

Category Appraisal of Salsa

Background

A previous study showed product deficiencies versus key competitors. Four prototypes were developed to address these deficiencies and push out the sensory space.

Because the competitive set is so diverse, we must achieve a holistic understanding of the entire category.

ACTION STANDARD: There must be a significantly higher Overall Liking (mean) of at least one prototype over the current salsa and that prototype must achieve parity with Competitors W and G.



Why Use Category Appraisal?

While consumers can tell us what they like and don't like, it is often difficult for them to articulate enough detail to guide product development.

The Category Appraisal combines consumer product testing with detailed product characteristics (from a descriptive panel), providing actionable results for product developers.

Methodology

Central Location Test

- We conducted a central location test with 153 consumers
- Ages 21-69
- Have purchased and eaten medium-heat salsa in past 6 months
- Taste 14 products over 3 days

Descriptive Analysis

- We conducted a descriptive analysis with 10 trained panelists with 5-9 years experience
- Trained on 14 products over seven two-hour sessions
- 45 attributes covered visual, aroma, taste, flavor, texture and afterfeel attributes

Sensory Mapping

- Principal Components Analysis conducted on the Descriptive Analysis data to identify the main sensory factors
- Consumer liking and attributes are overlaid on to the sensory map to gain a deeper understanding of what drives consumer liking





What We Learned

- None of the Prototypes achieves significantly higher Overall Liking (mean) over Control; however, Prototypes 1 and 2 perform at parity to Control on liking.
- Prototype 1 is more well-liked than Competitors W and G.
- Prototype 2 is parity to Competitors W and G.
- Prototype 1 has no major deficiencies while the competition have several key areas in which to improve their flavor profiles.

Key Drivers of Liking by Consumer Preference Segments

We used Cluster Analysis to identify three consumer segments that have different likes and dislikes for the salsas; however all three segments have similar liking scores for the top two Prototypes and Control.

	Positive Drivers of Liking	Negative Drivers of Liking
Segment 1 (n=60 / 39%)	<ul style="list-style-type: none"> • Onion (cooked) aroma/flavor • Green chili pepper aroma/flavor • Garlic powder aroma • Jalapeno pepper aroma • Vinegar flavor 	<ul style="list-style-type: none"> • Cumin aroma/flavor • Overall aroma/flavor • Heat • Red chili pepper flavor
Segment 2 (n=48 / 31%)	Jalapeno pepper flavor	<ul style="list-style-type: none"> • Red chili pepper flavor • Thick tomato base
Segment 3 (n=45 / 29%)	<ul style="list-style-type: none"> • Jalapeno pepper aroma • Thick tomato base • Onion (cooked) aroma 	<ul style="list-style-type: none"> • Briny/sea aroma/flavor • Post burn • Uniform chunks • Large chunks

Sensory Attributes that Differentiate the Salsas

Principal Component Analysis was conducted on the descriptive panel data. Based on this analysis, three sensory factors were identified that explain 64% of the differences in the sensory characteristics of the 14 salsas.

Factor 1 (26%)

Red Chili Pepper flavor vs. Green Chili and Jalapeno flavor / aroma

Cooked Tomato aroma vs. Cooked Onion flavor / aroma

Higher Vinegar flavor and Garlic Powder aroma

Factor 2 (23%)

Many large chunks with high uniformity versus Heat / Burn / Post Burn

Factor 3 (15%)

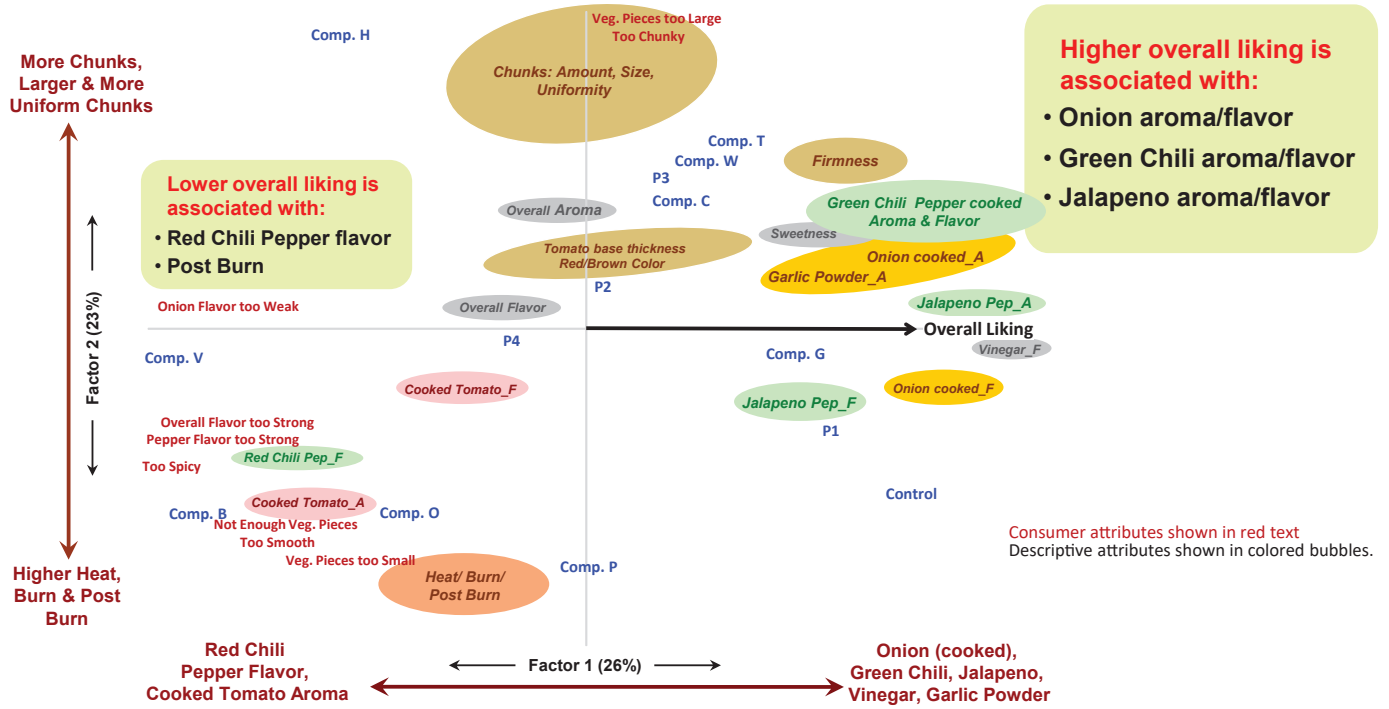
Higher Overall flavor / aroma versus Thicker Tomato Base

Red / Brown color versus Orange / Red color



Sensory & Consumer Maps:

Factors 1 & 2 combined explain half of sensory differences across the products



Competitor G and Control have very similar profiles, except in Color where Control is more red and both Competitor G and W samples are reddish brown. **Competitor W** is different than Competitor G and Control. It has thicker tomato base and overall chunks than Control. It also has higher cooked tomato flavor and contains a bit of tomato paste and fresh tomato flavor.

— Comp. G
 — Comp. W
 — Control

5% Significant difference
 10% Significant difference

