1002/aepp.13118>

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