# Choice Based Product Optimization vs Curion QDA®

## Comparing traditional descriptive methodology with more agile choice-based approaches.

## Research Team


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## Background & Objective

- Plant-based companies currently face increasing pressure to optimize products efficiently while maintaining quality.
- Since traditional landscaping and category reviews are resource-intensive, exploring a rapid alternative is critical to address the changing needs of a fast-moving market.
- Curion and Impossible Foods collaborated to investigate if a faster, more cost-effective method can be leveraged without sacrificing product insights.

### Objective:

To compare three methodologies against consumer CLT data, assessing how each can guide product and brand strategy. Descriptive data was collected from:

**Curion QDA® panel data**
**Choice-based data from consumers**
**Choice-based data from a semi-trained panel**

## Methodology

**Product Set: 10 total**
**Served:** Plain Patty with Salt Added.

**8 Plant-based Beef**

**2 Animal Beef**

### Curion QDA®

N=12 panelists, triplicate product evaluations
Category users and likers, trained on creating a lexicon using 58 consumer-based terms

### Choice-Based Data Collection

Descriptive attributes provided by Impossible Foods based on historical category knowledge. Sequential monadic evaluations, choice-based evaluation of 12 Flavor pairs and 12 Texture pairs.

### CLT

N=145 consumers; beef burger-eaters, non-rejectors of plant-based meat

### Semi-Trained Panel

N=12 Impossible Foods employees

## Clustering of Plant-based Meat Products Differed By Method

For cross-comparison, only modalities common between QDA®, the Semi-Trained Panel and Consumers (flavor and texture) were kept for analysis.

| | Curion QDA® | Semi-Trained | Consumer |
|---|---|---|---|
| 1 | Veggie-forward Plant-based Competitors | Plant-based Competitors | Veggie-forward Plant-based Competitors |
| 2 | Slightly more animal-forward, more tender & moist Plant-based Competitors | Impossible Foods legacy products + 1 competitor, Animal-forward, smokier/ charred | Animal-forward Plant-based Competitors |
| 3 | Animal Beef | Animal Beef | Animal Beef |
| 4 | Blander, chewier, less tender, crumbly and crunchy Plant-based Competitors | - | - |

**Transitioning from more naïve evaluators to more trained panelists offers increased differentiation between products and more detailed characterizations of the clusters.**

## Differences In Key Drivers Emerge, With Semi-Trained Results Closer To QDA®

**O = Key Driver In The Data Set**
**Green = > +0.7 Correlation to QDA®**
**Red = < -0.7 Correlation to QDA®**
**Grey = -0.69-0.69 Not Highly Correlated**

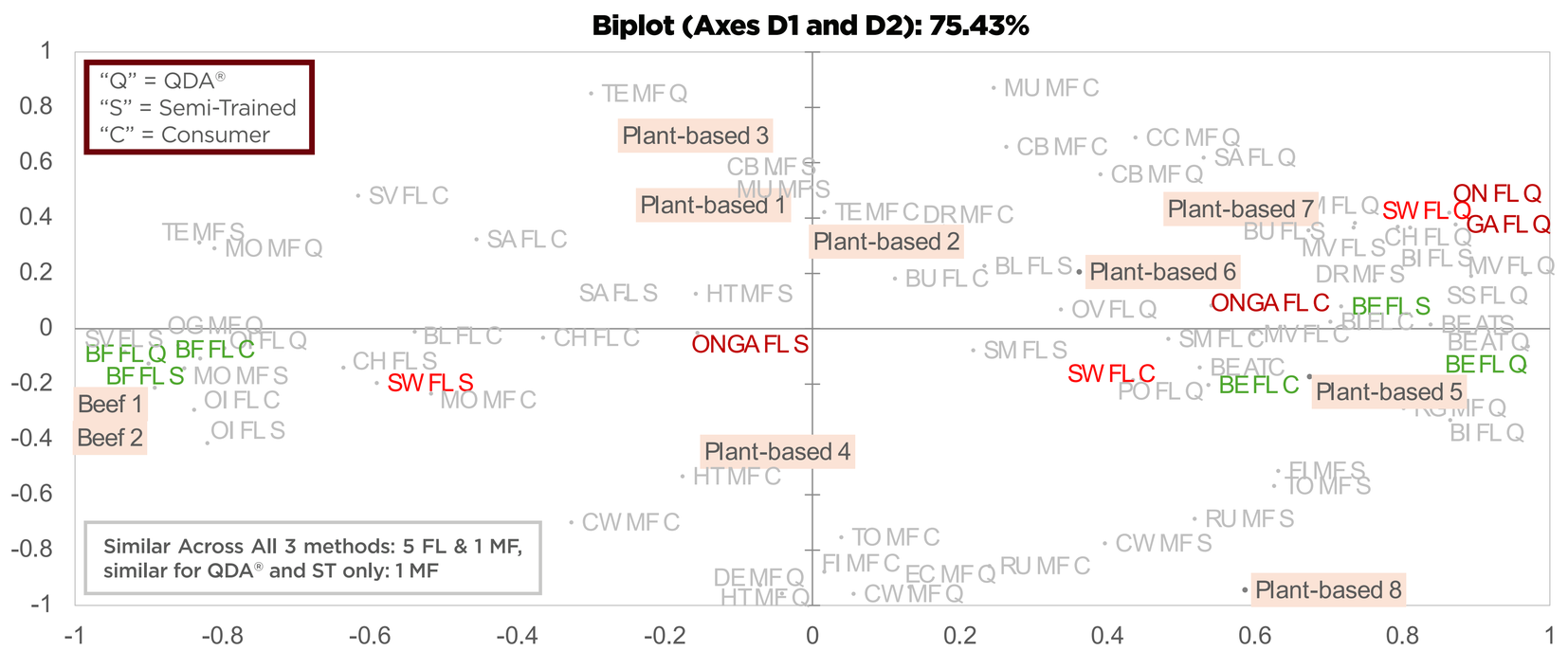
A few top key drivers were highly correlated across all 3 methods; however, **Semi-Trained data shows stronger correlation to QDA® than Consumer data.**

**Consumers were unable to identify a couple key drivers** captured by QDA® & the Semi-Trained Panel.

Some data from the Semi-Trained and Consumers yielded opposite results to QDA®.

Priority Level Based on QDA® ↓

| Attribute | Curion QDA® | Semi-Trained | Cons. |
|---|---|---|---|
| BF FL | O | O | O |
| BF FL | O | O | O |
| BE AT | O | O | O |
| OI MF | O | O | O |
| MV FL | O | O | O |
| OI FL | O | O | O |
| MO MF | O | O | |
| ON FL | O | | |
| BI FL | O | O | O |
| SW FL | O | O | |
| CH FL | | O | |




## Conclusions:

Curion QDA® is still the gold standard for detailed product profiling, offering comprehensive results compiling all sensory modalities & greater attribute understanding. This method provided the most key drivers & detail to product segmentation to guide product & brand strategy efforts.

Some training of assessors, "Semi-Trained" provided better product insights for guiding product development. Without training, data offers high-level results but may miss some product nuances.

## Next Steps:

Curion is excited to introduce **Curion PROP Pulse powered by FlavorWiki** using semi-trained panelists as an agile alternative to QDA®. In addition, R&D teams might consider using partially trained internal employees to guide development.

CURION PROP PULSE

**SCAN QR FOR MORE INFO**


**Presented at Pangborn 2025**


**Digital Poster Download**

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