

# Consumer Perception of Trans Fats and their Replacements

## Background

- **1985 – 1990:**
  - Anti ‘Tropical fats’ campaign due to health concerns over saturated fat content
  - Saturated fat included in nutrition facts panel
  - Trans fat not included in nutrition facts panel
  - Trans fat replaces saturated fat in processed foods
- **1991 – present:**
  - Trans fat found to be at least as unhealthy, if not more unhealthy, than saturated fat
  - Trans fat included in nutrition facts panel (2006)
  - Manufacturers desire to reduce or eliminate trans fat

## Consumer Studies (3)

- **Purpose:**
  - Evaluate consumers current opinion on fats/oils issues
  - Determine consumer interest in eliminating trans fat
  - Determine consumer preferences for trans fat alternatives
- **Outcome:**
  - Design and promote trans-free products with high consumer acceptance

## **Methodology**

- **Surveys carried out by Synovate Corporation**
- **Use of 'Internet Wave'**
  - 1000 subjects surveyed from database using internet-based questionnaire
  - representative of the general population based upon region, gender, age, and household income (census data)
  - primary grocery shoppers only (responsible for self or family)

## Survey Details

1. May 26, 2003: n = 626
2. February 25, 2004: n = 625
3. September 7, 2004: n = 621



**IOI GROUP**  
Loders Croklaan

## Statistical analysis:

- **Difference within question**
  - 95% confidence interval shown with upper case letter
  - 90% confidence interval shown with lower case letter
- **Difference across time**
  - 95% confidence interval shown with box
  - 90% confidence interval shown with underline



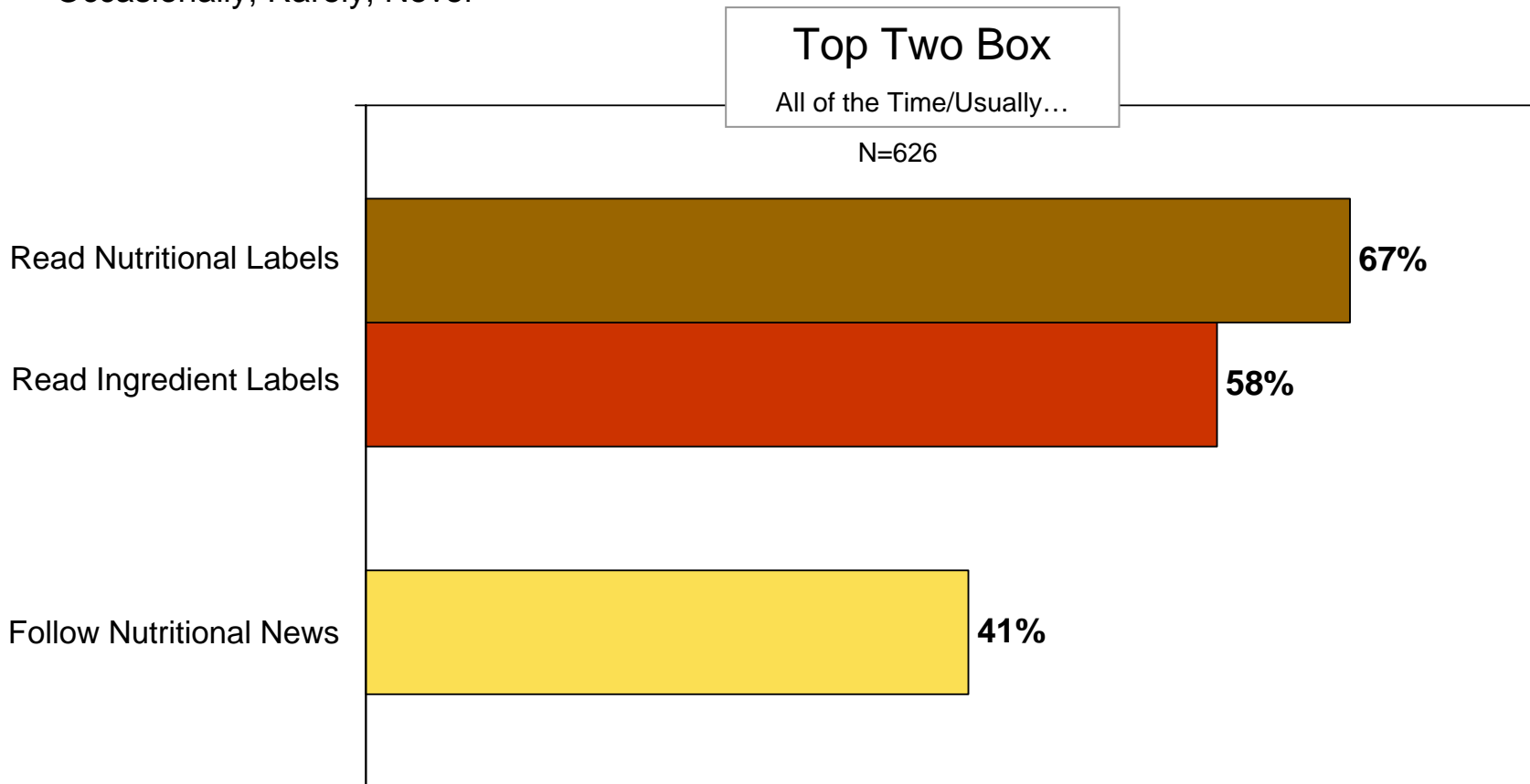
# **RESULTS:**

**1<sup>st</sup> Survey, May 26 2003**

**Part 1 – “pre-education”**

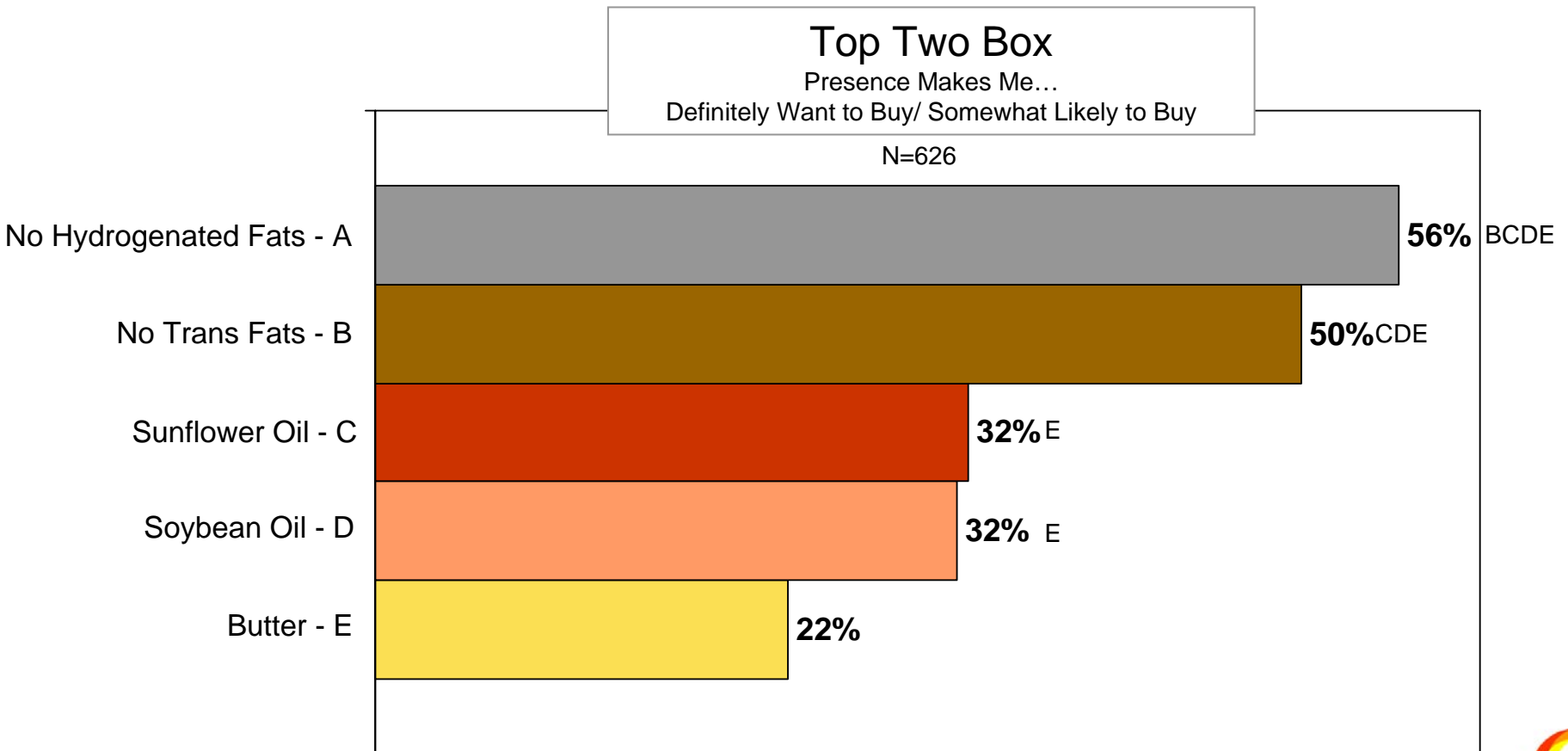
Q1. When you wish **to buy a product that you haven't bought before**, how frequently do you read the nutritional panel/the ingredient statement on the back of packages and cans of food products? All of the time, Usually, Occasionally, Rarely, Never, Only for Certain Products, Don't Know

Q2. Do you follow nutritional topics' reporting in the press, for example news about food product ingredients' effects on heart health or the value of exercise? All of the time, Usually, Occasionally, Rarely, Never



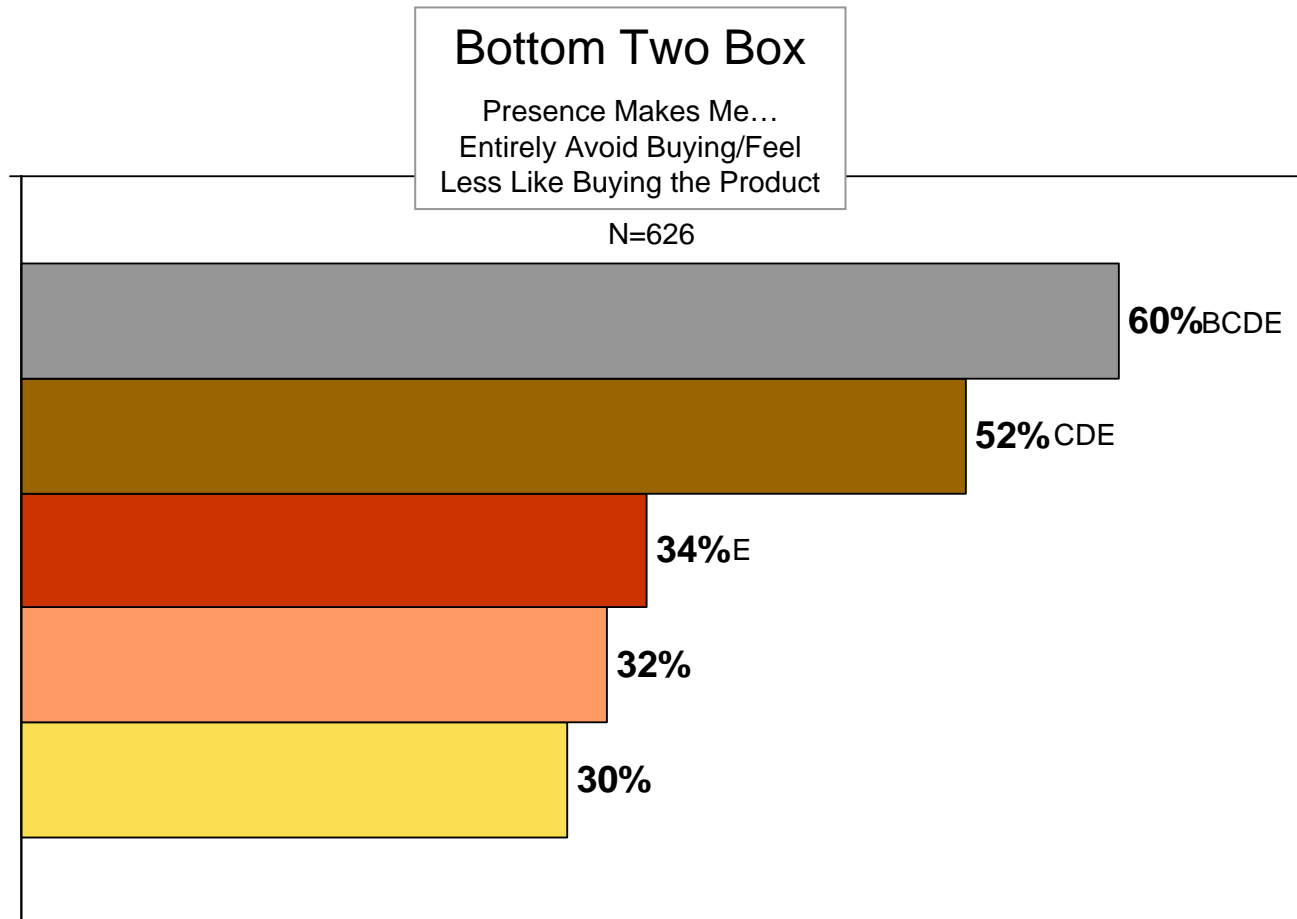
Consumers report strong involvement with nutritional issues

Q3. When you find the ingredient (listed below) on a label or package of a food product, would it encourage you to buy that product – or discourage you from buying? That is, would the presence of that ingredient make you want to buy the product – or would you avoid buying the product that had that ingredient in it? Definitely want to buy/Somewhat likely to buy/doesn't affect my decision to buy/Feel a bit less like buying/Entirely avoid buying.



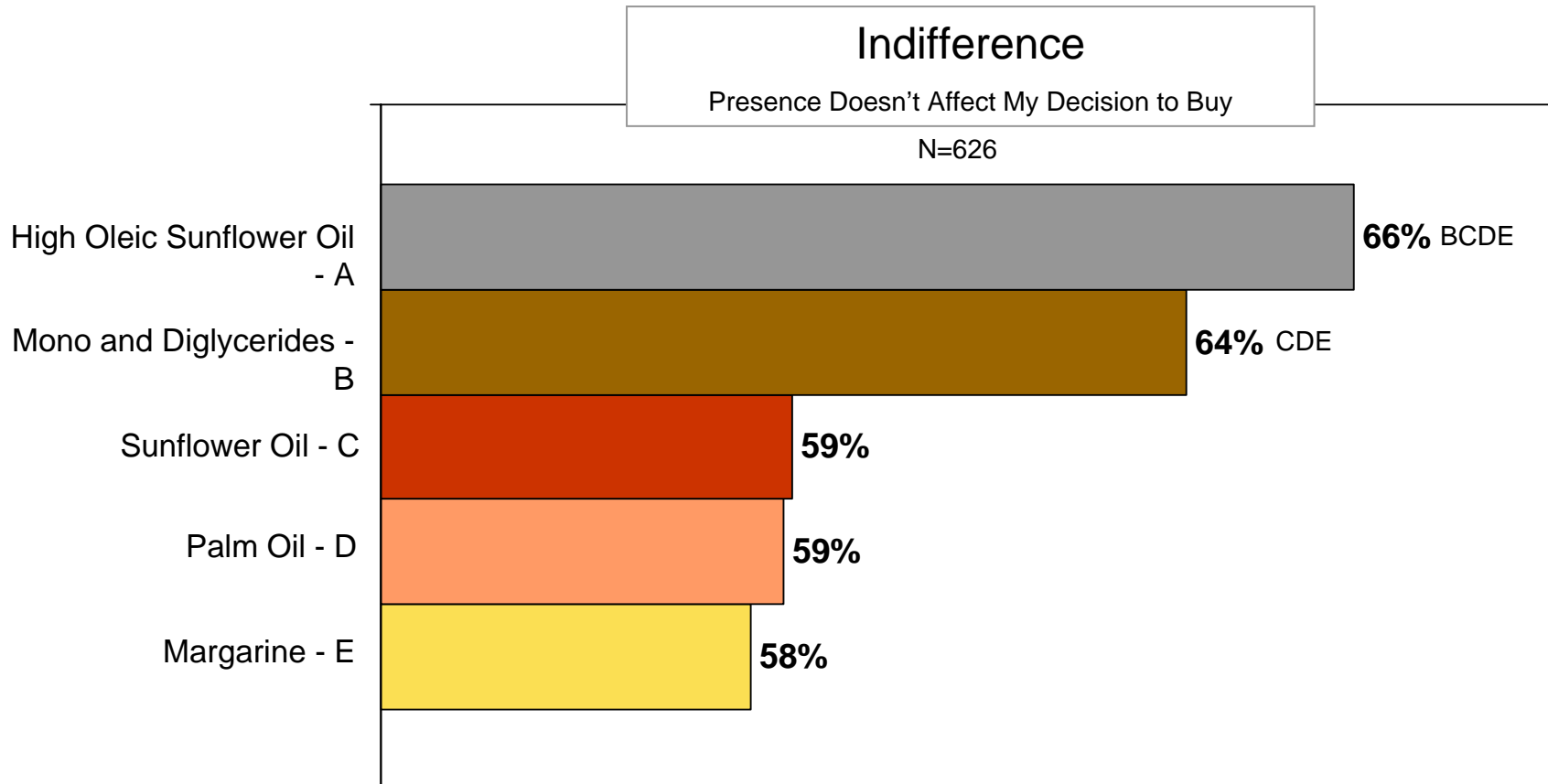
They use that knowledge to choose food products based on ingredients

Q3. When you find the ingredient (listed below) on a label or package of a food product, would it encourage you to buy that product – or discourage you from buying? That is, would the presence of that ingredient make you want to buy the product – or would you avoid buying the product that had that ingredient in it? Definitely want to buy/Somewhat likely to buy/doesn't affect my decision to buy/Feel a bit less like buying/Entirely avoid buying.



...and to avoid food products based on ingredients

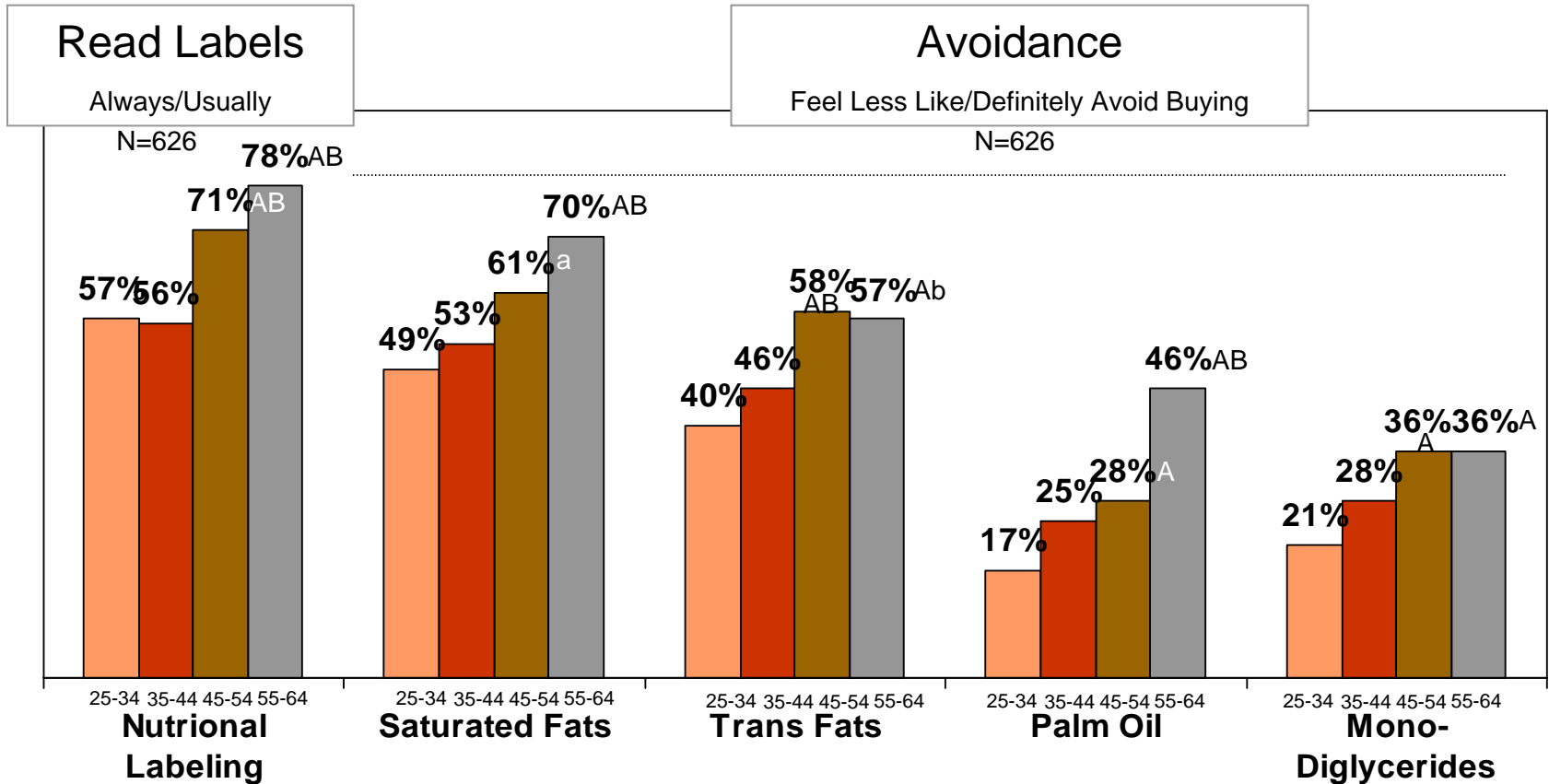
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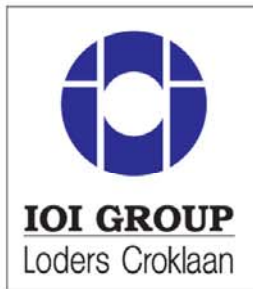
Consumers report highest levels of indifference to simple oils including palm oil as well as to mono and diglycerides

# Avoidance of these ingredients increases with age

Consumers' nutritional concerns and purchase avoidance of these products is lower among the younger consumers, with palm oil showing the lowest avoidance – especially among the younger consumers... and mono-and diglycerides having the lowest levels seen among the older folks



Age Ranges: 25-34, 35-44, 45-54, 55-64



# **RESULTS:**

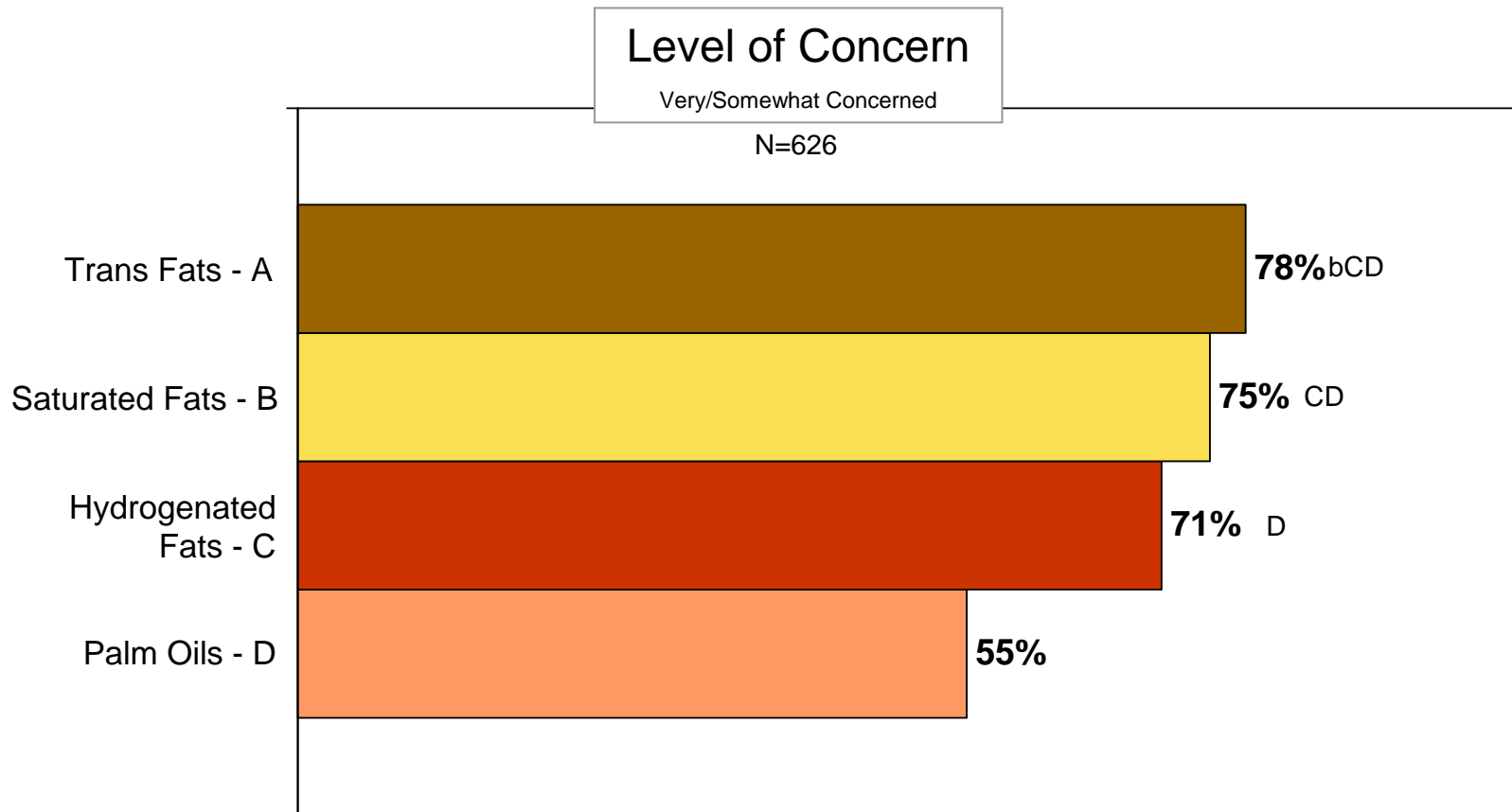
**1<sup>st</sup> Survey, May 26 2003**

**Part 2 – “post-education”**

# ‘Education’

- To simulate information that consumers are likely receive through media in the approach to the trans label deadline
- **Examples:**
  - [facts] Some scientific studies have shown that trans fats are at least as harmful, if not worse than saturated fats.
  - [definition] Trans fats are formed when vegetable oils are "partially hydrogenated". This is a manufacturing process that changes liquid vegetable oils to harder, shortening type products.
  - [solution] Using a non-hydrogenated palm oil that is naturally more saturated.
  - [solution] Blending liquid oils with fully hydrogenated oils that contain more saturated fats but no trans fats.

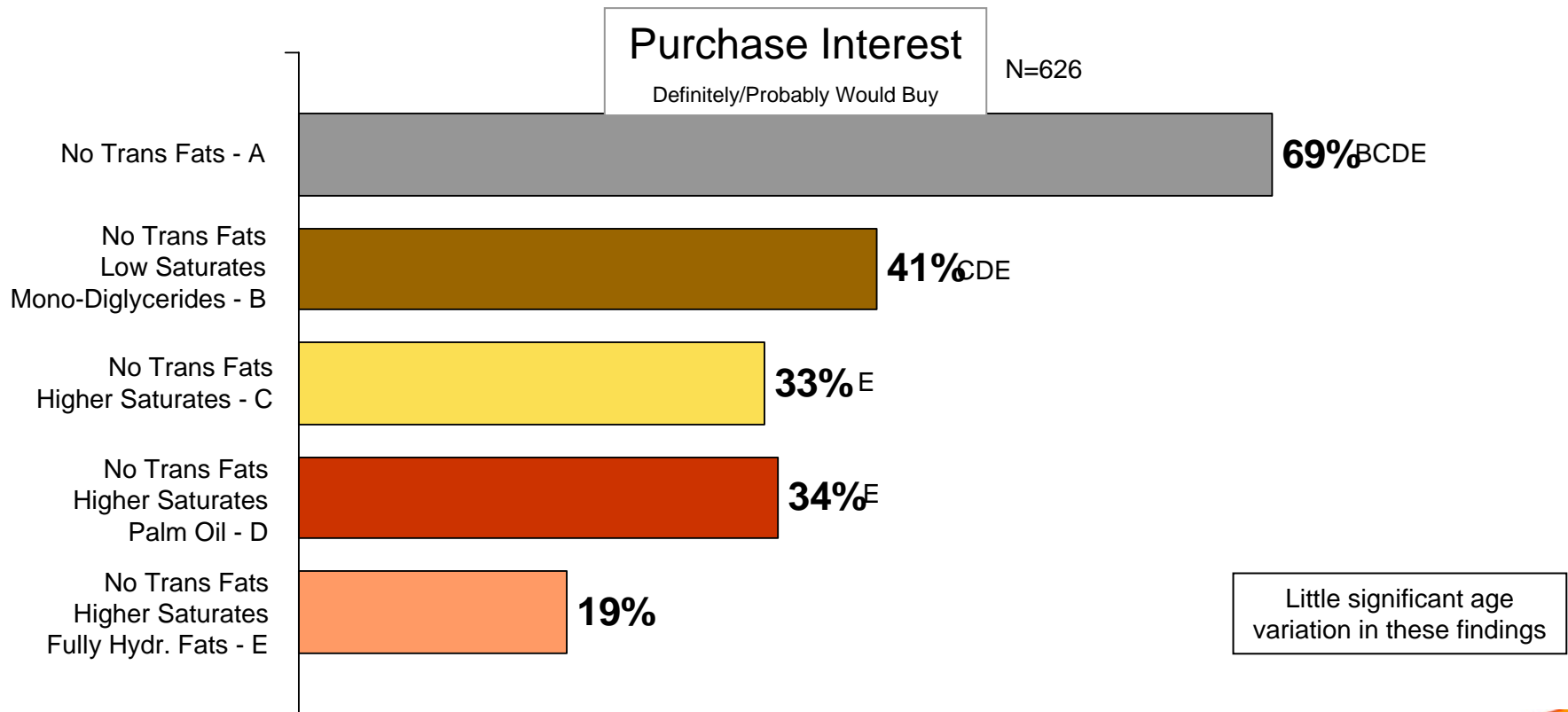
Q7. How concerned are you about the effects of each of the following in your diet? Very concerned/Somewhat concerned/Neither concerned nor unconcerned/Not very concerned/ Not at all concerned.



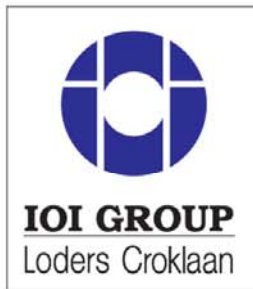
For key ingredients, consumers' concern levels are lead by trans fats

Q8. If given the opportunity to buy products which replace trans fat with other fats and oils which do not contain trans fats, but do offer the same taste and texture as foods you are used to, would you purchase this product over others/

Q10. If the products using ingredients that do not have trans fats resulted in a somewhat higher level of saturated fats, and do offer the same taste and texture as the foods that you are used to, would you purchase this product over others that contain trans fats? Made with natural palm oil? Fully hydrogenated fats? Mono-and diglycerides-low sats?



With knowledge of the issues, over 2/3rds would choose no trans fats



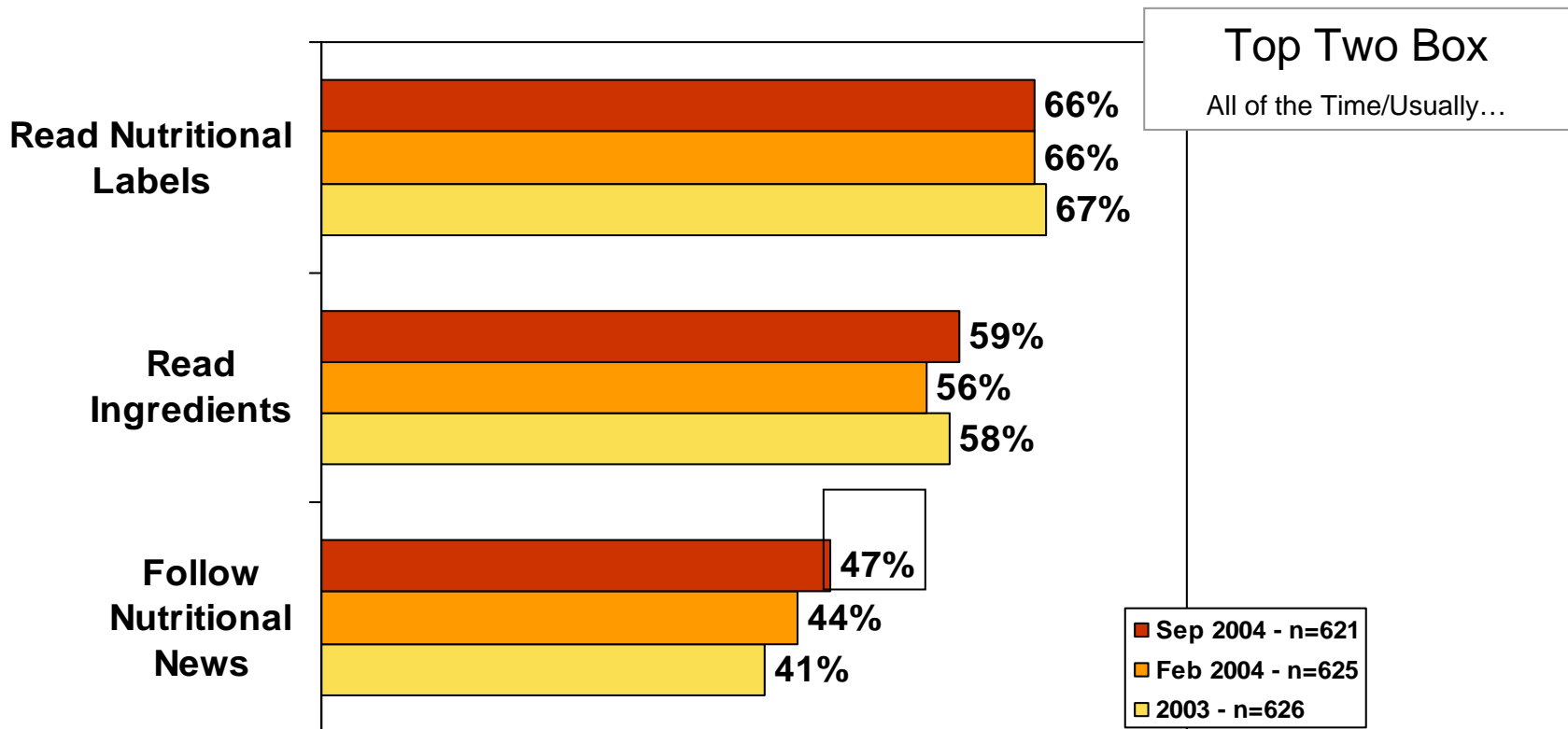
**RESULTS:**

**Trends -**

**Comparison of 3 surveys**

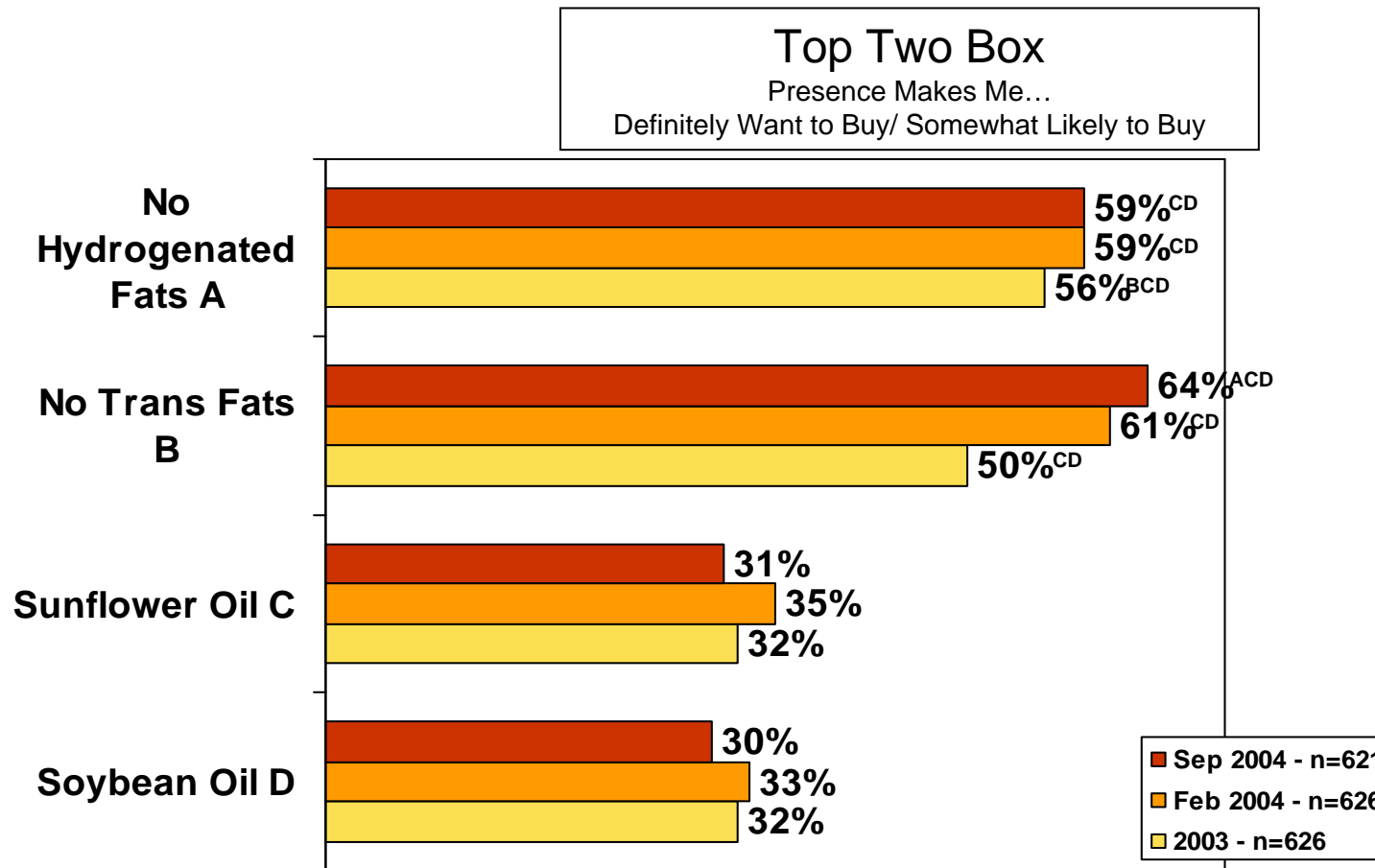
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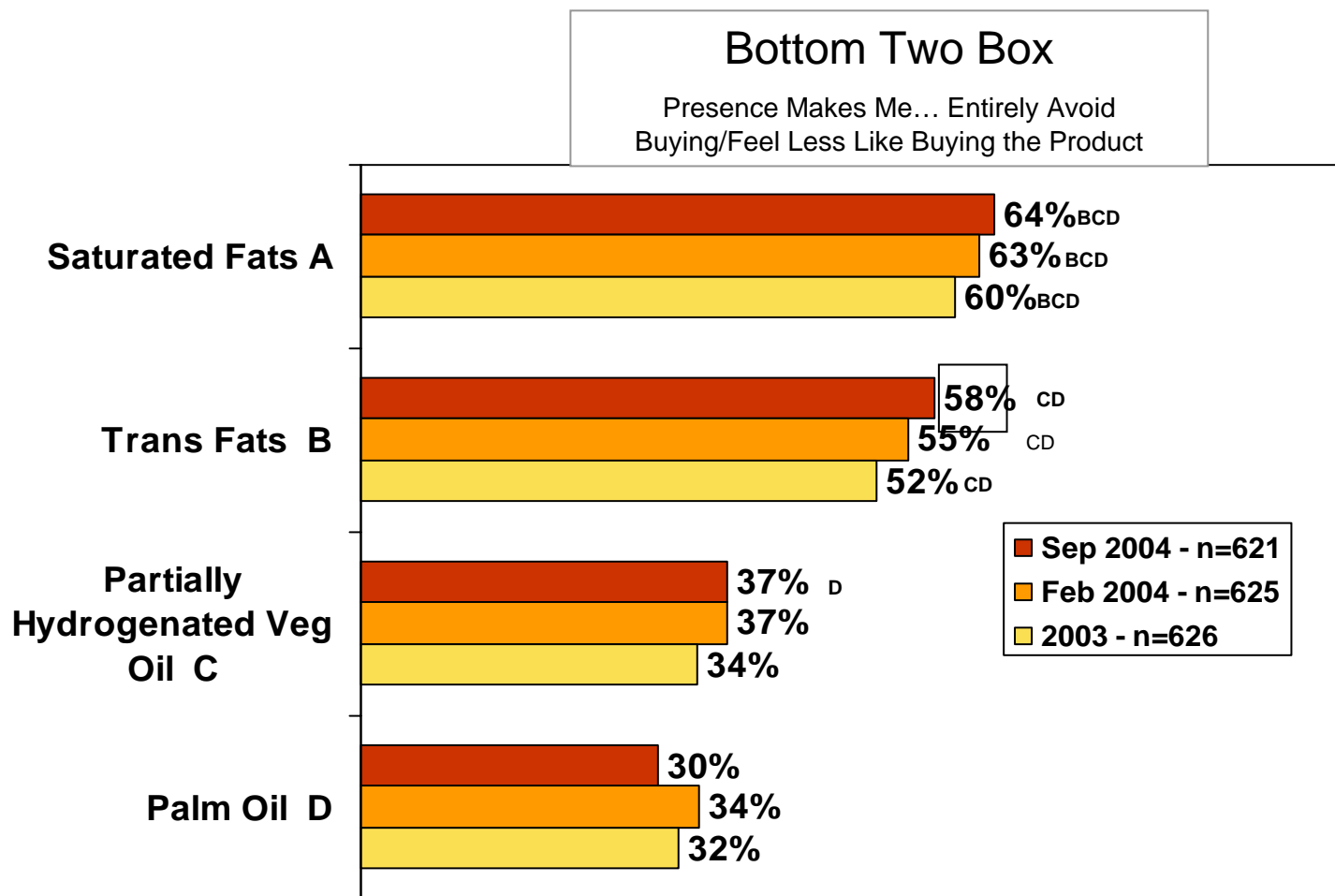
Consumers' concern with nutritional issues translates to more following the press for new information.

Q3. When you find the ingredient (listed below) on a label or package of a food product, would it encourage you to buy that product – or discourage you from buying it? This is, would the presence of that ingredient make you want to buy the product – or would you avoid buying the product that had that ingredient in it? (Select one for each)

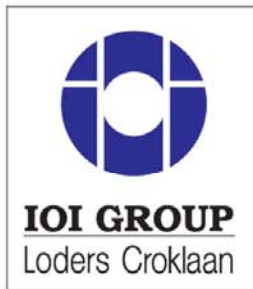


The NO TRANS FATS message reaches # 1 position

Q3. When you find the ingredient (listed below) on a label or package of a food product, would it encourage you to buy that product – or discourage you from buying? That is, would the presence of that ingredient make you want to buy the product – or would you avoid buying the product that had that ingredient in it? Definitely want to buy Somewhat likely to buy/doesn't affect my decision to buy/Feel a bit less like buying/Entirely avoid buying.



Avoidance of trans fats stronger



**RESULTS:**

**Label Mock-Ups**

Q7. Please look over the three nutritional facts panels below. They are all for the same **cookie** – but with different formulas, meaning different ways that the product has been produced. Please look over the labels thoroughly. There are several differences in the nutritional facts and in the ingredient list. After your review, would you please tell me which one of the product’s formulas you would be most likely to purchase?

A

Nutrition Facts	
Serving Size 3 Cookies (34g)	
Servings per container About 15	
Amount per Serving	
<b>Calories 170</b>	<b>Calories from fat 60</b>
	%Daily Value
<b>Total Fat 7g</b>	<b>11%</b>
Saturated Fat 1.5g	8%
Trans Fat 3g	
<b>Cholesterol 0mg</b>	<b>0%</b>
<b>Sodium 125mg</b>	<b>5%</b>
<b>Total Carbohydrate 24g</b>	<b>8%</b>
Dietary Fiber Less than 1g	3%
Sugars 12g	
<b>Protein 2g</b>	

**INGREDIENTS:** ENRICHED FLOUR (WHEAT FLOUR, NIACIN, SUGAR, PARTIALLY HYDROGENATED SOYBEAN OIL, HIGH FRUCTOSE CORN SYRUP, COCOA, CORNSTARCH, SALT, BAKING SODA, SOY LECITHIN, NATURAL AND ARTIFICIAL FLAVOR, WHEAT STARCH, CARAMEL COLOR, BUTTERFAT (FROM MILK).

**58%** <sup>BC</sup>

B

Nutrition Facts	
Serving Size 3 Cookies (34g)	
Servings per container About 15	
Amount per Serving	
<b>Calories 170</b>	<b>Calories from fat 60</b>
	%Daily Value
<b>Total Fat 7g</b>	<b>11%</b>
Saturated Fat 3.5g	<b>18%</b>
Trans Fat 0g	
<b>Cholesterol 0mg</b>	<b>0%</b>
<b>Sodium 125mg</b>	<b>5%</b>
<b>Total Carbohydrate 24g</b>	<b>8%</b>
Dietary Fiber Less than 1g	3%
Sugars 12g	
<b>Protein 2g</b>	

**INGREDIENTS:** ENRICHED FLOUR (WHEAT FLOUR, NIACIN, SUGAR, PARTIALLY HYDROGENATED SOYBEAN OIL, HIGH FRUCTOSE CORN SYRUP, COCOA, CORNSTARCH, SALT, BAKING SODA, SOY LECITHIN, NATURAL AND ARTIFICIAL FLAVOR, WHEAT STARCH, CARAMEL COLOR, BUTTERFAT (FROM MILK).

**22%**

C

Nutrition Facts	
Serving Size 3 Cookies (34g)	
Servings per container About 15	
Amount per Serving	
<b>Calories 170</b>	<b>Calories from fat 60</b>
	%Daily Value
<b>Total Fat 7g</b>	<b>11%</b>
Saturated Fat 3.5g	<b>18%</b>
Trans Fat 0g	
<b>Cholesterol 0mg</b>	<b>0%</b>
<b>Sodium 125mg</b>	<b>5%</b>
<b>Total Carbohydrate 24g</b>	<b>8%</b>
Dietary Fiber Less than 1g	3%
Sugars 12g	
<b>Protein 2g</b>	

**INGREDIENTS:** ENRICHED FLOUR (WHEAT FLOUR, NIACIN, SUGAR, PALM OIL, HIGH FRUCTOSE CORN SYRUP, COCOA, CORNSTARCH, SALT, BAKING SODA, SOY LECITHIN, NATURAL AND ARTIFICIAL FLAVOR, WHEAT STARCH, CARAMEL COLOR, BUTTERFAT (FROM MILK).

**20%**

When directly asked to choose between sats and trans fats on a cookie package label, consumers picked the product with lower saturated fats **synovate**



# Consumer reasoning for label choice is reported pretty clearly

Label 1 was all about lower saturated fat – nothing much else got thru to the consumer...no concerns about the higher trans fat content were noted.

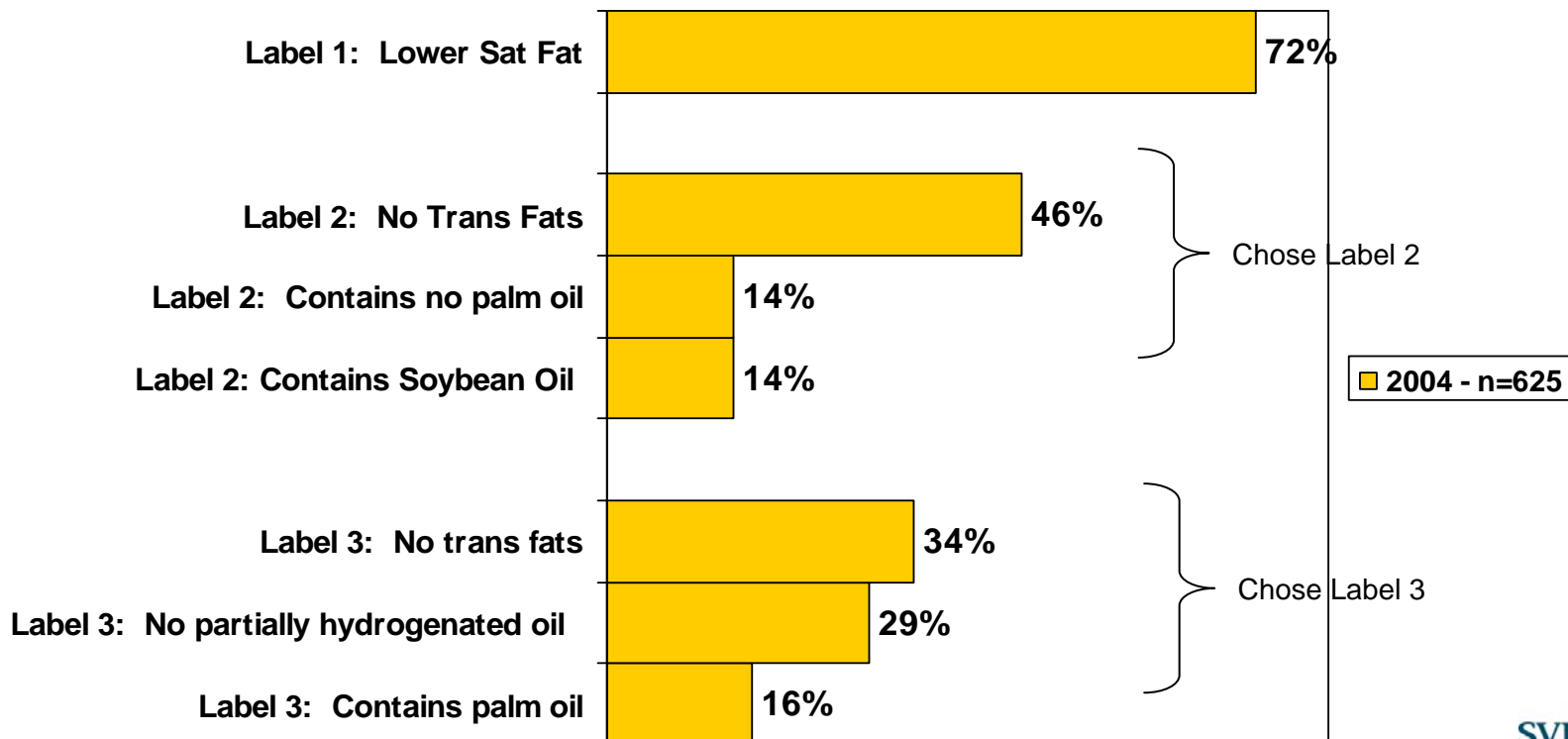
Consumers recognized the trans fat reduction in both 2 and 3, but from there a dichotomy came into play

Label 2 reported liking the presence of soybean oil, and the absence of palm oil

Label 3 reported liking the presence of palm oil, but much more often, the absence of hydrogenates

## Top Reasons for Label Choices

Open End Response



Q8. Why did you say that?

Q4. Please look over the three nutritional facts panels below. They are all for the same cookie – but with different formulas, meaning different ways that the product has been produced. Please look over the labels thoroughly. There are several differences in the nutritional facts and in the ingredient list. After your review, would you please tell me which one of the product’s formulas you would be most likely to purchase?

A  
Label 1

Nutrition Facts	
Serving Size 3 Cookies (34g)	
Servings per container About 15	
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Saturated Fat 3.5g	18%
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35%

B  
Label 2

Nutrition Facts	
Serving Size 3 Cookies (34g)	
Servings per container About 15	
Amount per Serving	
Calories 170	Calories from fat 60
%Daily Value	
Total Fat 7g	11%
Saturated Fat 3.5g	18%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 125mg	5%
Total Carbohydrate 24g	8%
Dietary Fiber Less than 1g	3%
Sugars 12g	
Protein 2g	

INGREDIENTS: ENRICHED FLOUR (WHEAT FLOUR, NIACIN, SUGAR, INTERESTERIFIED SOYBEAN OIL, HIGH FRUCTOSE CORN SYRUP, COCOA, CORNSTARCH, SALT, BAKING SODA, SOY LECITHIN, NATURAL AND ARTIFICIAL FLAVOR, WHEAT STARCH, CARAMEL COLOR, BUTTERFAT (FROM MILK).

22%

C  
Label 3

Nutrition Facts	
Serving Size 3 Cookies (34g)	
Servings per container About 15	
Amount per Serving	
Calories 170	Calories from fat 60
%Daily Value	
Total Fat 7g	11%
Saturated Fat 3.5g	18%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 125mg	5%
Total Carbohydrate 24g	8%
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Protein 2g	

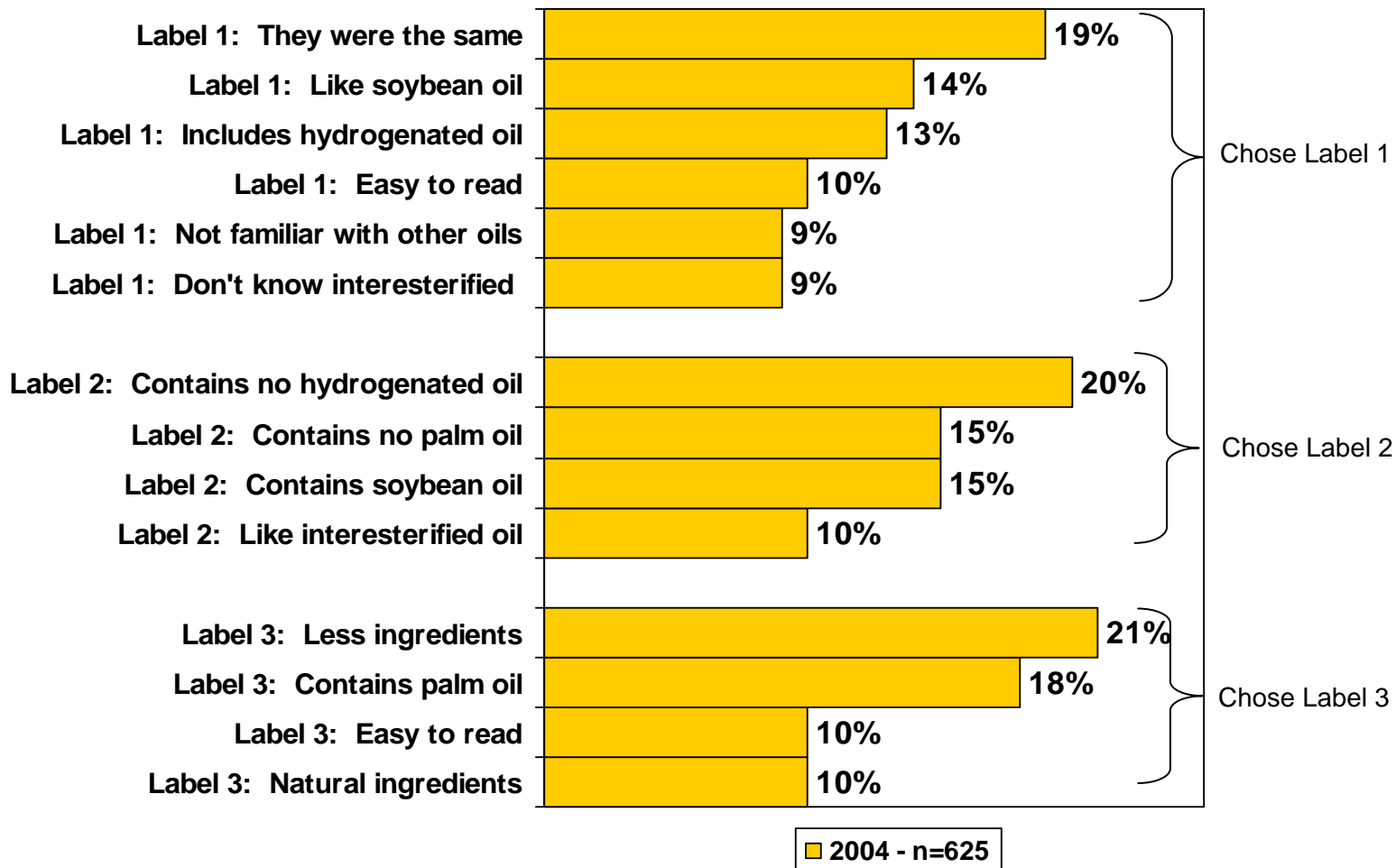
INGREDIENTS: ENRICHED FLOUR (WHEAT FLOUR, NIACIN, SUGAR, PALM OIL, HIGH FRUCTOSE CORN SYRUP, COCOA, CORNSTARCH, SALT, BAKING SODA, SOY LECITHIN, NATURAL AND ARTIFICIAL FLAVOR, WHEAT STARCH, CARAMEL COLOR, BUTTERFAT (FROM MILK).

43%<sup>AB</sup>

Label 3 is preferred by the significantly largest consumer contingent – the natural/simplicity group...incidentally containing palm oil.

# Top Reasons for Label Choices

Open End Response



## Key Conclusions

- Majority of consumers prefer products with ‘no trans fat’ or ‘no hydrogenated oils’
- About half of consumers will accept a large increase in saturated fat in order to eliminate trans fat
- Palm oil is an acceptable ingredient for the elimination of trans fat
- Without ‘education’, partially hydrogenated vegetable oil is acceptable for trans fat elimination
- Ingredients with unfamiliar names (‘interesterified’) are less desirable as solutions for trans fat