Consumer Assessment of Baked Goods made with Phase 2

Results Summary
Tragon Corporation
Research Objectives for Three Research Projects

Kanak Udani contacted Tragon on behalf of Pharmachem Laboratories who have developed an ingredient (Phase 2) that would reduce carbohydrate absorption when incorporated into a variety of baked goods.

Over the course of three research projects, testing was conducted to assess consumer acceptance of a prototype Test product made with the Phase 2 ingredient relative to a Control product.

This research was conducted for:

- Cheese Pizza (pizza dough)
- Coffee Cake
- Blueberry Muffins
Conclusions from Three Research Projects

Across, all three research phases, results consistently indicated that the test product made with Phase 2 could be used as a replacement for the Control.

- Within cheese pizza, coffee cake, and blueberry muffins, consumers liked the Control and Test products similarly.
- Test rated higher than Control for cheese pizza and coffee cake and higher in texture liking for blueberry muffins.
Consumer Assessment of Baked Goods

Cheese Pizza
Results Summary
Tragon Corporation
March 15, 2005
Project Objectives

Kanak Udani has contacted Tragon on behalf of Pharmachem Laboratories who have developed an ingredient (Phase 2) that would reduce carbohydrate absorption when incorporated into a variety of baked goods.

The current research is designed to assess consumer acceptance of a prototype Test cheese pizza product made with this ingredient relative to a Control cheese pizza.
Consumer Recruiting Methodology

Twenty-nine consumers were recruited from the San Francisco, CA metropolitan area and qualified according to the following criteria:

- Head of Household,
- 50% female and 50% male,
- Ages 25-65,
- Pizza users,
- No conflict of interest,
- No food allergies, diet restrictions, or food sensitivities, and
- Have not participated in any food product test in the past six months.

Testing was conducted at Tragon’s Redwood City, CA facility on March 15, 2004.
Consumer Testing Methodology

Consumers were read an orientation after arriving to Tragon’s test facility.

Consumers evaluated two pizza products.

• A product questionnaire was completed with each product.
• Product order was rotated across all consumers to avoid order bias.
• Products were served using a sequential monadic, balanced block design.
• Consumers were served one slice of pizza for each product.
Product Evaluation Process

Consumers evaluated two Pizza products – Control and Test.

Consumers completed a product questionnaire with each product to evaluate:

- Overall Appearance (9-point Liking)
- Overall Texture (9-point Liking)
- Overall Taste (9-point Liking)
- Overall Opinion (9-point Liking)

XXX

DATE:_______ NAME:_________________________ CODE:_____

CHEESE PIZZA

Please place an “X” in the box next to the phrase below which best describes your overall opinion of the product you just tasted.

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<tr>
<th>OVERALL APPEARANCE</th>
<th>Dislike Extremely</th>
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<th>Dislike Moderately</th>
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Hedonic (9-point Liking) Results

Control and Test were rated at parity across all measures.

Overall Appearance
Overall Texture
Overall Taste
Overall Opinion

Control and Test were rated at parity across all measures.
Consumers liked the Control and Test products similarly.

- The two products scored at statistical parity at the 90% and 95% Confidence Levels for all measures.

Test was numerically better liked than Control across Overall Appearance, Overall Texture, Overall Taste, and Overall Opinion.
Consumer Assessment of Baked Goods

Coffee Cake
Results Summary
Tragon Corporation
May 19, 2005
Kanak Udani and Tragon have conducted previous consumer guidance panel research on the extended shelf life of baked goods.

Kanak Udani has contacted Tragon regarding an ingredient that would extend shelf life in Bisquick Coffee Cake. The current research would be designed to gather consumer evaluations of a current product relative to a prototype that contains this Phase 2 test ingredient.

The objective of this research was to conduct a basic screening test among a small number of consumers to understand consumer acceptance of the current and test products.
Thirty-two consumers were recruited from the San Francisco, CA metropolitan area and qualified according to the following criteria:

- Head of Household,
- 50% female and 50% male,
- Ages 25-65,
- Coffee Cake users,
- No conflict of interest,
- No food allergies, diet restrictions, or food sensitivities, and
- Have not participated in any food product test in the past six months.

Testing was conducted at Tragon’s Redwood City, CA facility on May 18, 2005.
Consumer Testing Methodology

Consumers were read an orientation after arriving to Tragon’s test facility.

Consumers evaluated two coffee cake products.

- A product questionnaire was completed with each product.
- Product order was rotated across all consumers to avoid order bias.
- Products were served using a sequential monadic, balanced block design.
- Consumers were served one piece of coffee cake for each product.
Three Research Projects
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Product Evaluation Process

Consumers evaluated two Coffee Cake products – Control and Test.

Consumers completed a product questionnaire with each product to evaluate:
- Overall Appearance (9-point Liking)
- Overall Texture (9-point Liking)
- Overall Taste (9-point Liking)
- Overall Opinion (9-point Liking)

XXX DATE: ______ NAME: __________________________ CODE: ______

COFFEE CAKE

Please place an “X” in the box next to the phrase below which best describes your overall opinion of the product you just tasted.

<table>
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<tr>
<th>OVERALL APPEARANCE</th>
<th>Dislike Extremely @</th>
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</table>
Hedonic (9-point Liking) Results

Control and Test were equally liked and rated at parity across all measures.
Conclusions

Consumers liked the Control and Test products similarly, suggesting the two products are interchangeable.

- The two products rated at statistical parity across all hedonic measures at the 90% and 95% Confidence Levels.

Test rated numerically higher in liking for Overall Appearance, Overall Texture, and Overall Taste.
Consumer Assessment of Baked Goods

Blueberry Muffins
Results Summary
Tragon Corporation
June 29, 2005
Project Objectives

Kanak Udani and Tragon have conducted previous consumer guidance panel research on the extended shelf life of baked goods.

Kanak Udani has contacted Tragon regarding an ingredient that would extend shelf life in Blueberry Muffins. The current research would be designed to gather consumer evaluations of a current product relative to a prototype that contains this Phase 2 test ingredient.

The objective of this research was to conduct a basic screening test among a small number of consumers to understand consumer acceptance of the current and test products.
Consumer Recruiting Methodology

Thirty-five consumers were recruited from the San Francisco, CA metropolitan area and qualified according to the following criteria:

• Head of Household,
• 50% female and 50% male,
• Ages 25-65,
• Consumers of Blueberry Muffins,
• No conflict of interest,
• No food allergies, diet restrictions, or food sensitivities, and
• Have not participated in any food product test in the past six months.

Testing was conducted at Tragon’ s Redwood City, CA facility on June 29, 2005.
Consumer Testing Methodology

Consumers were read an orientation after arriving to Tragon’s test facility.

Consumers evaluated two blueberry muffin products.

• A product questionnaire was completed with each product.
• Product order was rotated across all consumers to avoid order bias.
• Products were served using a sequential monadic, balanced block design.
• Consumers were served one full muffin for each Control and one full muffin for Test.
Consumers evaluated two Blueberry Muffin products – Control and Test.

Consumers completed a product questionnaire with each product to evaluate:

- Overall Appearance (9-point Liking)
- Overall Texture (9-point Liking)
- Overall Taste (9-point Liking)
- Overall Opinion (9-point Liking)
Hedonic (9-point Liking) Results

Control and Test rated at statistical parity across all measures.
Conclusions

Consumers liked the Control and Test products similarly, suggesting the two products are interchangeable.
  • The products were at statistical parity for all measures at both the 90% and 95% Confidence Levels.

Control rated slightly higher in liking for Overall Appearance and Overall Opinion while Test rated slightly higher in liked for Overall Texture.