How do we eat?
"Meal Inspiration"
Questionnaire Analysis

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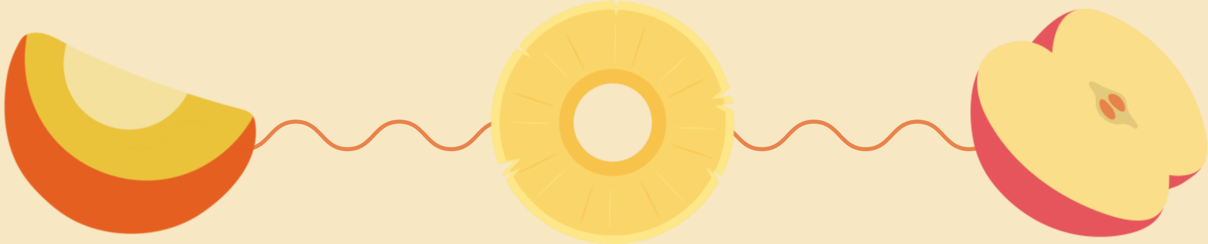
OUR GOALS



Profiling

Categorize the shoppers into key demographic segments

Insights

Find patterns in the typical shopping habits and engagement of key segments

Market Share Expansion

Leveraging our insights so that we can help companies get more customers

Outline

1. We will explain how the data was collected
2. Introduce the research questions that will be answered
3. Categorize shoppers into key segments to find the shopping habits of the typical shopper
4. Comment on our analysis for each research question
5. Report our findings
6. GIve recommendations for a business proposal

The Data

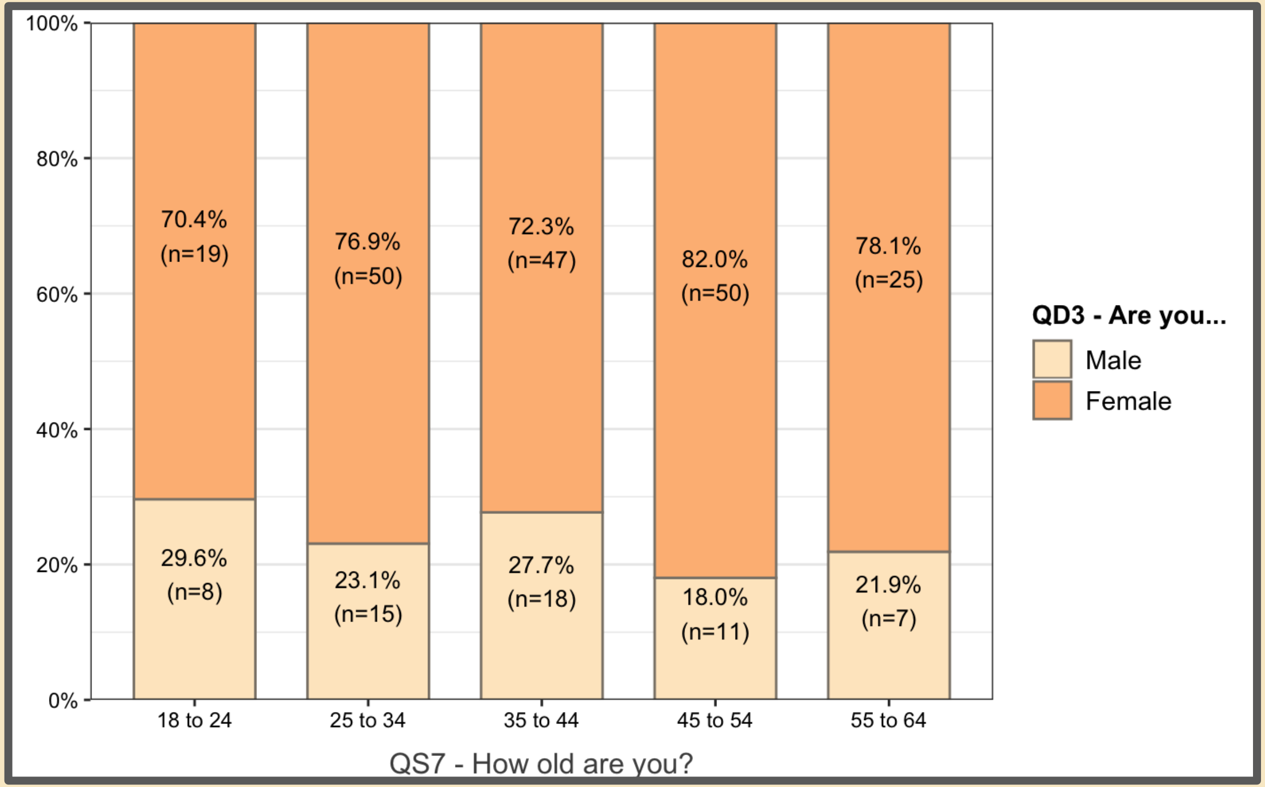
- Dataset provided by Dr. Luke (USC)
- Data was gathered from the responses in the Meal Inspiration questionnaire
- 250 observations
  - Consists of 191 females and 59 males
- Contains information on the shopping habits and family dynamics of grocery store shoppers

Research Questions

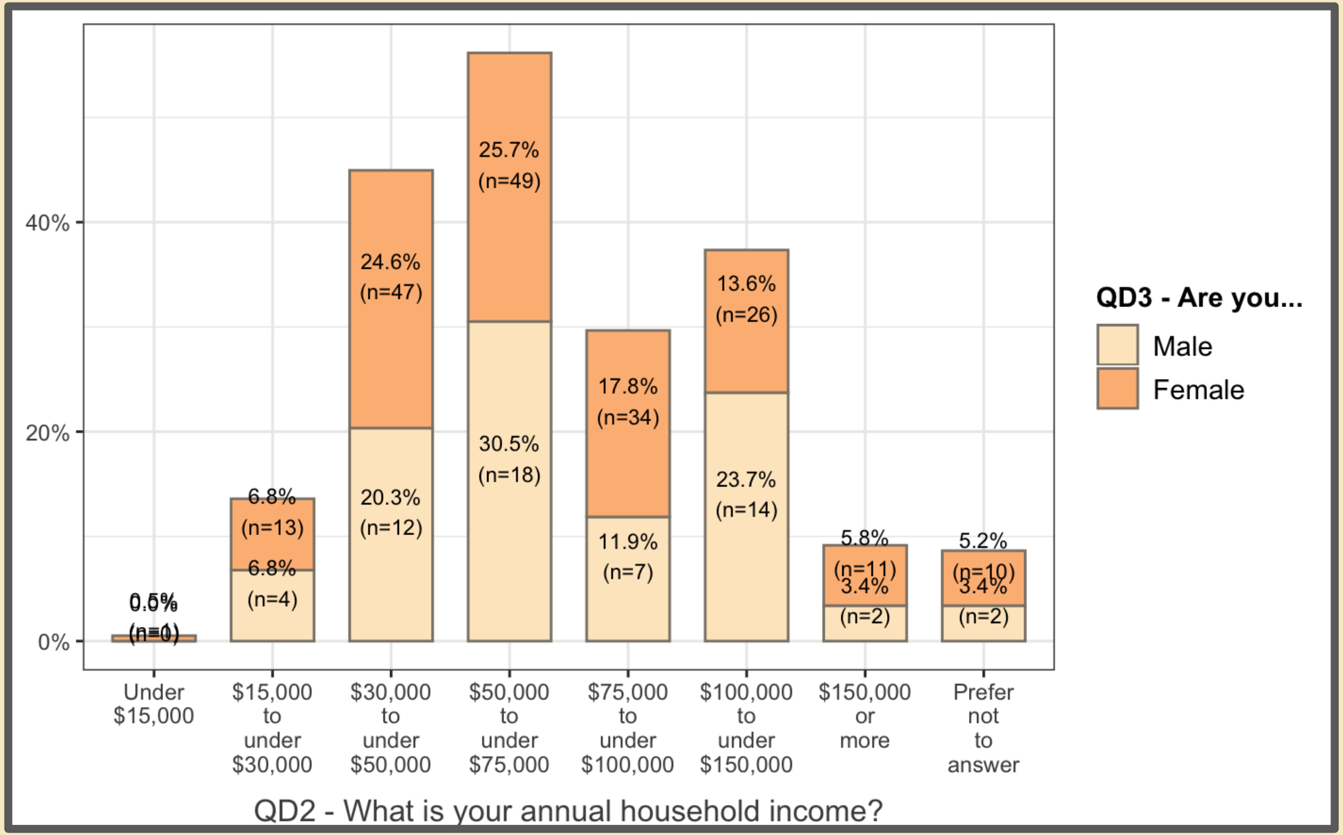
1. What is the profile of the typical grocery store shopper?
2. What are the demographic profiles for each of the key segments?
3. How engaged is the typical grocery store shopper?
4. What are the typical shopping habits of grocery store shoppers?
5. How does engagement and shopping habits differ for the key segments?
6. How can we leverage needs and solutions among consumers?
7. How do needs and solutions differ among the key segments?
8. Are there any other groups/segments/clusters that we could win with?

What is the profile of the typical grocery store shopper?

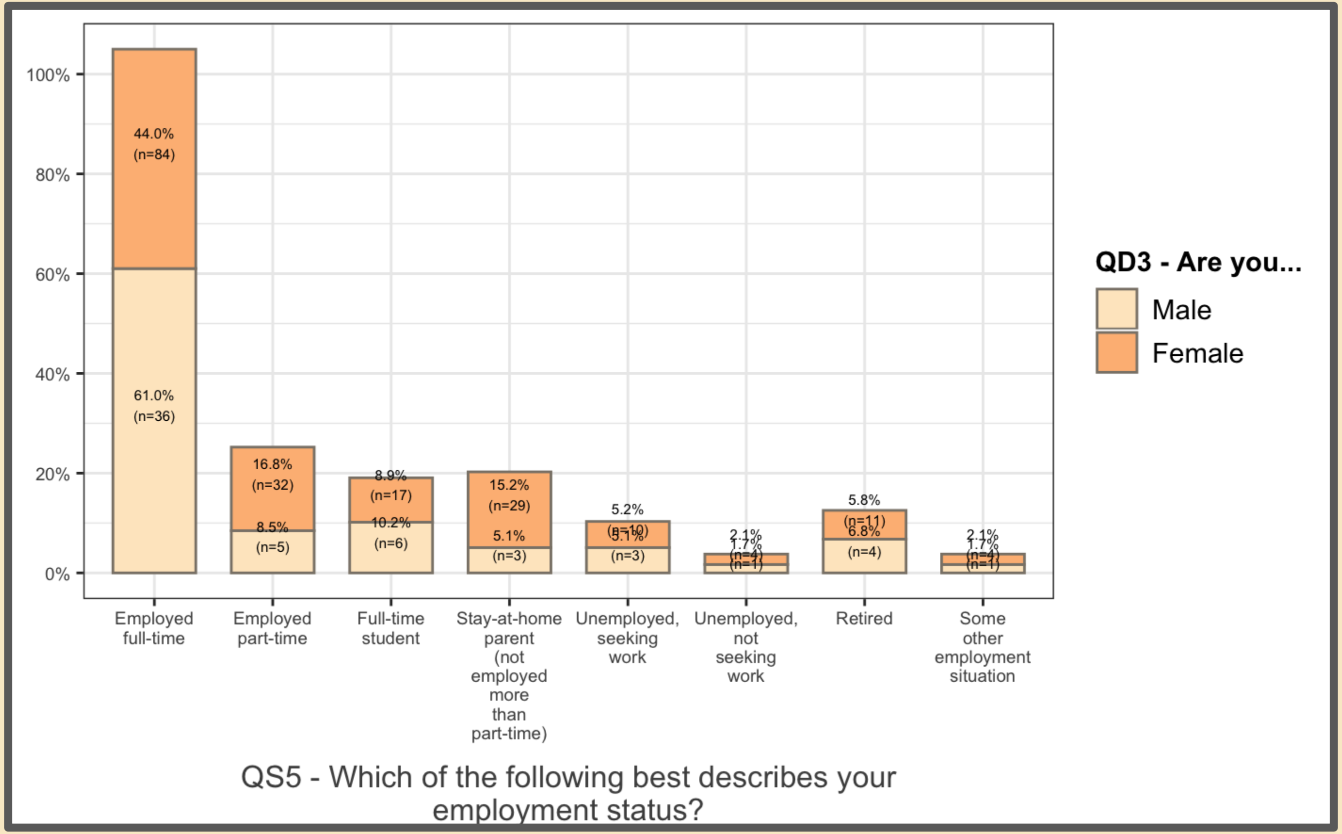
Age and Gender



Gender and Annual Household Income



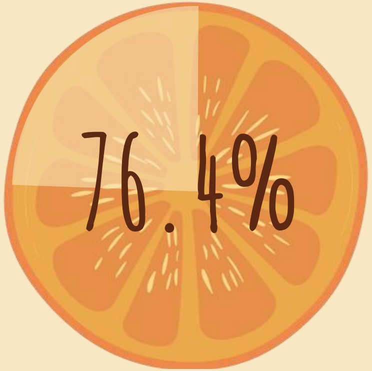
Employment status



MARKET SEGMENTATION

Average Shopper by Sex

Women are the majority shoppers 76.4%, men only account for 23.6%



Income Group

Almost half women are in the 30k-75k income bracket. Similarly, about half of themale shoppers 50.8% fell into this income bracket

Employment

157 people were employed

What Are the Demographic profiles for the key segments?

Key Segments

Stay at home(Unemployed)

Work It (Employed)

Juggling Just Us (No kids)

Revolving Door (Multigenerational)

Single(not living with partner)

Q2: What are the demographic profiles for each of the key segments?

Key Segments:

-**Stay at Home Planners:** Married/living with a partner and unemployed w/ at least one child under 18

-**Work it:** Married/living with a partner, full-time working women with at least one child

-**Juggling Just Us:** Married/living with a partner and no kids

-**Revolving Door:** Large(+5) HH with kids, multi-generational and/or with adults at home

-**Singles:** Single adults (not living with a partner) with at least one kid under 18:

-QS3: How many people (in your household) do you grocery shop for?

-QS4: Who are the people in your household that you grocery shop for?

-QS5: Which of the following best describes your employment status?

Q2: What are the demographic profiles for each of the key segments?

-Participants can choose multiple responses for each question.

-Key Segments does not consider other demographic variables (income, age, quota, own/rent house)

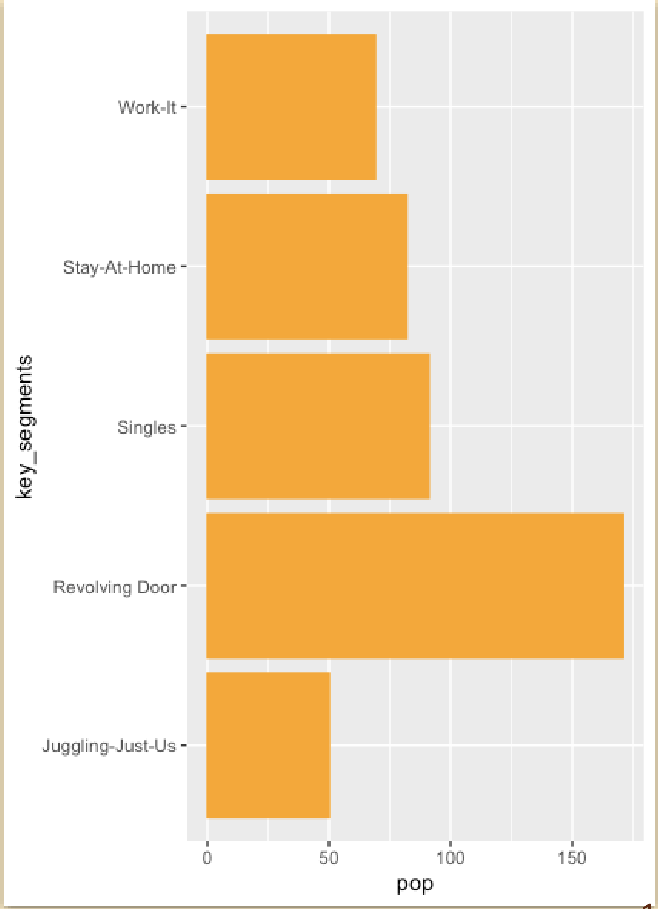
QS3*QS5*$num_people Crosstabulation

Number of persons in household[a]				QS5 - Which of the following best describes your employment status? Employed full-time	Employed part-time	Full-time student	Stay-at-home parent (not employed more than part-time)	Unemployed, seeking work	Unemployed, not seeking work
Spouse or significant other	QS3 - How many people (in your household) do you grocery shop for?	2	Count	19	12	6	0	3	1
			% within QS3	38.0%	24.0%	12.0%	0.0%	6.0%	2.0%
		3	Count	36	10	2	4	1	0
			% within QS3	65.5%	18.2%	3.6%	7.3%	1.8%	0.0%
		4	Count	14	5	2	18	5	1
			% within QS3	30.4%	10.9%	4.3%	39.1%	10.9%	2.2%

Q2: What are the demographic profiles for each of the key segments?

-From running 3-way tab of **QS3, QS4, QS5**, the largest group is the "**Revolving-Door**" group

-What's common among the larger groups is that they contain parents who are responsible for multiple members of their household.

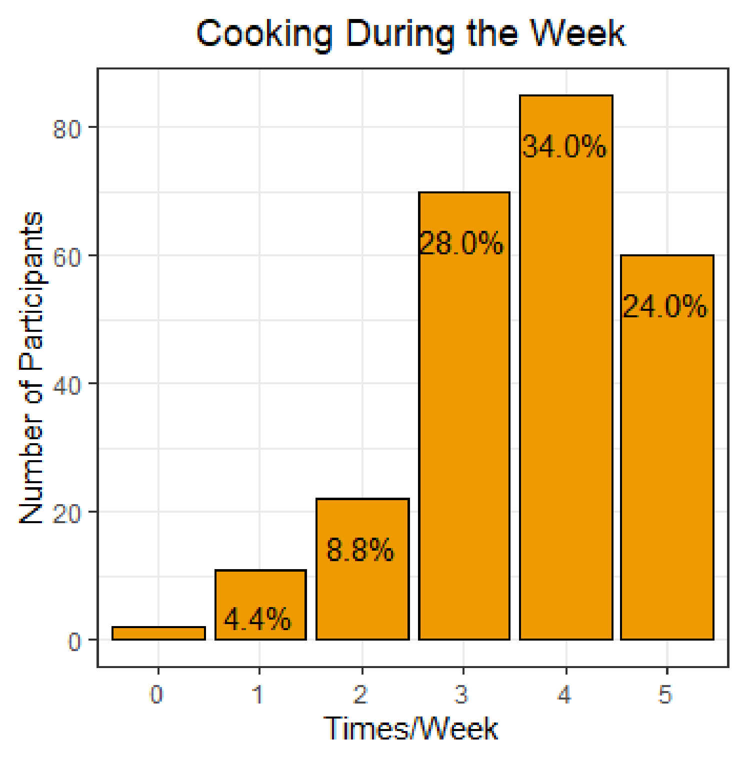


How Engaged is the typical grocery store shopper?

Weekday Engagement: In a typical week how often do you prepare dinner?

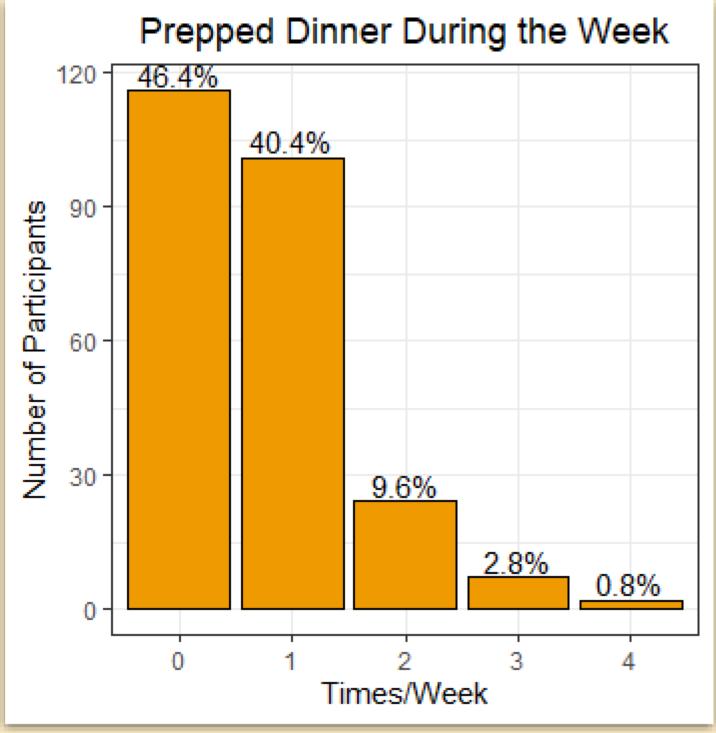
- Regular Poisson model implemented
- Variables used: Income, Living Situation, Employment, Age, Time spent cooking dinner, Money spent on groceries for the week, who the dinner was prepared for

- No factors seem to be significant in how many times a week typical household prepares dinner (all p-values in model above .05)



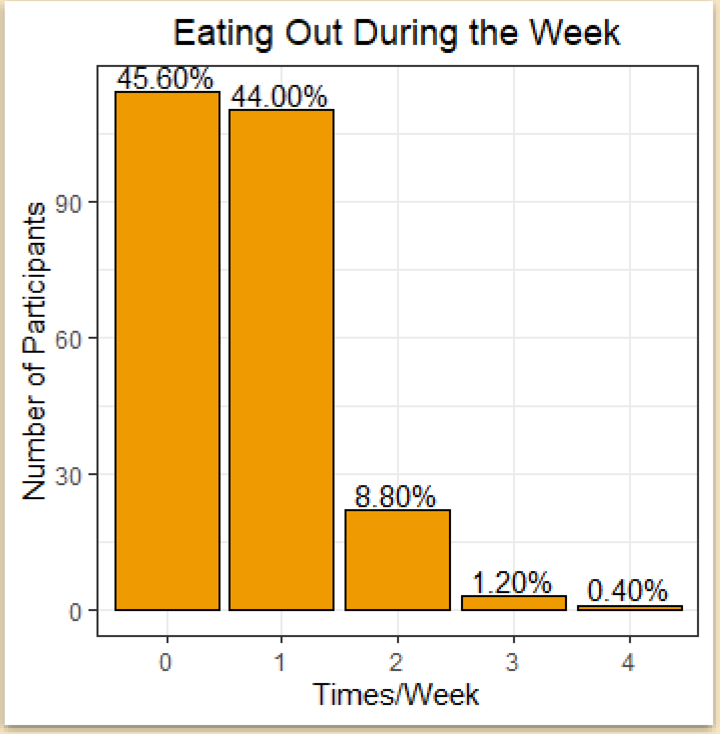
Weekday Engagement: In a typical week how often do you buy a prepped dinner from the grocery store?

- Zero Inflated poisson model run.
- Being a full time student is a significant factor in how many times a week a person buys prepped dinner from The grocery store.
- The estimated average number of times a full-time student buys prepped dinner a week is 223% of that for a full-time employee.
- Other significant factors: Preparing dinner for parents, cooking Mostly From scratch



Weekday Engagement: How many times do you eat out in a typical week?

- Zero Inflated poisson model implemented
- Having an annual income of $150,000 or above is a significant factor in how many times a week a person eats out during a typical week..
- The estimated average number of times an individual with a high income eats out in a week is 105% of that for an individual with a lower income.
- Other significant variables to eating out during the week: **Mostly using already prepared items that just require assembly or cooking.**

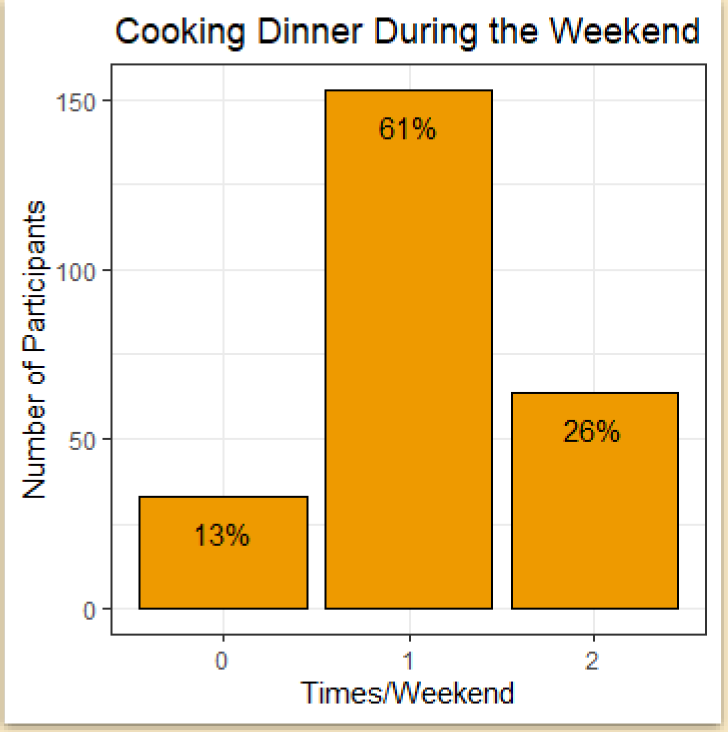


Weekend engagement: Cooking dinner

- Regular Poisson Model Implemented

- Variables Explored: Living Situation, Employment, Age, Income, Time spent cooking dinner, Money spent on groceries for the week

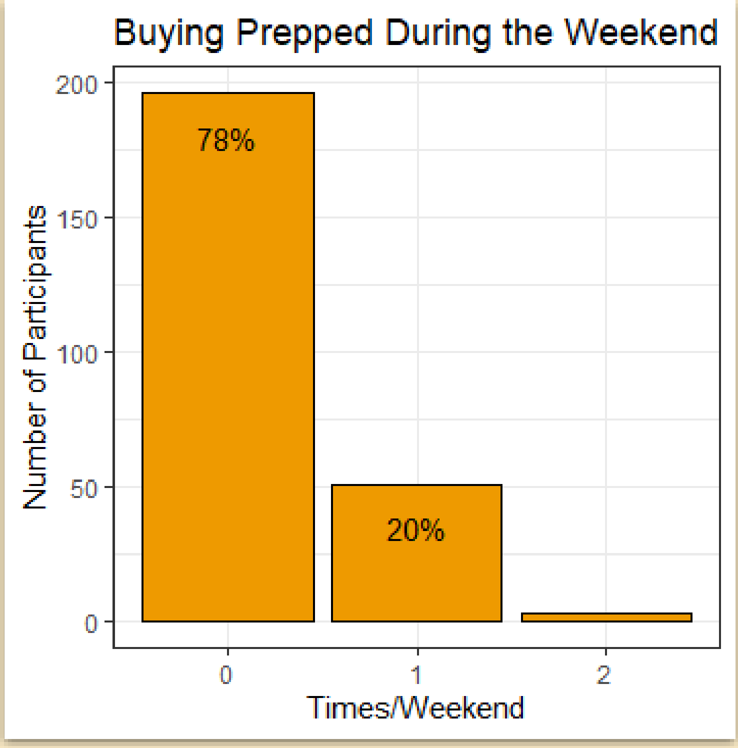
- No variables seem to show any significance in how often a family prepares a meal during the weekend



Weekend engagement: Buying a Prepped Meal

- Part-time employees are more likely to purchase prepared dinners from the grocery store on weekends.

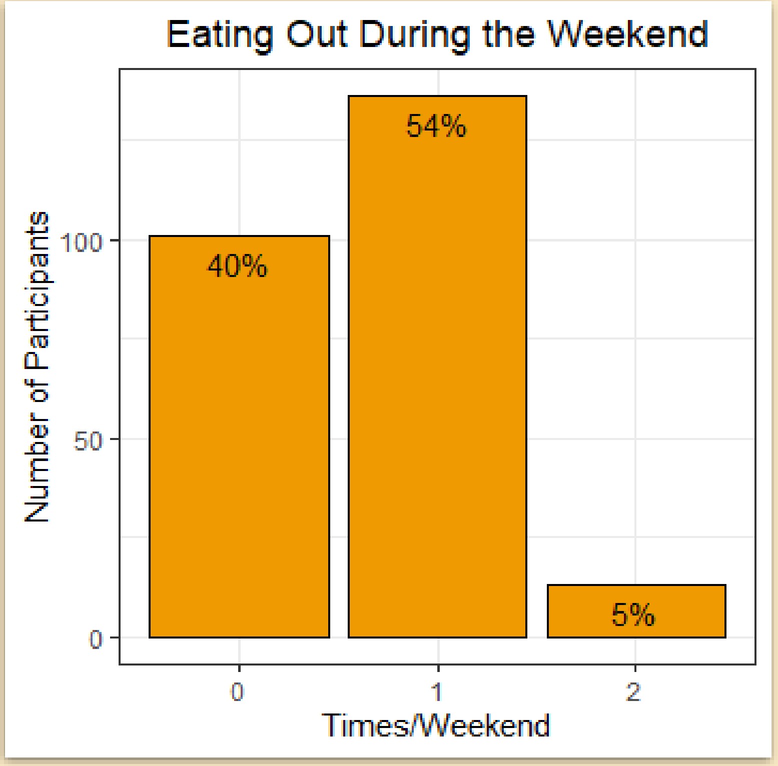
- The estimated average number of times a part-time employee buys prepped dinner in a weekend is 22% of that for a full-time employee.



Weekend engagement: Eating Out

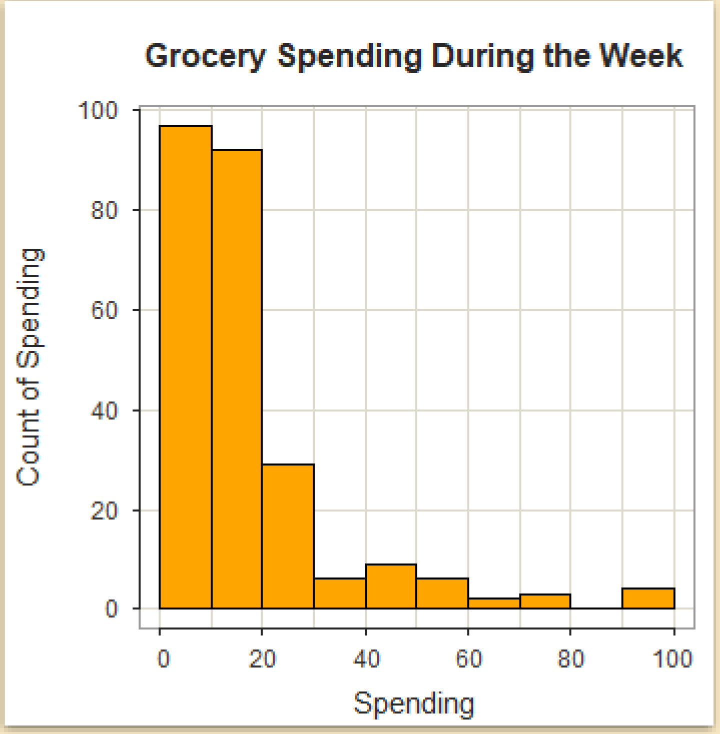
- Retired individuals are more likely to eat out during the weekend than any other group.

- The estimated average number of times a retired individual eats out during the week is 28% of that for an individual with a full-time job.



Engagement: Money spent on groceries in a week

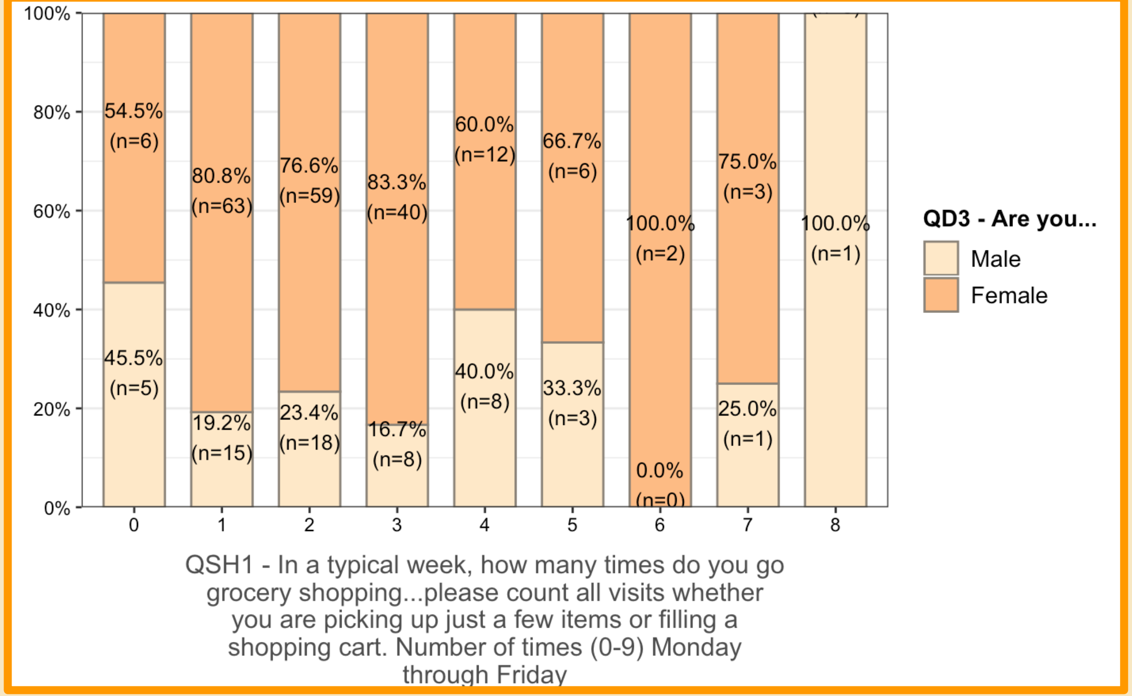
- Since the data is skewed to the right, running a gamma regression model would be most appropriate.
- Significant predictors are gender and income.
- Males spend a average amount of 144% than that of females
- Those with a low income (below $15,000) actually spend an average of 16.6% more than that of individual with a higher Income. ($100,000-150,000)



What are the Typical shopping Habits of Grocery Store Shoppers?

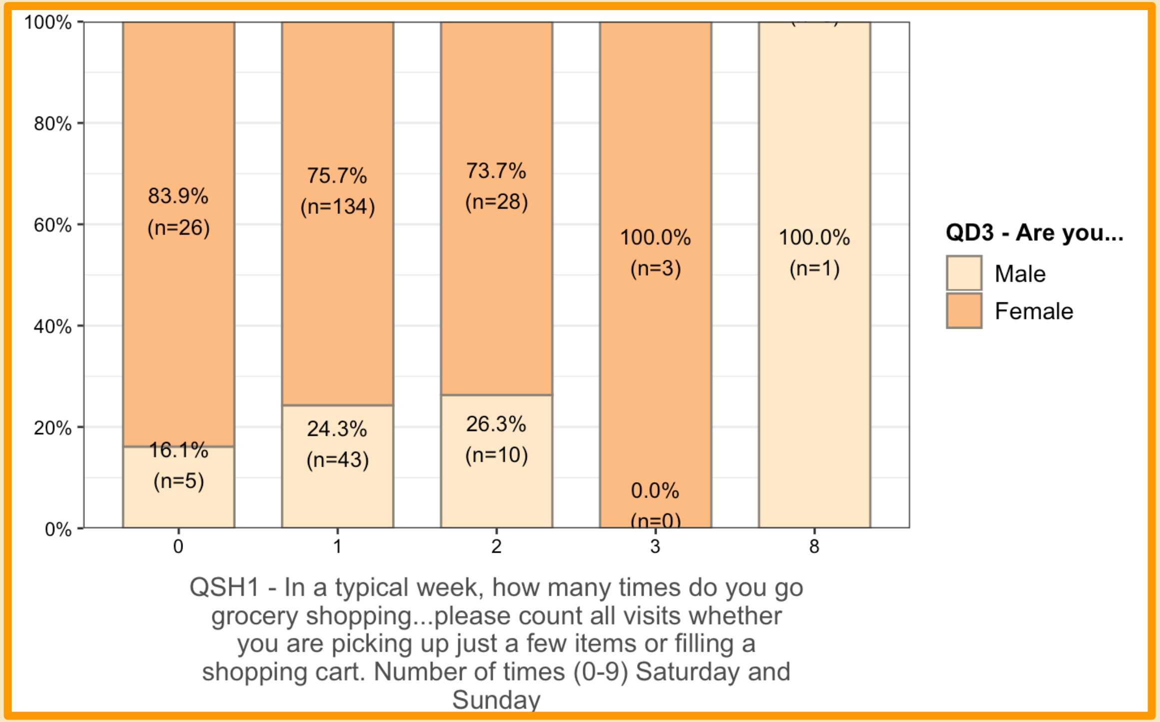
Q4: What are the typical shopping habits of grocery store shoppers?

- Majority of respondents grocery shop once or twice a week (Mon-Fri)



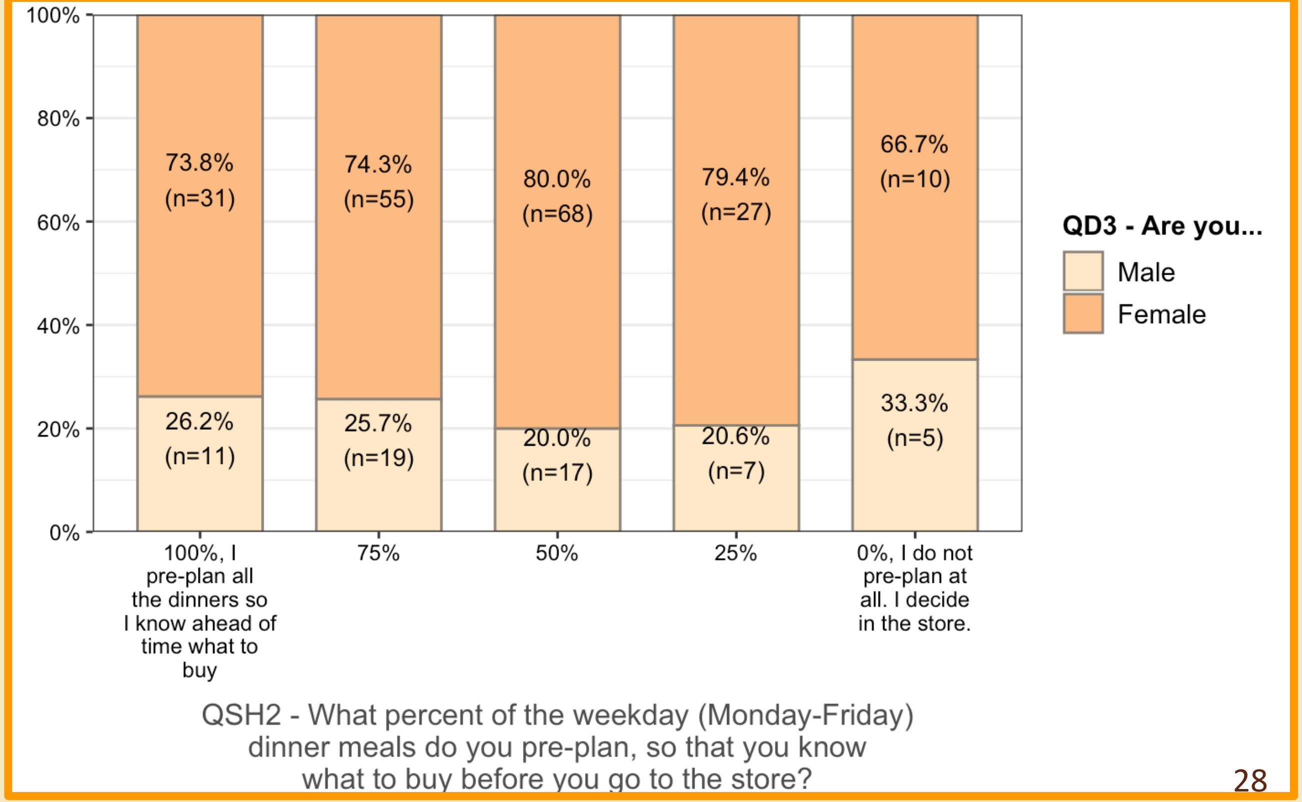
Q4: What are the typical shopping habits of grocery store shoppers?

- Majority of respondents grocery shop once over the weekend (Sat-Sun)



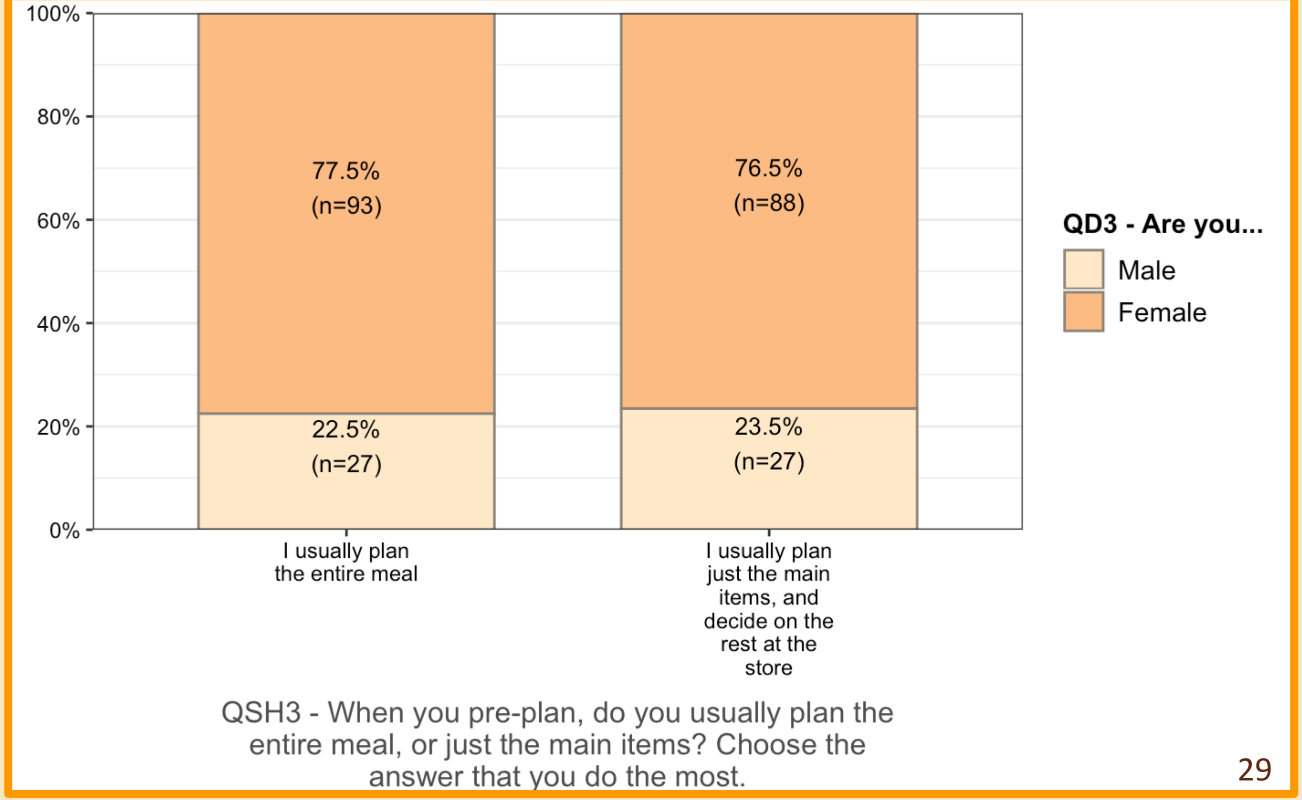
Q4: What are the typical shopping habits of grocery store shoppers?

- Majority of respondents pre-plan 50-75% of their weekday dinner meals to know what to buy before going to the store (Mon-Fri)



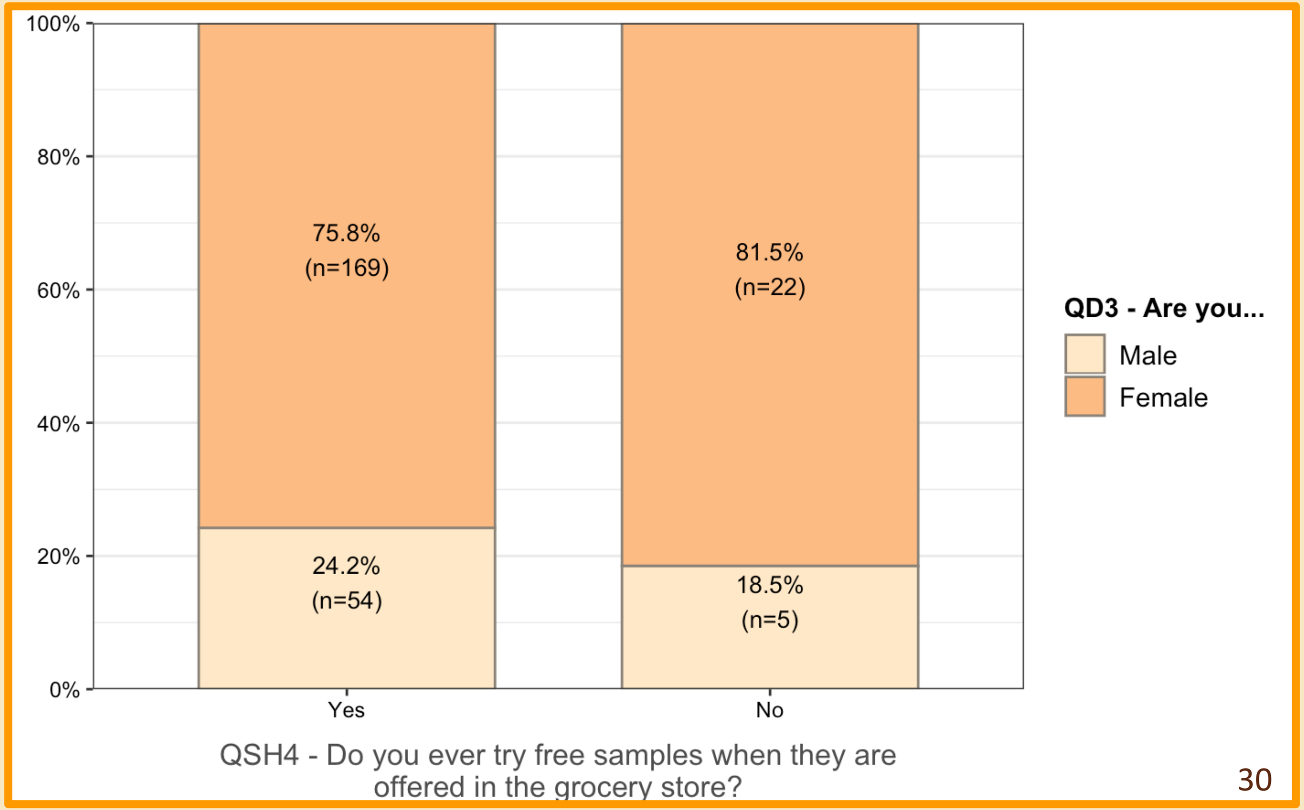
Q4: What are the typical shopping habits of grocery store shoppers?

- Of all respondents who pre-plan:



Q4: What are the typical shopping habits of grocery store shoppers?

- 89.2% of respondents try free samples offered at the store

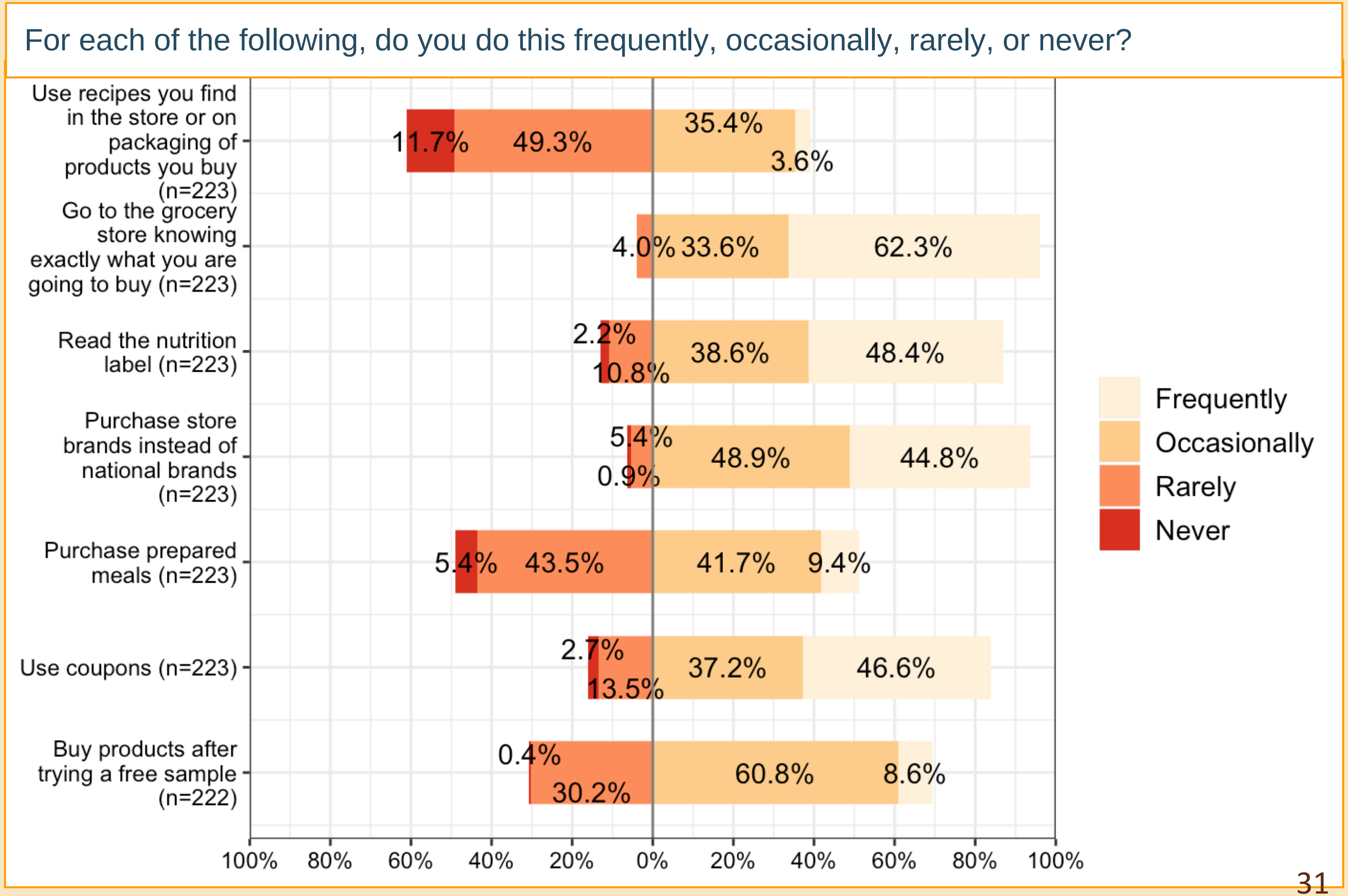


Q4: What are the typical shopping habits of grocery store shoppers?

Among all respondents who DO try free samples at the store:

Sample Size

- 223 Valid
- 27 Missing

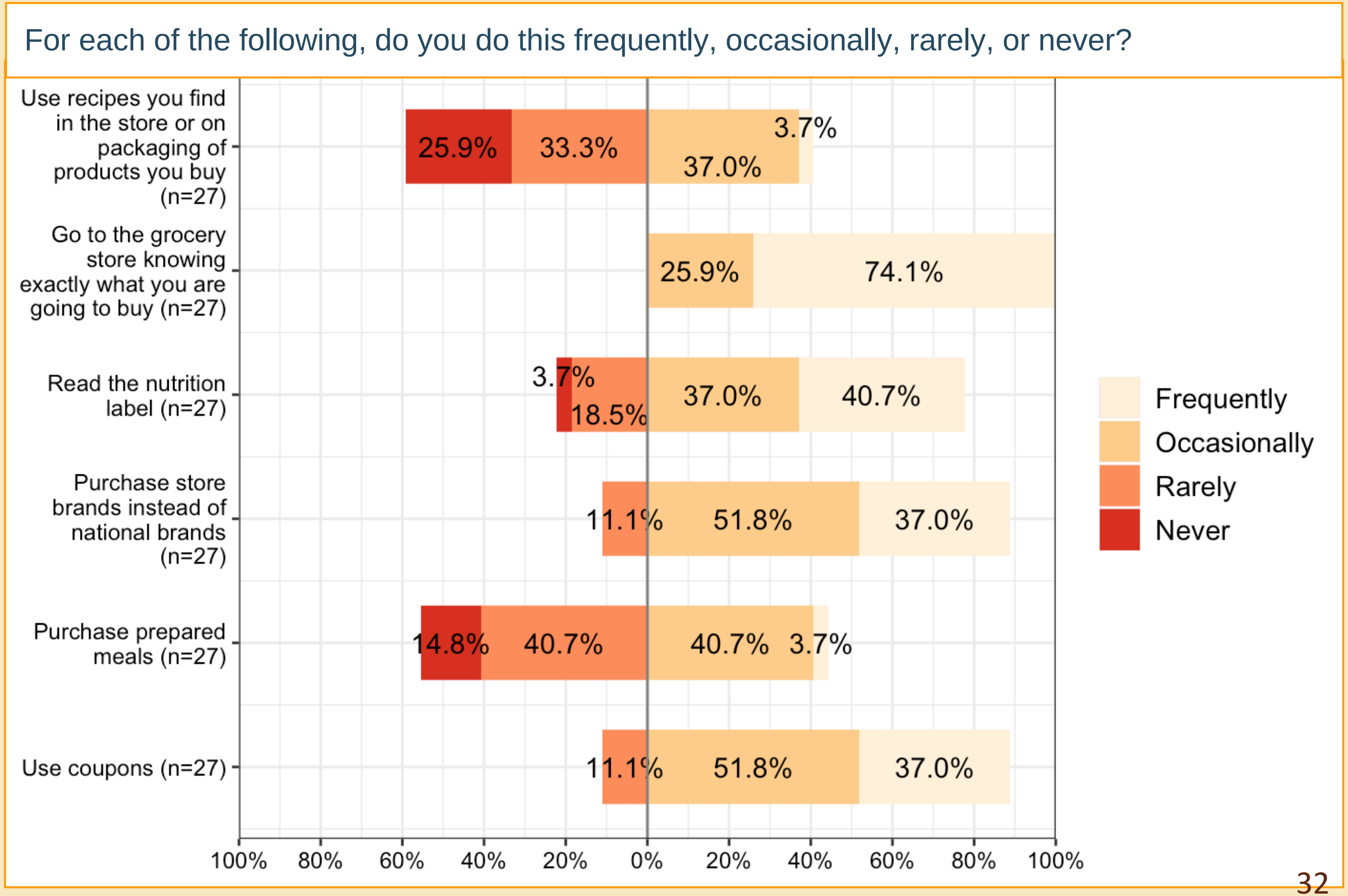


Q4: What are the typical shopping habits of grocery store shoppers?

Among all respondents who DO NOT try free samples at the store:

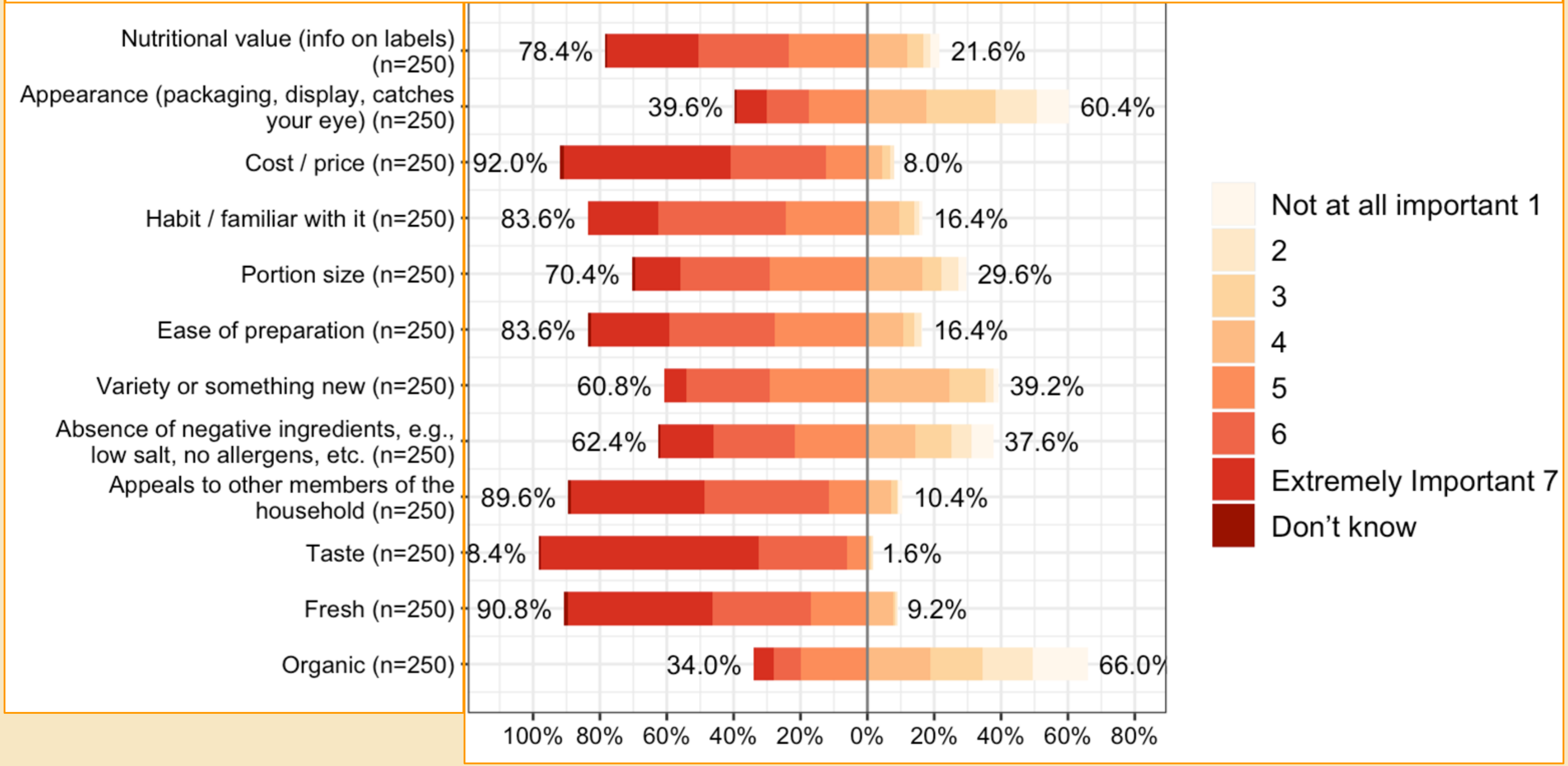
Sample Size

- 27 Valid
- 223 Missing



Q4: What are the typical shopping habits of grocery store shoppers?

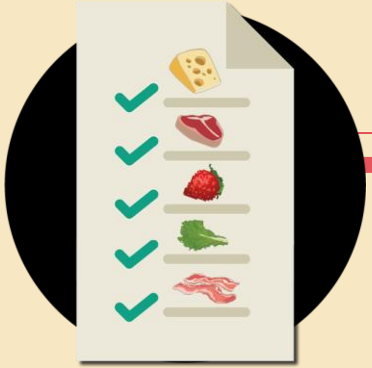
How important is each of the following when you choose a food item for a weekday (Mon-Fri) dinner?



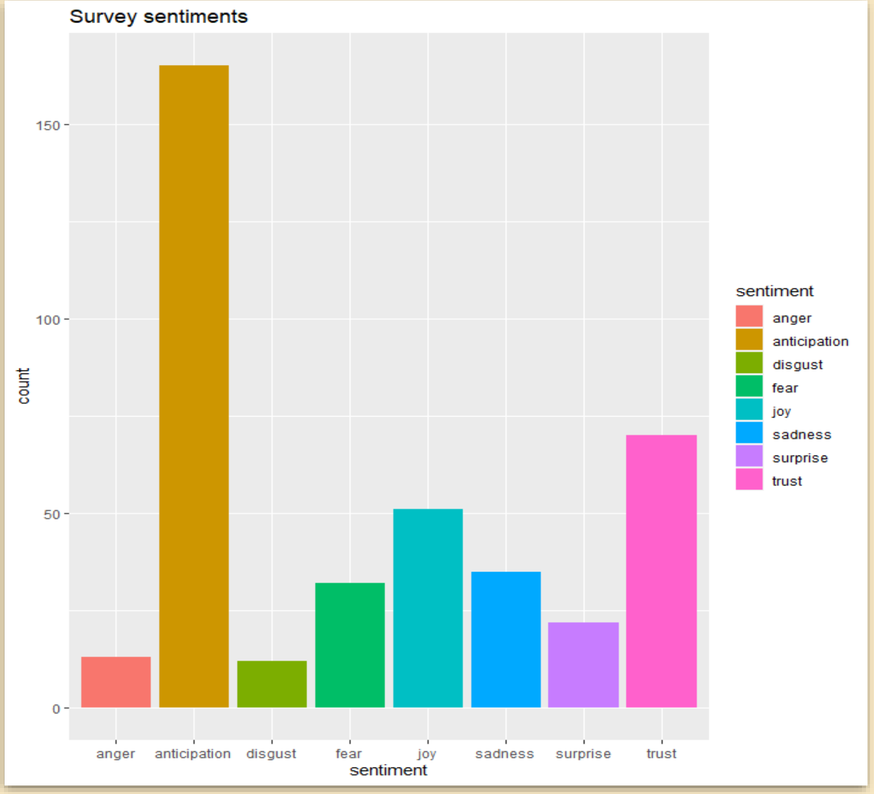
Q4: What are the typical shopping habits of grocery store shoppers?

What are the main problems or challenges that you face when shopping for or preparing your weekday evening meal?

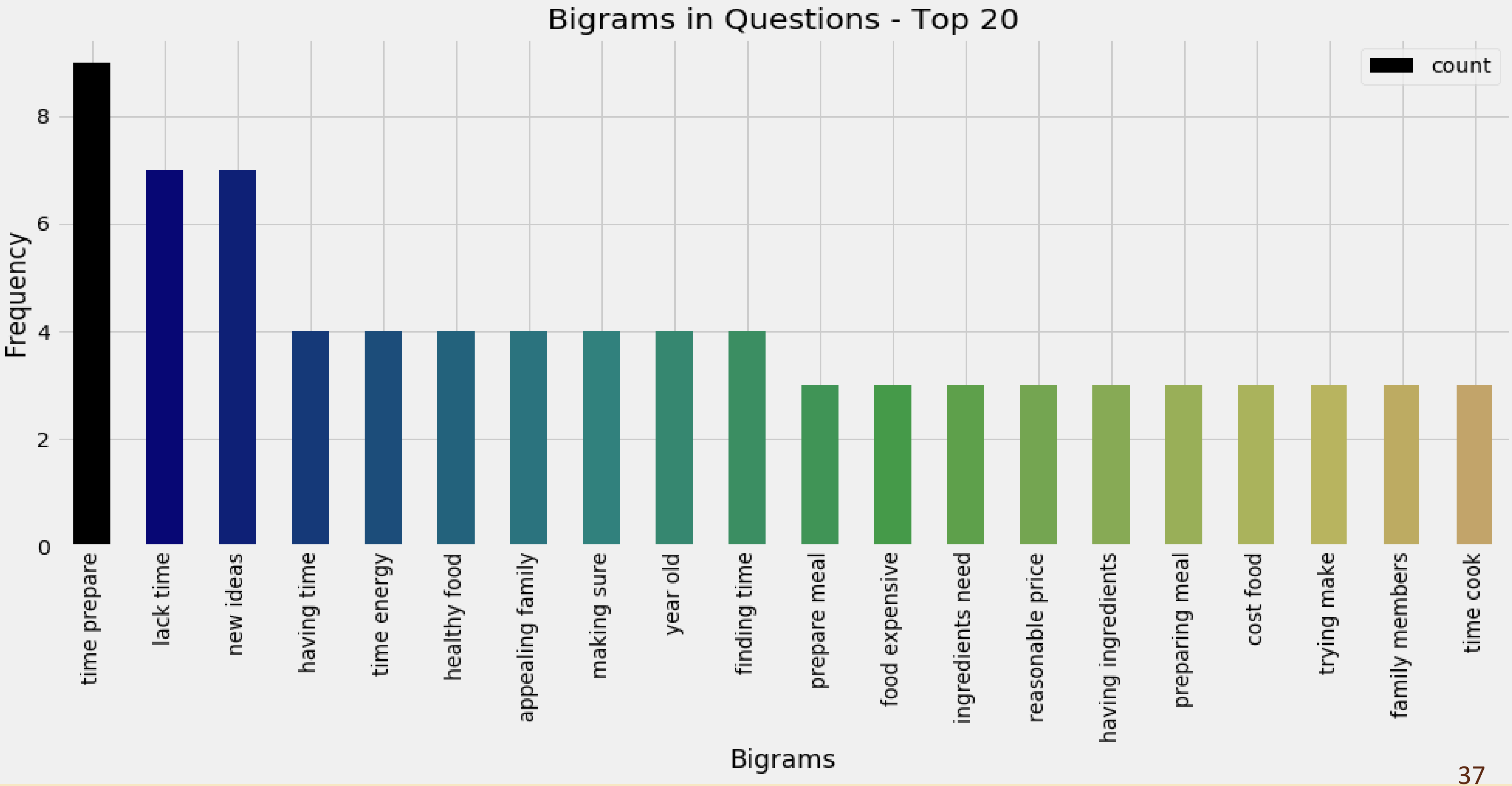
How does engagement and shopping habits differ for the key segments?



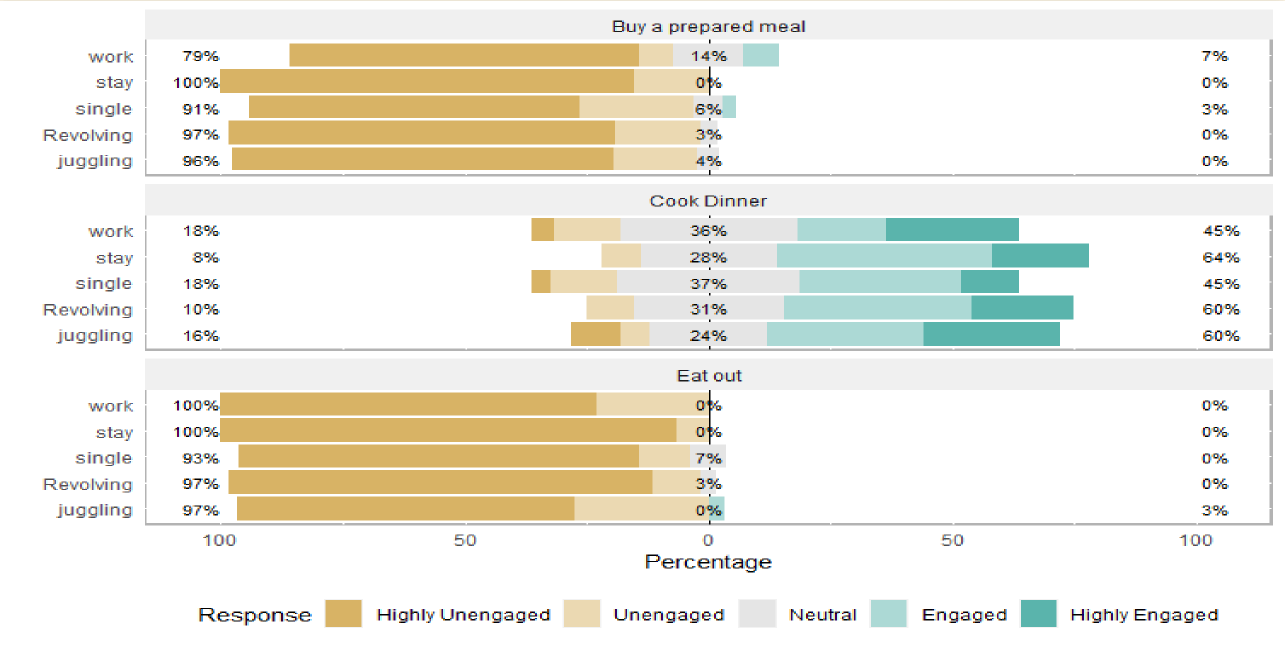
Shopping Habits Sentiment analysis



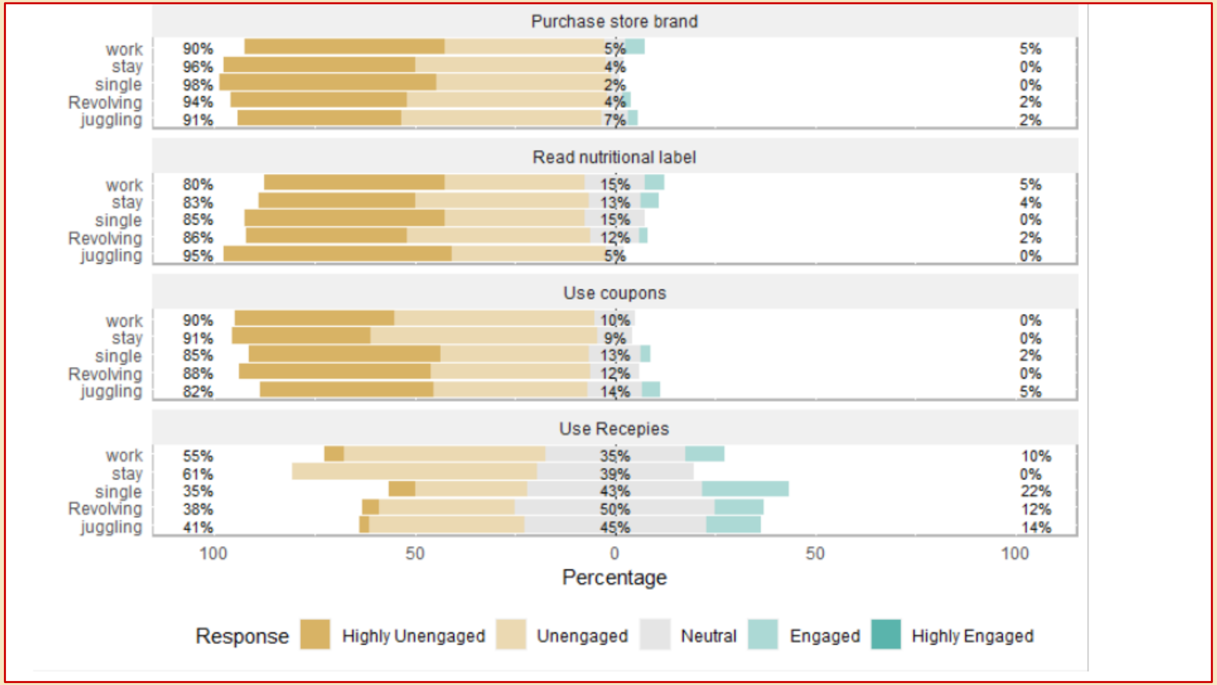
- Anticipation and Trust are the highest emotions felt when asked what are the main challenges faced by customers.
- The majority of emotions are positive however a lot of the frustration stems from time consuming cooking.


Bigrams in Questions - Top 20
count
Frequency
0
2
4
6
8
time prepare
lack time
new ideas
having time
time energy
healthy food
appealing family
making sure
year old
finding time
prepare meal
food expensive
ingredients need
reasonable price
having ingredients
preparing meal
cost food
trying make
family members
time cook
Bigrams

Q5: How does engagement and shopping habits differ for the key segments?

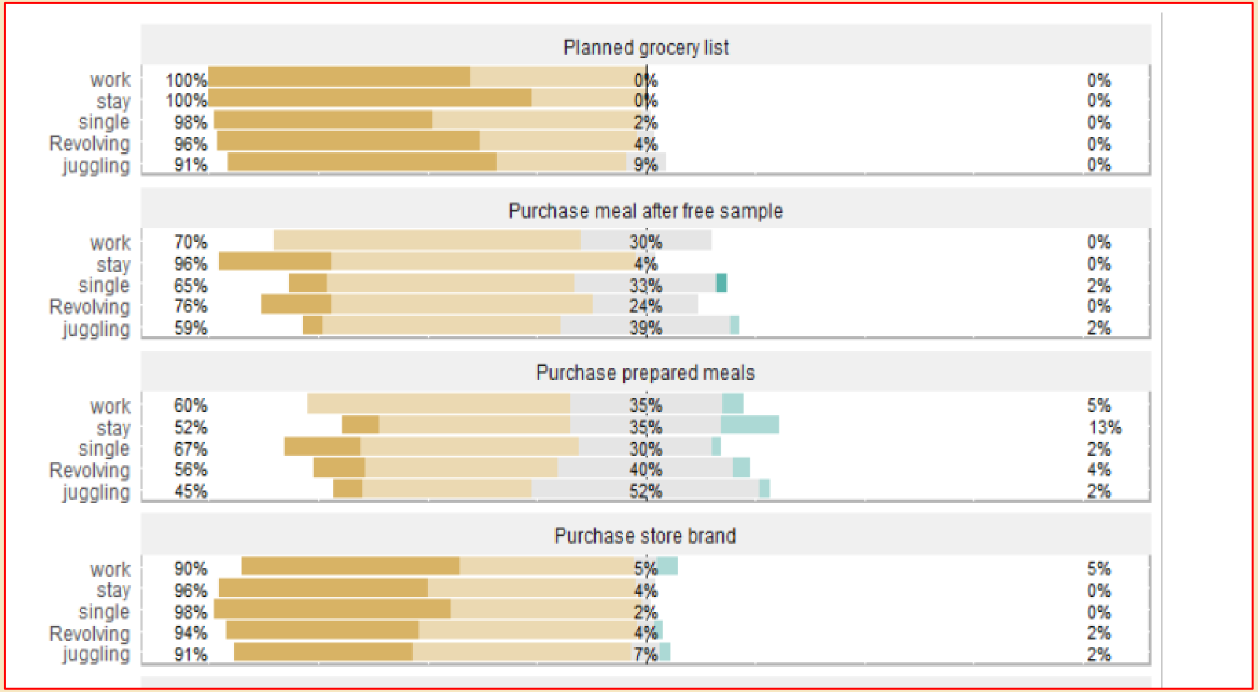


Shopping Habits between Key Segments



- Recipes trend the most with SIngles.
- People who work are the most loyal at purchasing store brands
- Juggling use the most coupons

Shopping Habits between key segments



- Stay at home purchased the most prepared meals
- Singles and Juggling more likely to purchase meal after free sample.

How can we leverage Needs and Solutions Among Consumers?

Q6: How can we leverage needs and solutions among consumers?

Needs

Figure out where grocery stores need to focus on.

Solutions

What actions will cause the most number of people, most happiness?

CORE NEEDS

Preference

"I prefer to cook my own meals"

Health

"The food I buy should be free of hormones and contaminants"

Inspiration

" I am looking for meal inspiration, not prepared food"

Household

"My family has dietary restrictions"

Budget/Convenience

"Often the food I want is out of my budget"

Core Solutions

Convenience
"More pre-cooked meals"

Inspiration
"More easy to make recipes around the store"

Ethnic Variety
"More ethnic foods and ingredients"

Store Service
"A mix and match dinner station"

Preference
"More items that meet special dietary needs"

Q6: How can we leverage needs and solutions among consumers?

Needs:

a. I prefer to cook my own meals using fresh ingredients.

h. I prefer to prepare my own meals, so I'm looking more for meal information and inspiration, not prepared meals.

i. I conduct big shopping trips weekly or every other week and so dinner depends on the ingredients I get at that time.

j. I want new dinner inspiration to come ahead of time before I go shopping so that I am able to purchase all the ingredients I will need.

l. I am usually too busy or tired during the week, so want more meal choices that are quick or that can save me time.

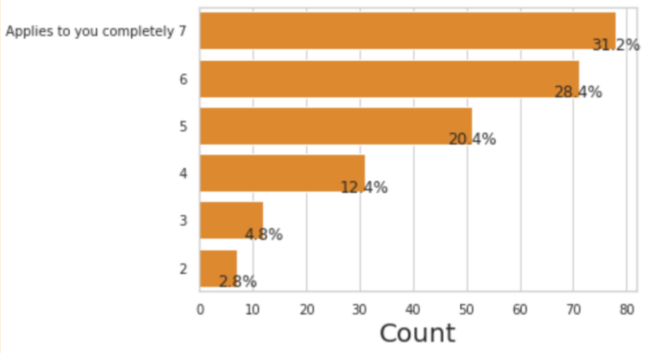
n. I like prepared or partially prepared meals, but find it difficult to find partially prepared meals that are the appropriate size for my family – they are either too large (bulk) or made for a single person

o. I look for and sometimes use the recipes that are shown on packaging when I am in the store deciding what to make.

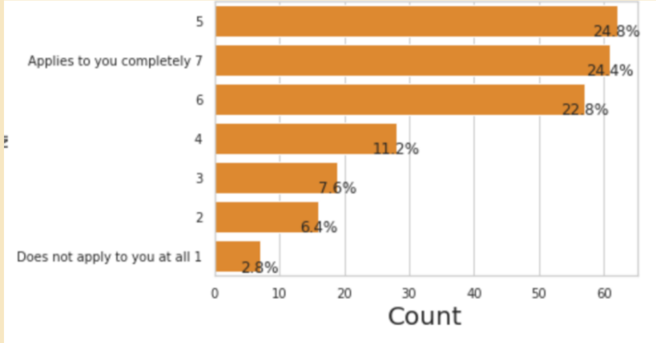
p. I would like grocery stores to carry more partially prepared options that are both tasty and nutritious.

q. I enjoy foods that originate within my native culture but I am unable to find the ingredients at my local grocery store.

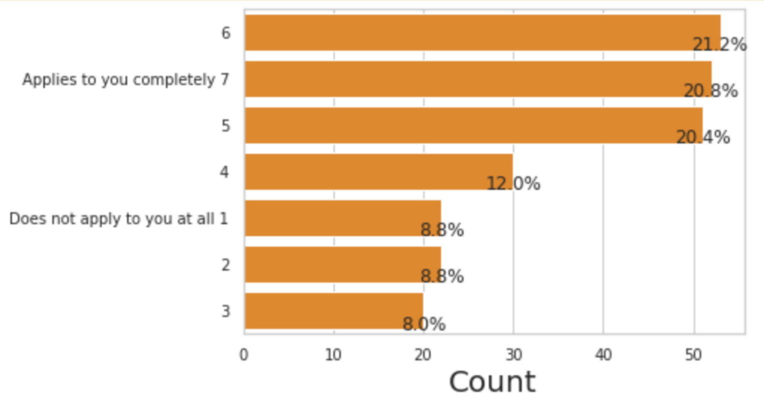
I prefer to cook my own meals using fresh ingredients



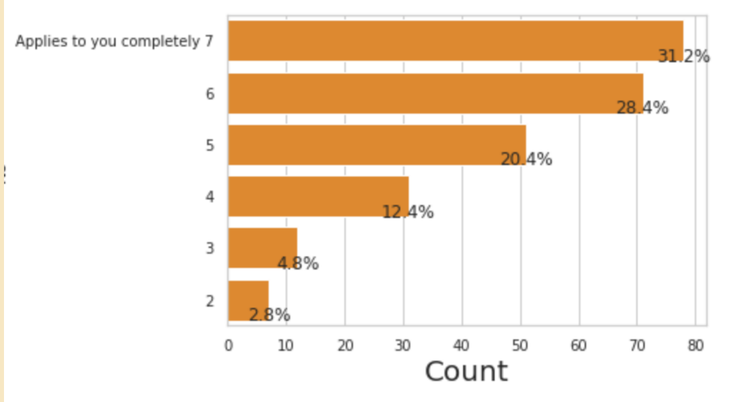
Fresh, high quality ingredients are oftentimes too expensive for my budget



I am usually too busy or tired during the week, so want more meal choices that are quick or that can save me time.



I look for and sometimes use the recipes that are shown on packaging when I am in the store deciding what to make.



Q6: How can we leverage needs and solutions among consumers?

Solutions:

b. More food items that meet special dietary needs (e.g., Kosher, low sodium).

d. The ability to see or learn more about the preparation process for prepared foods – such as behind the meat or fish counter, in the bakery area, etc.

e. The ability to select fresh fish from tanks in the seafood department. You select the fish, and an employee prepares it right in front of you, just the way you prefer.

h. More ethnic foods and ingredients, including more prepared or partially prepared meals.

i. Promotional or discounted prepared or partially prepared meals that allow me to try something new at a relatively lower cost.

j. More samples of prepared or partially prepared meals that I could try before I take the time to make it at home.

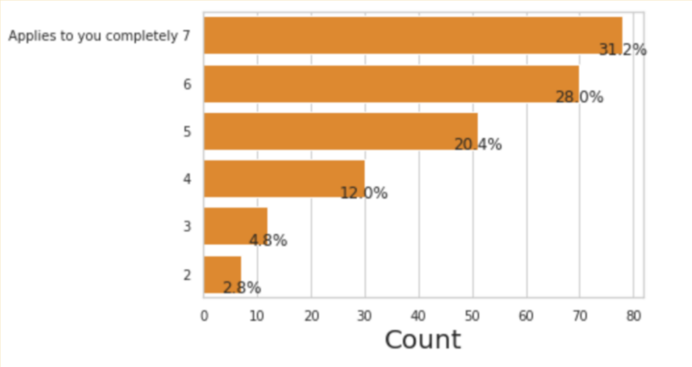
k. More dinner options that are still tasteful to reheat throughout the day or that would be easy to make several plates of at different times.

o. A new line of fresh meals that can be made in a skillet.

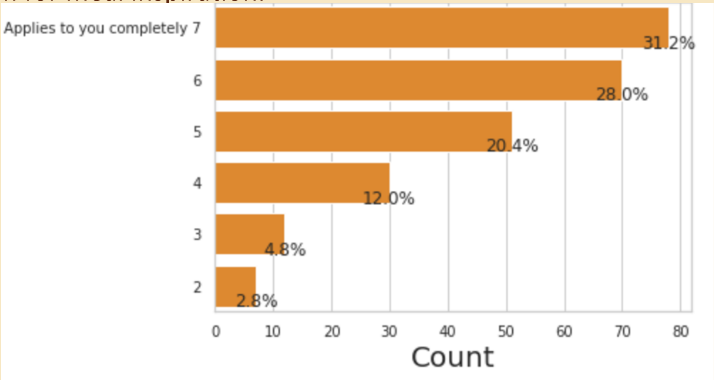
p. A “mix and match” dinner items station that includes prepared main dishes, side dishes and desserts.

q. Pre-cut meat and vegetable kits, such as for fajitas, stir fry, etc.

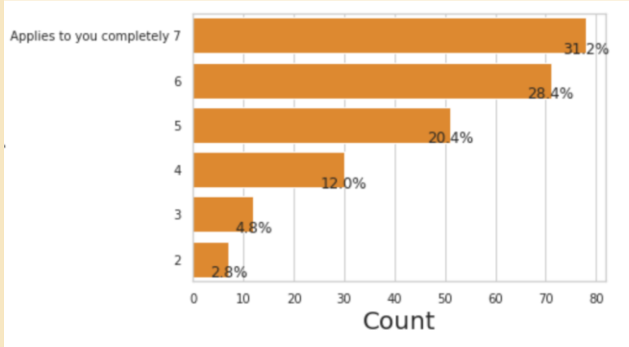
More food items that meet special dietary needs (e.g., Kosher, low sodium).



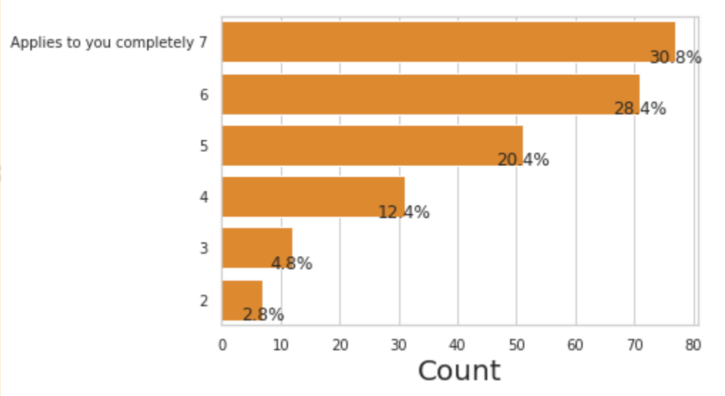
More easy to make recipes around their store that I could use them for meal inspiration.



More samples of prepared or partially prepared meals that I could try before I take the time to make it at home.



A new line of fresh meals that can be made in a skillet.



How do Needs and Solutions differ Among the Key Segments?

Q7: How do needs and solutions differ among the key segments?

- Each need statement falls into a core category
- Some statements can belong to more than one category (ex: statement h)
- Category scores are calculated from summing the points given to each statement

Preference, Budget/Convenience, Health, Household, Inspiration

a. I prefer to cook my own meals using fresh ingredients.
b. I have very strict restrictions about the food I prepare for my family, so I am hesitant to buy some items because I do not know how they are prepared.
e. I want to make sure that the meats, poultry, and seafood I buy are safe and natural – free from hormones and other possible contaminants.
f. Fresh, high quality ingredients are oftentimes too expensive for my budget.
h. I prefer to prepare my own meals, so I'm looking more for meal information and inspiration, not prepared meals.

Preference

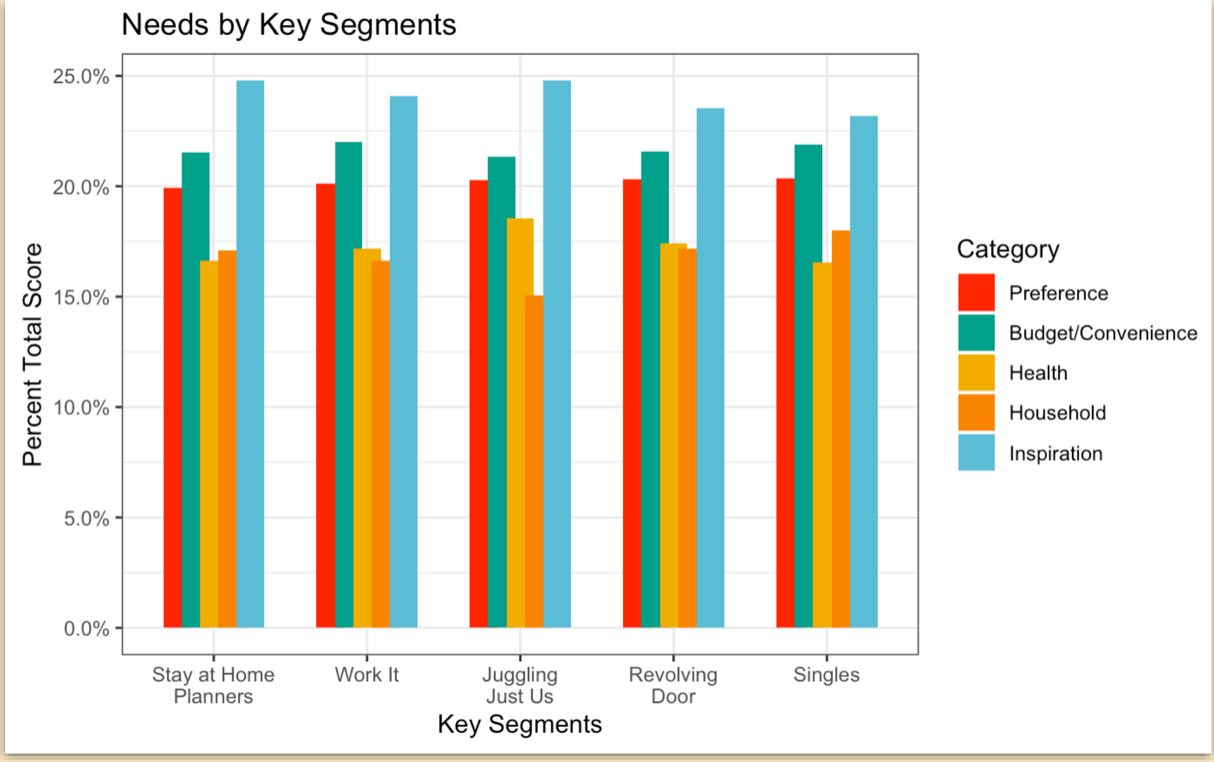
Budget/Convenience

Health

Household

Inspiration

Q7: How do needs and solutions differ among the key segments?



- Inspiration needs are the highest across all segments
- Health and household needs are the lowest
- Budget/convenience and preference are the most consistent across segments

Q7: How do needs and solutions differ among the key segments?

- Each solution statement falls into a core category
- Some statements can belong to more than one category (ex: statement h)
- Category scores are calculated from summing the points given to each statement

Convenience, Inspiration, Ethnic Variety, Store Service, Health/Preferences

b. More food items that meet special dietary needs (e.g., Kosher, low sodium).
d. The ability to see or learn more about the preparation process for prepared foods – such as behind the meat or fish counter, in the bakery area, etc.
e. The ability to select fresh fish from tanks in the seafood department. You select the fish, and an employee prepares it right in front of you, just the way you prefer.
f. Year-round availability of pre-cooked full meals that only require heating up, such as what is available now during Thanksgiving and other holidays.
g. More easy to make recipes around their store that I could use them for meal inspiration.
h. More ethnic foods and ingredients, including more prepared or partially prepared meals.

CONVENIENCE

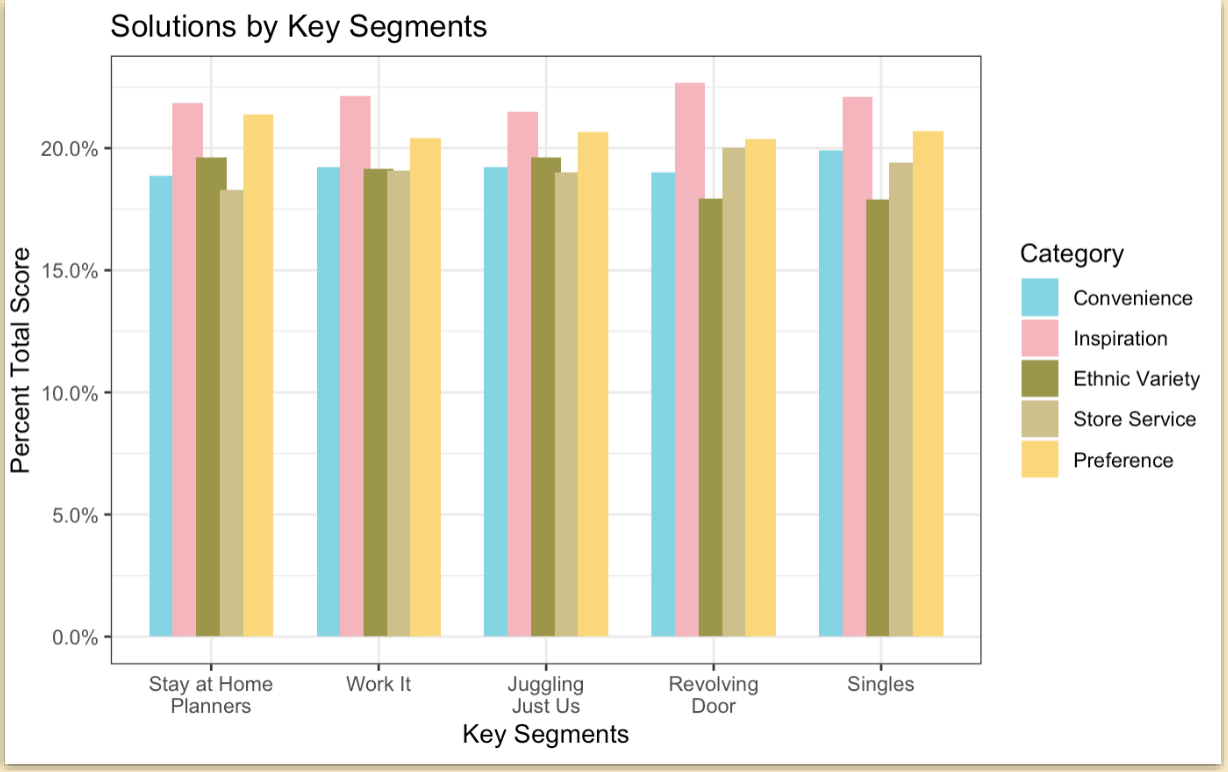
INSPIRATION

ETHNIC VARIETY

STORE SERVICE

PREFERENCE

Q7: How do needs and solutions differ among the key segments?



- Inspiration solutions are highest across all segments
- Preference is again consistent among all segments
- Less disparity among categories compared to needs
- Solutions that participants want don't have the same contrast as needs

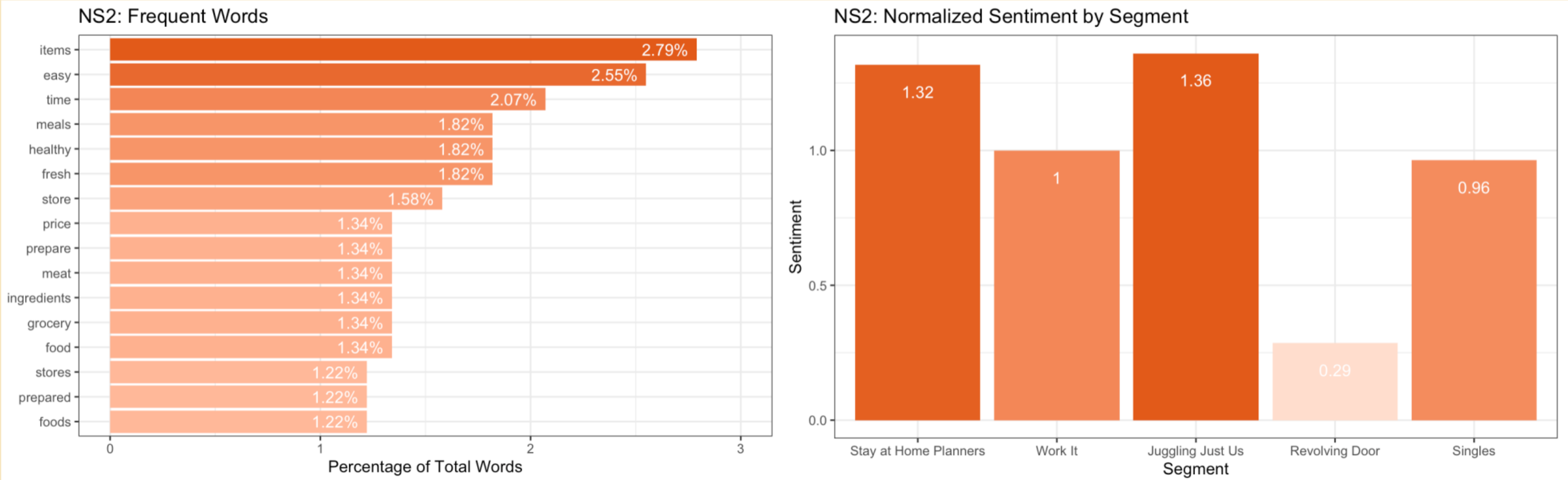
Q7: How do needs and solutions differ among the key segments?

Needs: NS2

Solutions: SO2

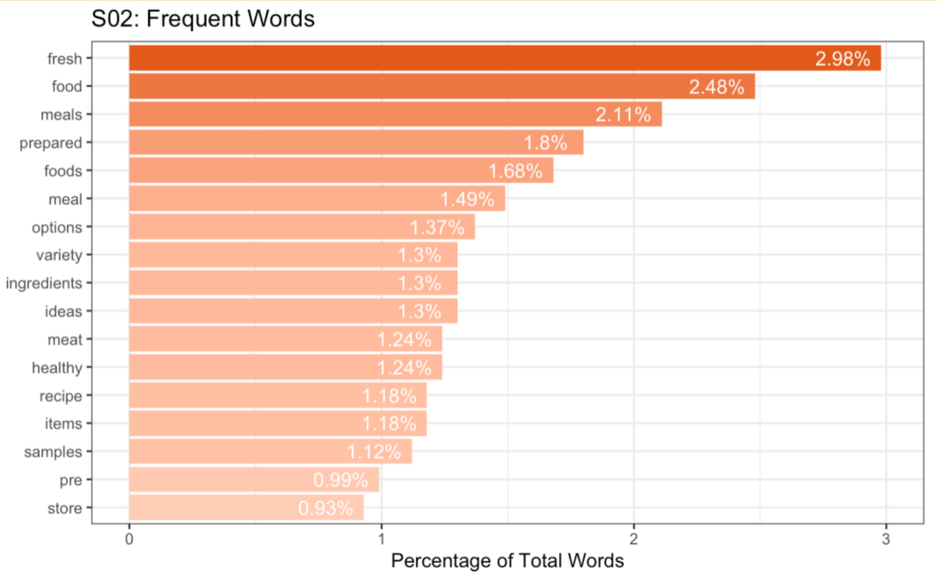
- **Wordclouds for free responses are very similar**
- **Needs and solutions for consumers are aligned**

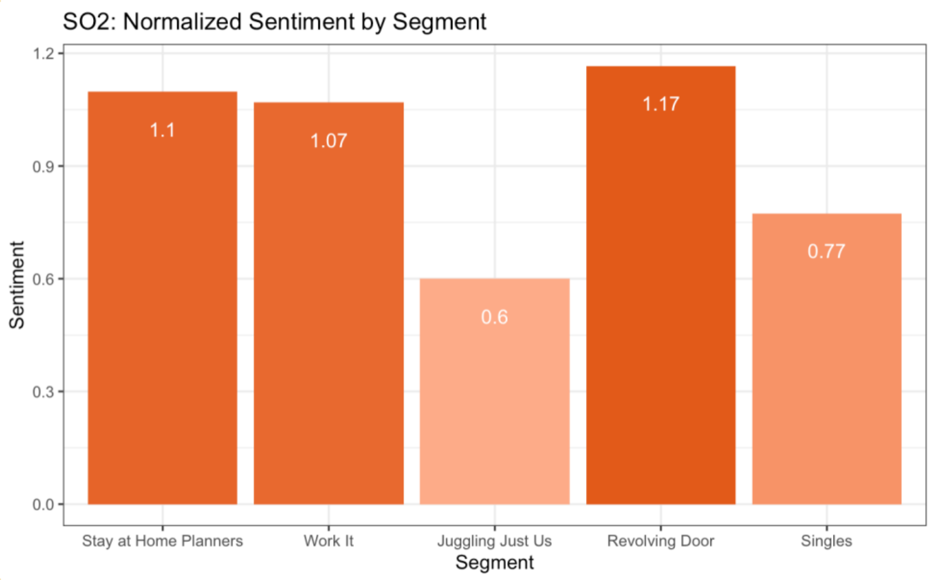
Q7: How do needs and solutions differ among the key segments?



- **AFINN lexicon assigns a sentiment score from -5 (negative) to 5 (positive) to each word used in responses**
- **Each segment has a total sentiment score normalized by the number of words**
- **Revolving Door (multigenerational) have the least positive response in describing needs**
- **Juggling Just Us (no kids) are the most positive in describing needs**

Q7: How do needs and solutions differ among the key segments?



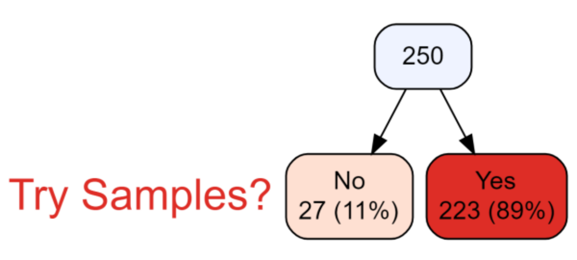


- **Revolving Door (multigenerational) have the most positive response for solution suggestions**
- **Juggling Just Us (no kids) are the least positive for solution suggestions**
- **No segments in both needs or solutions have a total sentiment that is negative**
- **Revolving Door and Juggling Just Us have the most polarized responses - their sentiment rankings are flipped from what we see under needs**

Are there any other groups/segments/clusters that we could win with?

Q8: Are there any other groups/segments/clusters that we could win with?

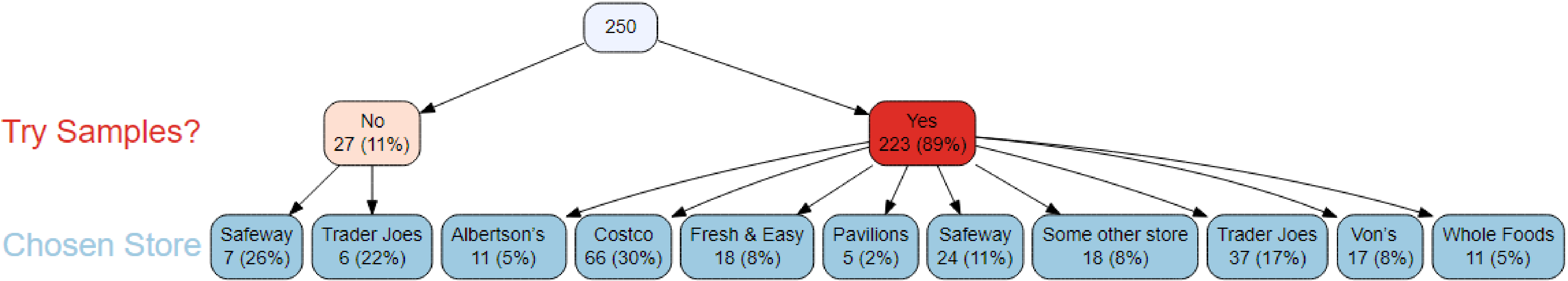
Do you ever try free samples when they are offered in the grocery store?



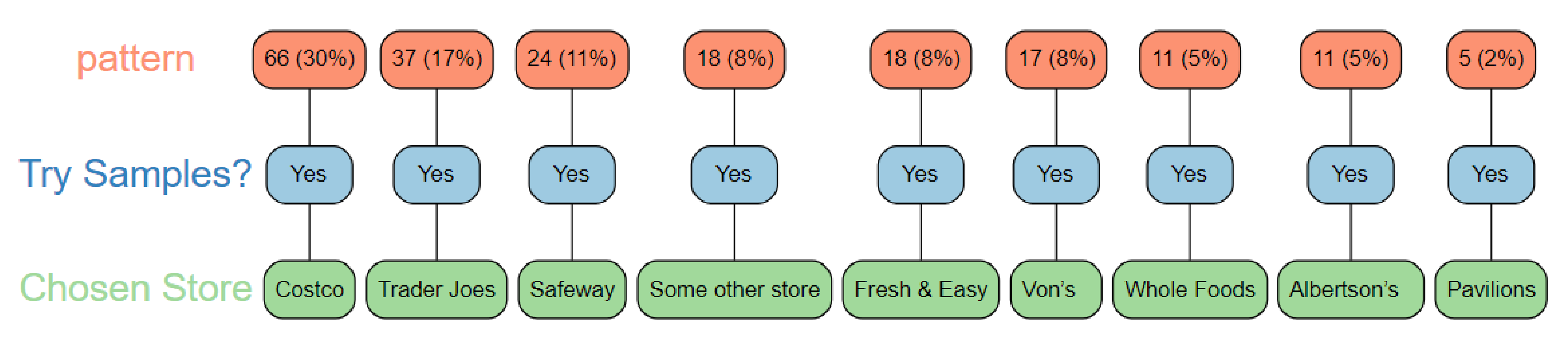
Choose a store that….

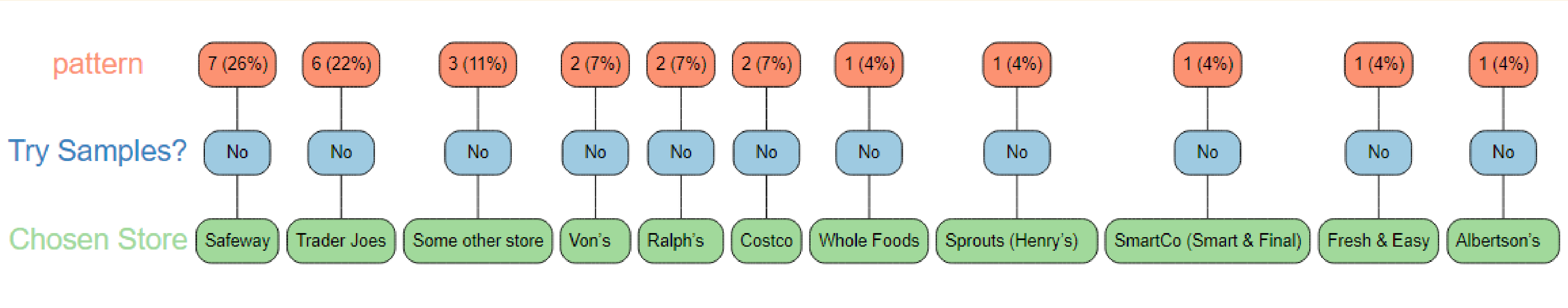
1. Provides prepared or ready to eat meals that you prefer
2. Provides healthier food choices
3. Inspires you to try new recipe ideas
4. Provides the best variety of foods that you usually shop for

Provides prepared or ready to eat meals that you prefer

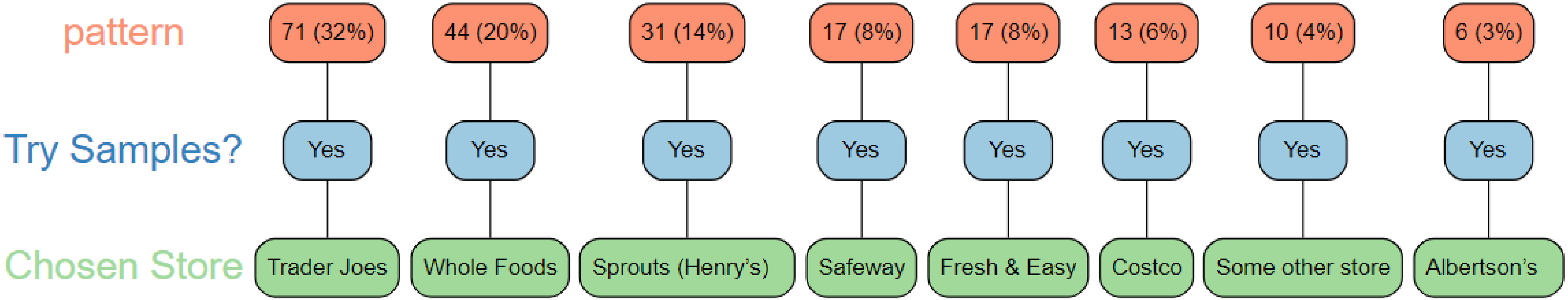


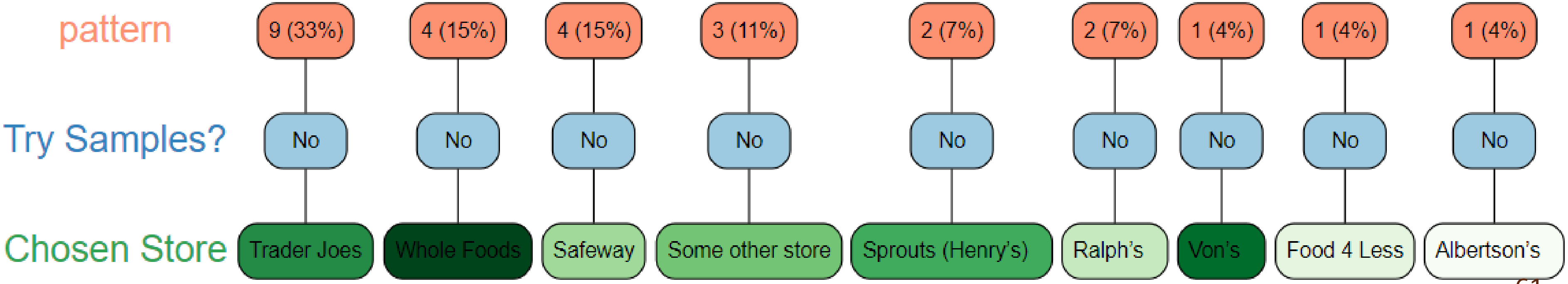
Provides prepared or ready to eat meals that you prefer



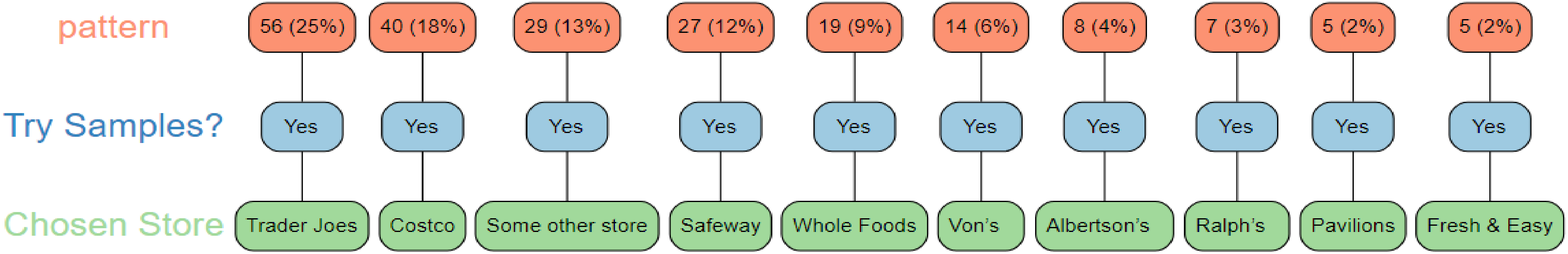


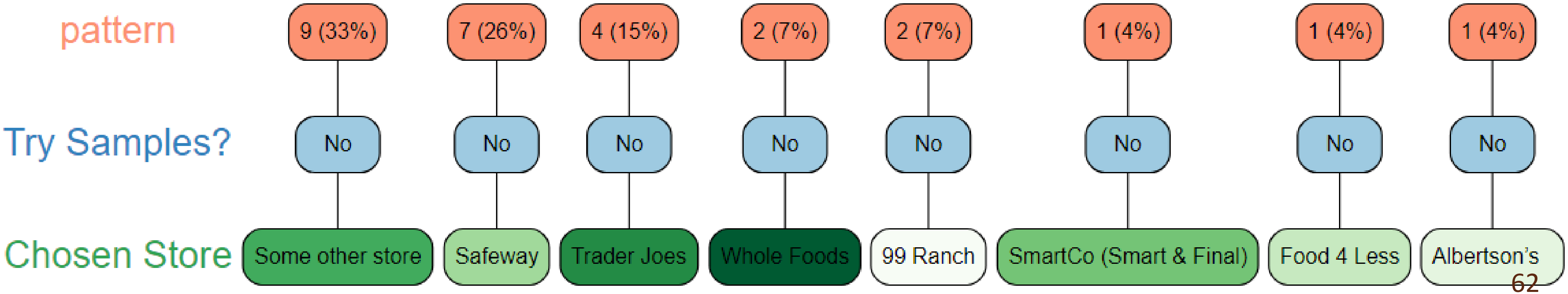
Provides healthier food choices



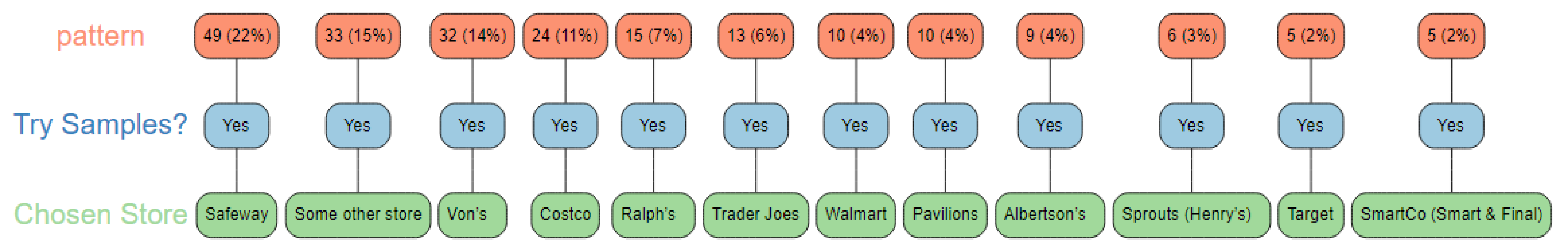


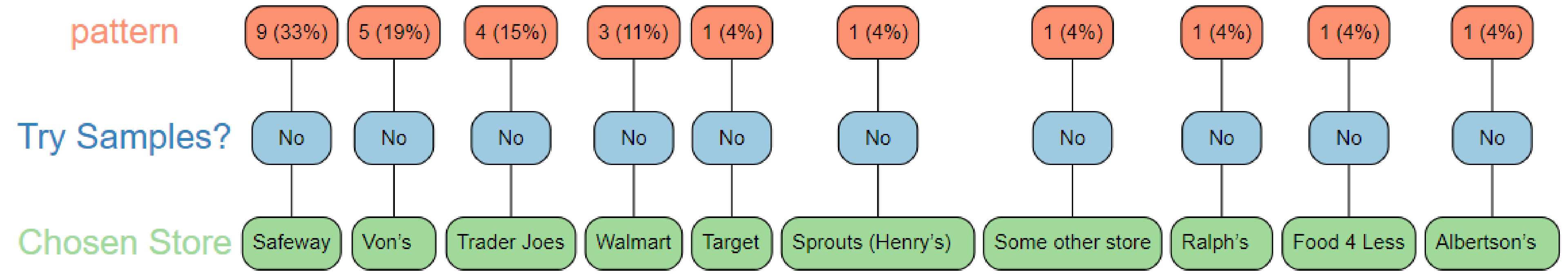
Inspires you to try new recipe ideas





Provides the best variety of foods that you usually shop for





COnclusion and Recommendations

- Customers will choose a store that…
  - Provides prepared or ready-to-eat meals
  - Provides healthier food choices
  - Gives out free samples
  - Inspires customers to try new recipes
  - Provides the best variety of foods that they shop for

Executive Summary

- Of the 250 participants, 191 (76%) were female and 59 (24%) were male.
- Ages ranged from 18 years old to 64 years old.
- About half of the female shoppers are in the 30-75k income bracket.
- 120 participants were employed full time.
- For this study, 5 key segments were defined in order to effectively categorize the subjects. The key segments are: Stay-at-home (unemployed), Work it (employed), Juggling with us (couple with no kids), Revolving door (Multigenerational family), and Single (individual with kids and no partner).
- From analyzing the 3-way crosstab of the variables of interest (QS3, QS4, QS5), the revolving-door group contains the highest number of people (171). This makes sense as this group classifies multigenerational families.
- Majority of shoppers go to the grocery store once or twice a week (Mon-Fri) and once over the weekend (Sat-Sun).
- On a typical week (Monday-Friday), the majority of shoppers pre-plan 50-75% of their dinner meals so that they know what to buy before going to the store.
- People tend to know what they are going to buy ahead of time so that they do not have to make constant trips to the grocery store.
- Of the people who pre-plan their meals, approximately 50% usually plan the entire meal while the other 50% usually plan just the main items, and decide on the rest at the store.

Executive Summary

- Of the people who pre-plan their meals, approximately 50% usually plan the entire meal while the other 50% usually plan just the main items, and decide on the rest at the store.
- Approximately 90% of people try free samples offered at the store.
- Among people who DO try free samples, the majority
  - frequently use coupons,
  - occasionally buy products after trying a free sample,
  - rarely use recipes they find in the store or on packaging of products they buy
- Among people who DO NOT try free samples, the majority
  - occasionally use coupons,
  - occasionally use recipes they find in the store or on packaging of products they buy
- Among both groups of people who DO and DO NOT try free samples, the majority
  - frequently go to the store knowing what they will buy,
  - frequently read the nutrition label,
  - occasionally purchase store brands instead of national brands,
  - rarely purchase prepared meals

Executive Summary

- People tend to consider the following as ‘Extremely Important’ when choosing a food item for a weekday (Mon-Fri) dinner:
    - Nutritional value (information on labels)
    - Cost/price
    - Appeals to other member of the household
    - Taste
    - Fresh
- The main problems/challenges people face when shopping for or preparing their weekday evening meal are:
    - Not having enough time
    - Finding food that is appealing to everyone in the household
    - Preparing healthy meals
- Full time university students are much more likely to purchase prepared meals from the grocery store on a weekday night.
- Part-time employees are much more likely to purchase prepared meals from the grocery store on a weekend night.
- Needs and solutions regarding inspiration (new recipes and meal ideas) are consistently the highest among all key segments

THANKS

Does anyone have any questions?

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