

Greek Yogurt Analysis Report in Wegmans



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Key Insights:

- Female accounts for majority of Wegmans Greek Yogurt targets.
- Taste, texture, and consistency are the top 3 drivers of consumer purchases.
- Consumer's purchase behavior is not necessarily directed by their perceptions.
- Prices influences customers' purchase behavior a lot.
- Yogurt with good taste tends to generate more sales
- Customers who use yogurt for cooking care more about whether the yogurt is natural.



Methodology:



We Use Statistical Analyses to Test Hypothesis



Chi-Squared Test

- Test of Goodness-of-Fit
Difference between female proportion in Sample & Population

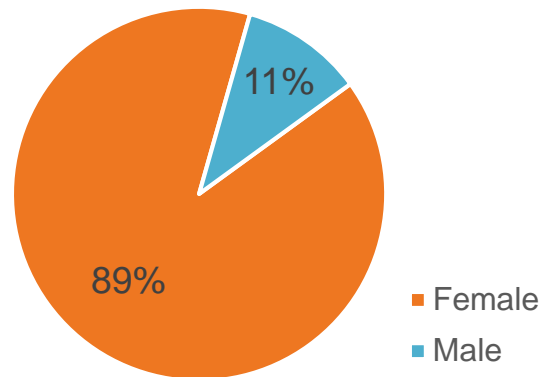


t-Test

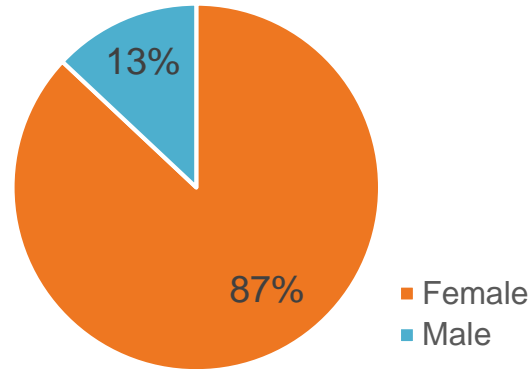
- Two-sample t-Test
- Perception difference from people who choose two different brands
Perception difference from people in two usage situations

Female Accounts for the Majority of Wegmans Greek Yogurt Targets

Sample Proportion



Population Proportion



- Female accounts for **89%** in Wegmans survey sample proportion, and **87%** in the population proportion.

Insights:

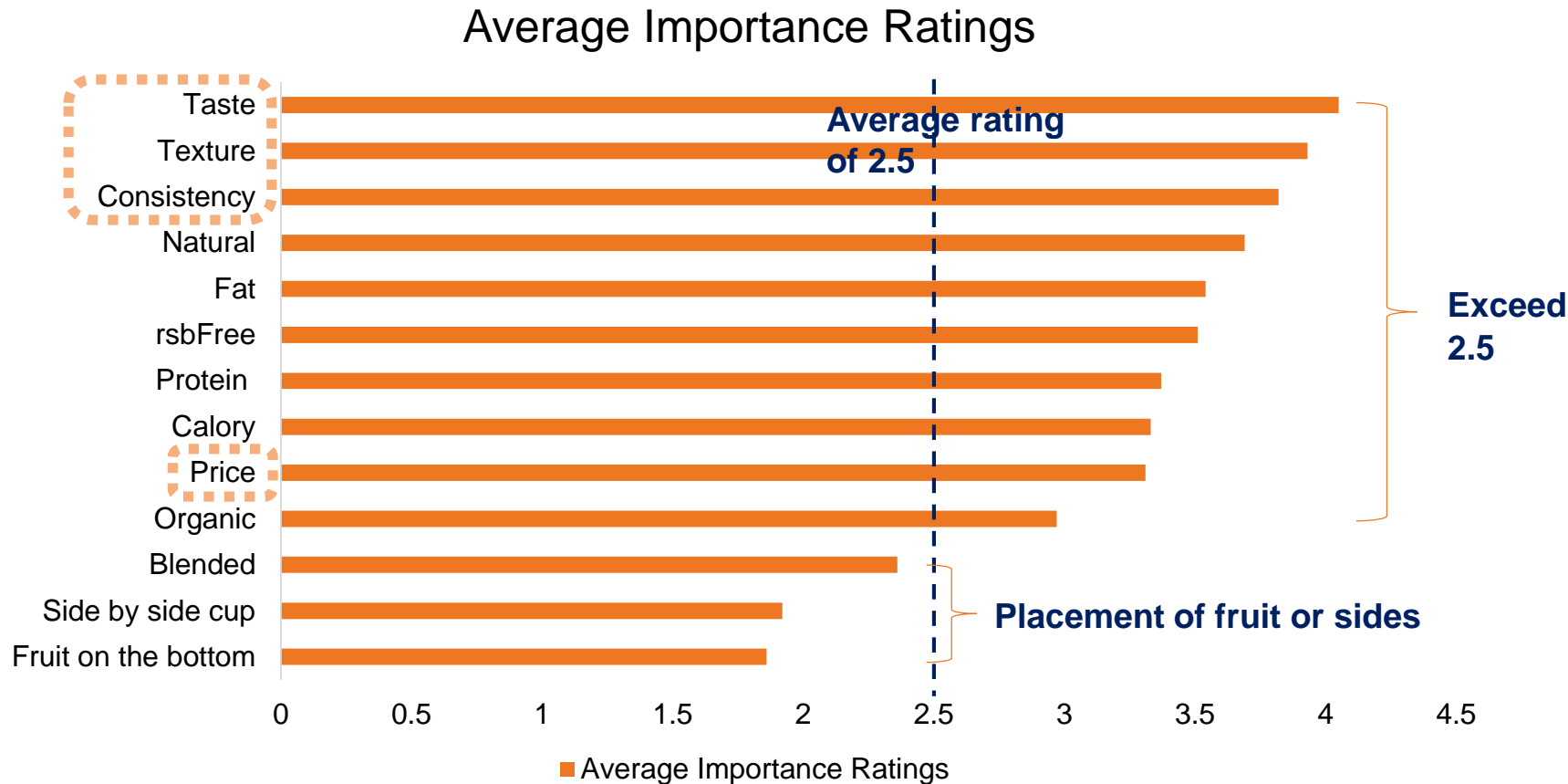
- Female consumer cohort is Wegmans' largest target by gender.
- Directing promotion to female consumers should be Wegmans' strategy focus.

Chi-square Test Result:

Gender	Population	Sample	Weight
Female	87%	89.4%	0.97
Male	13%	10.6%	1.23

- The result of chi-square test of Goodness-of-Fit is **statistically significant** with $p\text{-value}=0.02235$.
- It's a **disproportionate** sampling.
- For **female**, we should *downweight* each female respondent by 97% .
For **male**, we should *upweight* each male respondent by 123%.
- By intuition, the difference is **trivial**, so we don't do reweighting here to complicate our analysis.

“Taste”, “Texture”, and “Consistency” are the Top 3 Drivers of Consumer Purchases



Notes: Measures are performances ratings of Greek yogurt attributes: the rating ranges from 5(very important) to 1(not important at all).

Insights:

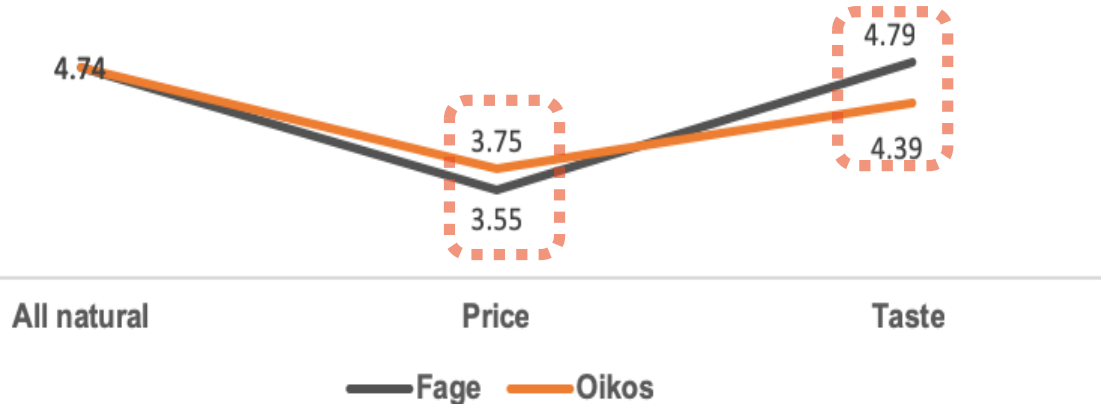
- “Taste, texture and consistency” are the top 3 attributes requiring more attention in purchase and pricing decisions.
- Wegmans can package promotions that showcase “taste, texture and consistency” to attract more consumers.
- Placement of fruit and sides attaches little perceived value, thus can be excluded in Wegmans purchase evaluation .



- Price **ranks 9th** in average importance rating Vs. **top 2** in brand selection.
- Value attached on taste and texture in brand selection **matches** consumer's perception.
- **Brands** of Greek yogurt pop up in consumer's messages.

- Consumer's purchase behavior is **not necessarily directed** by their perceptions.
- **Wegmans should not totally rely on consumer's perception results to make business decisions.*
- The text messages reveal certain **loyalty** or preference for some particular brands. (Fage, Oikos, Chobani)
**Those eye-catching brands are prospective sources of Wegmans' profit.*

Comparison of Three Attribute Ratings for Fage versus Oikos



(Customers' average ratings for 'All natural', 'Price' and 'Taste' of Fage and Oikos)

Notes: Statistically significant differences (at p-value <.05) are circled. This means, between these two brands, due differences exist in the aspects of price and taste.

Price of Oikos



¥ 1 / 5.3 Oz



\$4.99 / 32 Oz

Price of Fage



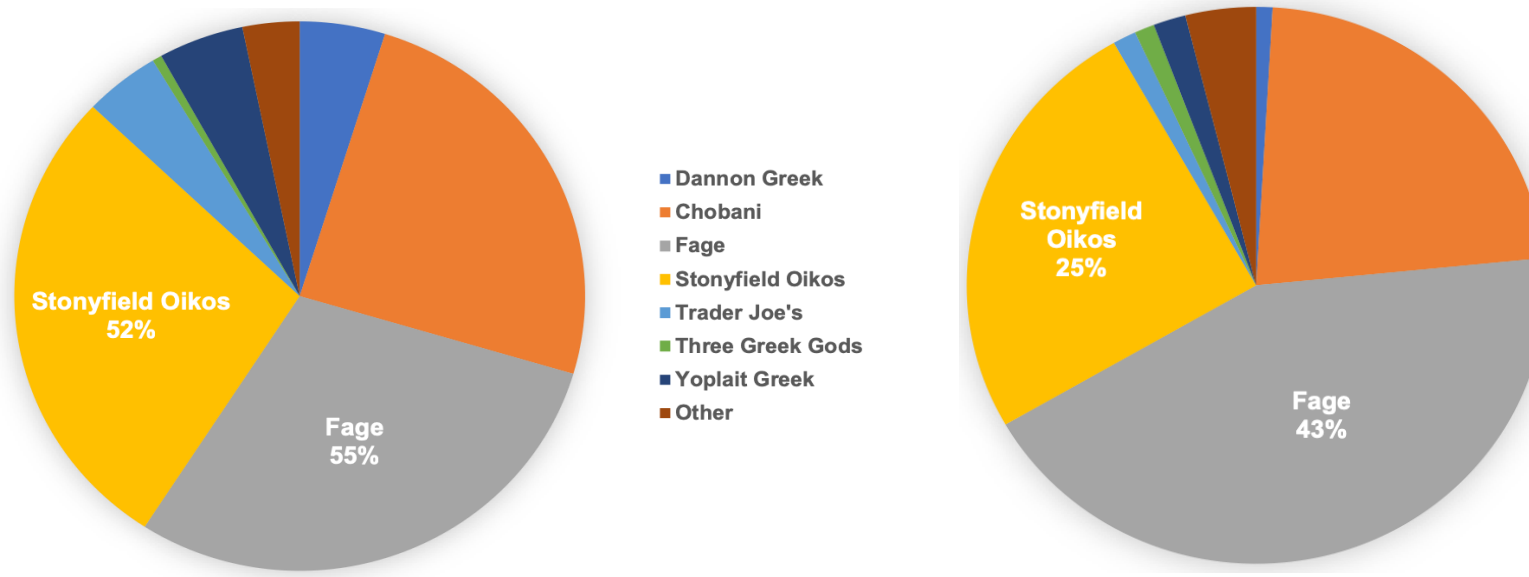
¥ 1.29 / 5.3 Oz



\$5.49 / 35.3 Oz

From the comparison we can see customers want low-priced yogurt with good taste, which is not so surprising. But which attribute is more influential on customers' purchases?

Price Influences Customers' Purchase Behavior a Lot



customers' actual purchases in the past month (left) V.S Customer choices for yogurt if for free (right)

- If customers can choose the Yogurt for free, the number of Fage's customers is twice of Oikos'. While their customer numbers in the past month are close.
- We can conclude that taste can decide customers' preferences but price is also important on influencing purchases.
- Therefore, if we want to improve sales of Fage, the best way is to lower the price so Fage can get absolute advantages. But low-pricing strategy for Oikos should careful as the low price should at least cover its costs.

Customers Who Use Yogurt for Cooking Care More about Whether the Yogurt is Natural

Yogurt Attributes	Average Rating for Cooking Usage	Average Rating for Snack Usage	Significance Difference Between Cooking / Snack
All Natural	3.75	3.64	0.01
Organic	3.03	2.91	0.06
rbst free	3.51	3.51	0.92
Price	3.22		

Notes: Statistically significant differences (at p-value <.05) are circled. This means, between these two segments, due differences exist in the aspects of ‘all natural’.

- Comparing with people who take yogurt as snack, people who use yogurt for cooking generally care more about whether the yogurt is all natural. It is natural foods are usually more safe. From the ‘rbst free’ attribute, we can infer that both two segments want rbst free yogurt.
- Among these four attributes, the group who use yogurt for Cooking rank ‘price’ as 3rd. For them, ‘price’ is not as much important as ‘all natural’ and ‘rbst free’.
- If we want to target specifically at people who purchase yogurt for cooking, ‘all natural’ is a good promoting point.



Appendix

Appendix: Hypothesis of Statistical Tests

- For the perception difference test on two usage situations, we assume that people who do not use Greek yogurt for cooking will use it for snacks.

The t-Test result of this statistic analysis is as follows:

Attributes	Fage	Oikos	Significant Difference Between Fage and Oikos
All natural	4.7395	4.7357	0.9316
Price	3.5525	3.7465	0.001668*
Taste	4.788	4.3917	6.095e-15*

Notes: Use two-sample t-test of Fage Vs. Oikos consumers. Measures are performances ratings of Greek yogurt attributes: the rating ranges from 5(very important) to 1(not important at all). Boldened attributes are significant, and likely drivers of behavior.