

Qualified Health Claims: Food for Thought?

Neal H. Hooker and Ratapol P. Teratanavat

Paper presented at FDA Public Meeting
Assessing Consumers' Perceptions of Health Claims
College Park, MD. November 17, 2005

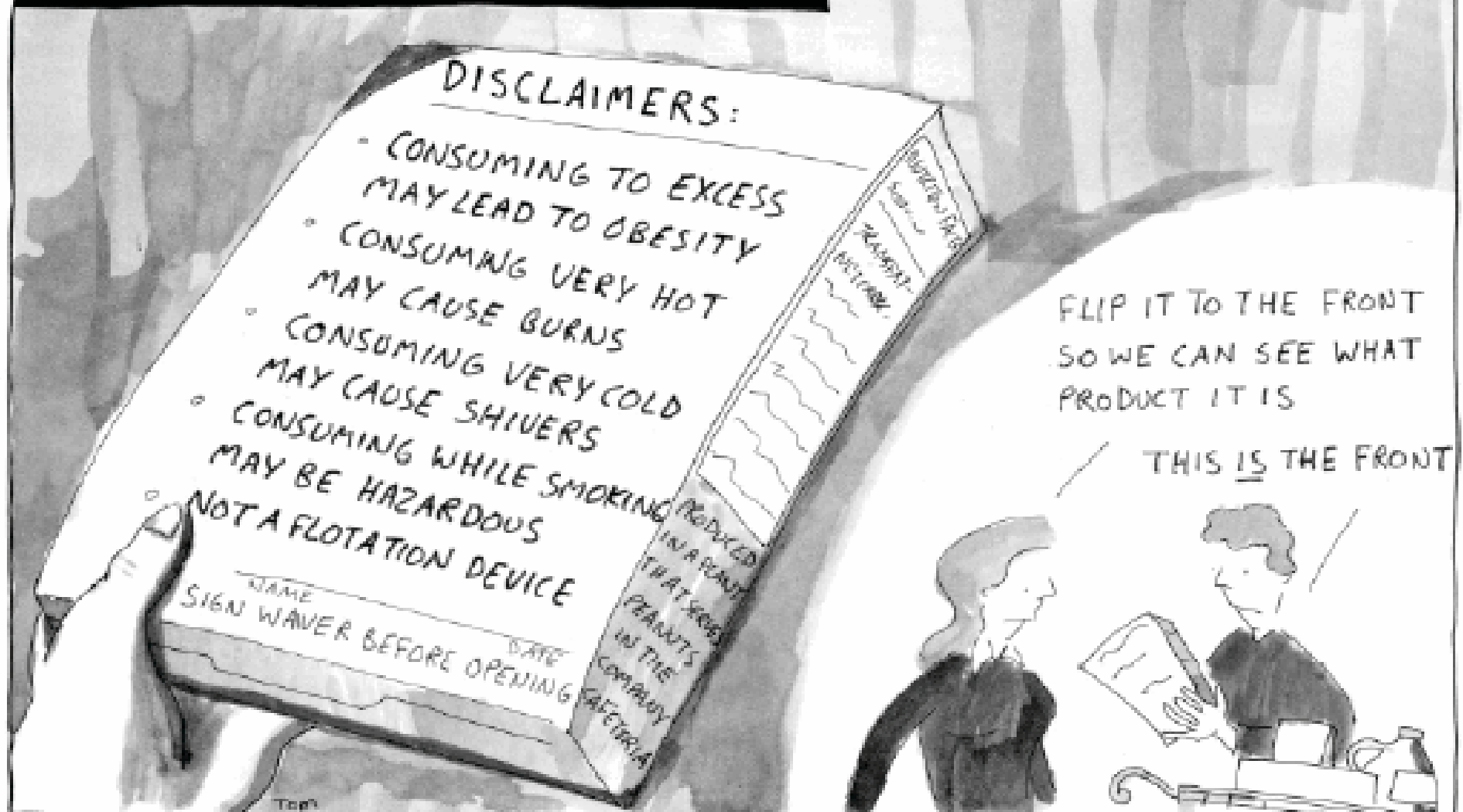


Department of Agricultural, Environmental,
and Development Economics

[Qualified Health Claims]

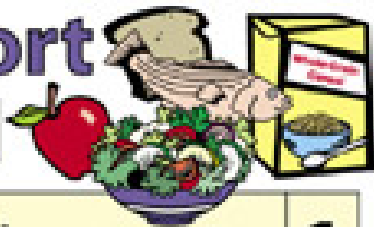
- *Pearson v. Shalala* led to new FDA food labeling policy
 - To provide additional and up-to-date scientific information
 - To encourage food producers to make accurate, science-based claim
- Ranked by level of scientific evidence

THE FUTURE OF FOOD LABELING



Examples of Visual Aid/Disclaimers

Health Claims Report Card



A	High Significant scientific agreement	1
B	Moderate Evidence is not conclusive	2
C	Low Evidence is limited and not conclusive	3
D	Extremely Low Little scientific evidence supporting this claim	4

Level B: Although there is scientific evidence supporting the claim, FDA has determined that the evidence is not conclusive

Level D: Very limited and preliminary scientific research suggests that FDA concludes that there is little scientific evidence to support this claim

Literature Review

- Experimental studies on consumer use of label information
 - Ford et al., 1996; Keller et al., 1997; Mitra et al., 1999; Roe, Levy, and Derby, 1999; Garretson and Burton, 2000; Kozup, Creyer, and Burton, 2003
- Independent effect of claims on front label and nutrition information in Nutrition Facts panel
- Consumers rely more on information in the Nutrition Facts panel
- No published study has looked at the new qualified health claim policy

[Related Studies]

- IFIC – web based
- Derby and Levy – mall intercept
- France and Bone – dietary supplements
- Murphy – FTC advertising “copy” test

[Students as Subjects?]

- General consumers and undergrad. students often used as participants in experimental studies
 - No difference between two groups for consumer response to labeling information (Wansink, 2003)
 - Two groups react similarly to open-ended willingness to pay questions (Maguire, Taylor, and Gurmu, 2003)

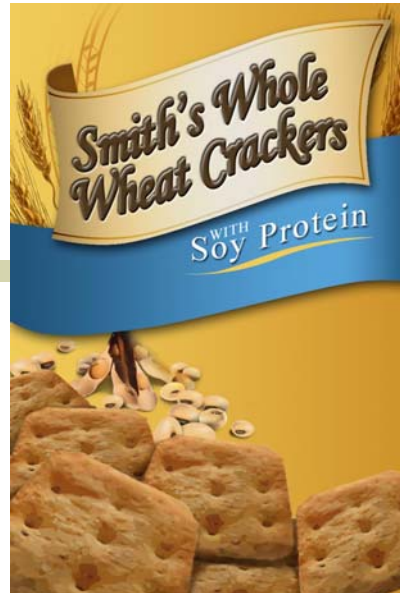
[Study 1: Objectives]

- To determine how consumers use health information to form judgments about product quality
- To examine whether consumers can differentiate various levels of qualified health claims

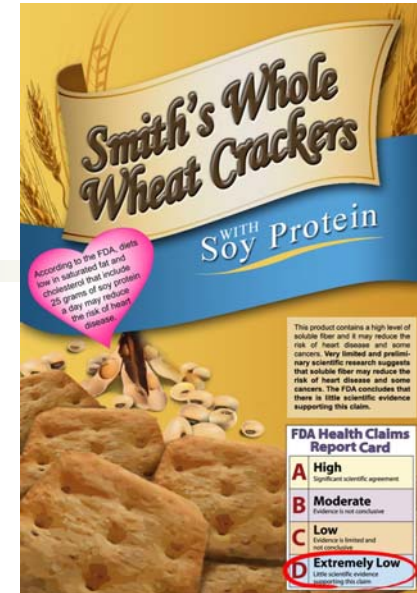
[Methodology]

- Controlled randomized experimental design
- 5 levels of claim
- Wheat Crackers Containing Soy Protein
 - Dual benefit product
- 168 students participated for extra credit
 - 48% Female; 21-22 years old; 66% Caucasian

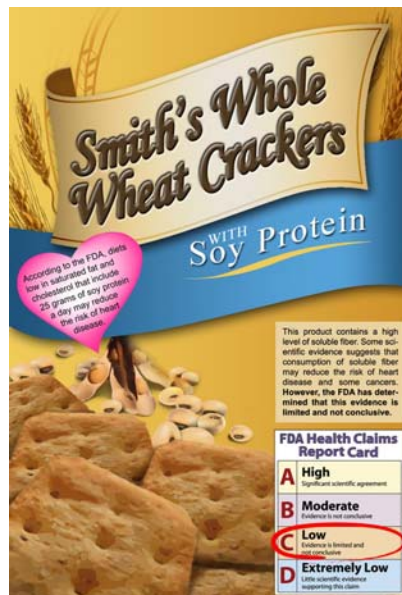
5 Versions of Front Labels with Different Qualified Claims



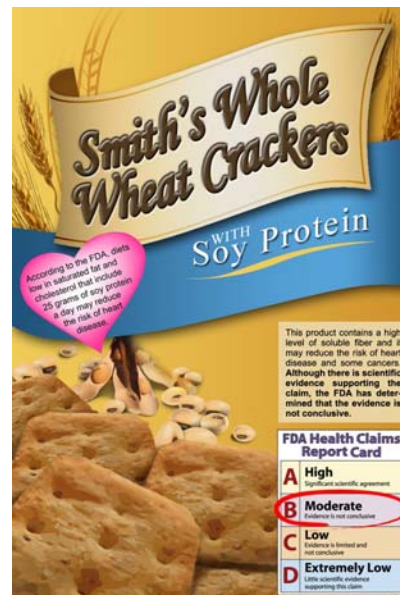
Control



Level D



Level C



Level B



Level A

WITH Soy Protein

According to the FDA, diets low in saturated fat and cholesterol that include 25 grams of soy protein a day may reduce the risk of heart disease.

This product contains a high level of soluble fiber and it may reduce the risk of heart disease and some cancers.

FDA Health Claims Report Card

A	High Significant scientific agreement
B	Moderate Evidence is not conclusive
C	Low Evidence is limited and not conclusive
D	Extremely Low Little scientific evidence supporting this claim

Nutrition Facts

Serving Size 13 crackers (31g)

Servings Per Container About 7

Amount Per Serving

Calories 140 Calories from Fat 35

% Daily Value*

Total Fat 3.5g 6%

Saturated Fat 0.5g 3%

Polyunsaturated Fat 0g 0%

Monounsaturated Fat 1g 6%

Cholesterol 0mg 0%

Sodium 240mg 10%

Potassium 135mg 4%

Total Carbohydrate 23g 8%

Dietary Fiber 1g 5%

Sugar 4g

Protein 3g

Vitamin A 0% Vitamin C 0%

Calcium 2% Iron 6%

*Percent daily values are based on a 2000 calorie diet.
Your daily value may be higher or lower depending on your
calorie needs:

		Calories	2,000	2,500
Total Fat	Less Than		65g	80g
Sat Fat	Less Than		20g	25g
Cholesterol	Less Than		300mg	300mg
Sodium	Less Than		2,400mg	2,400mg
Total Carbohydrate			300g	375g
Dietary Fiber			25g	30g

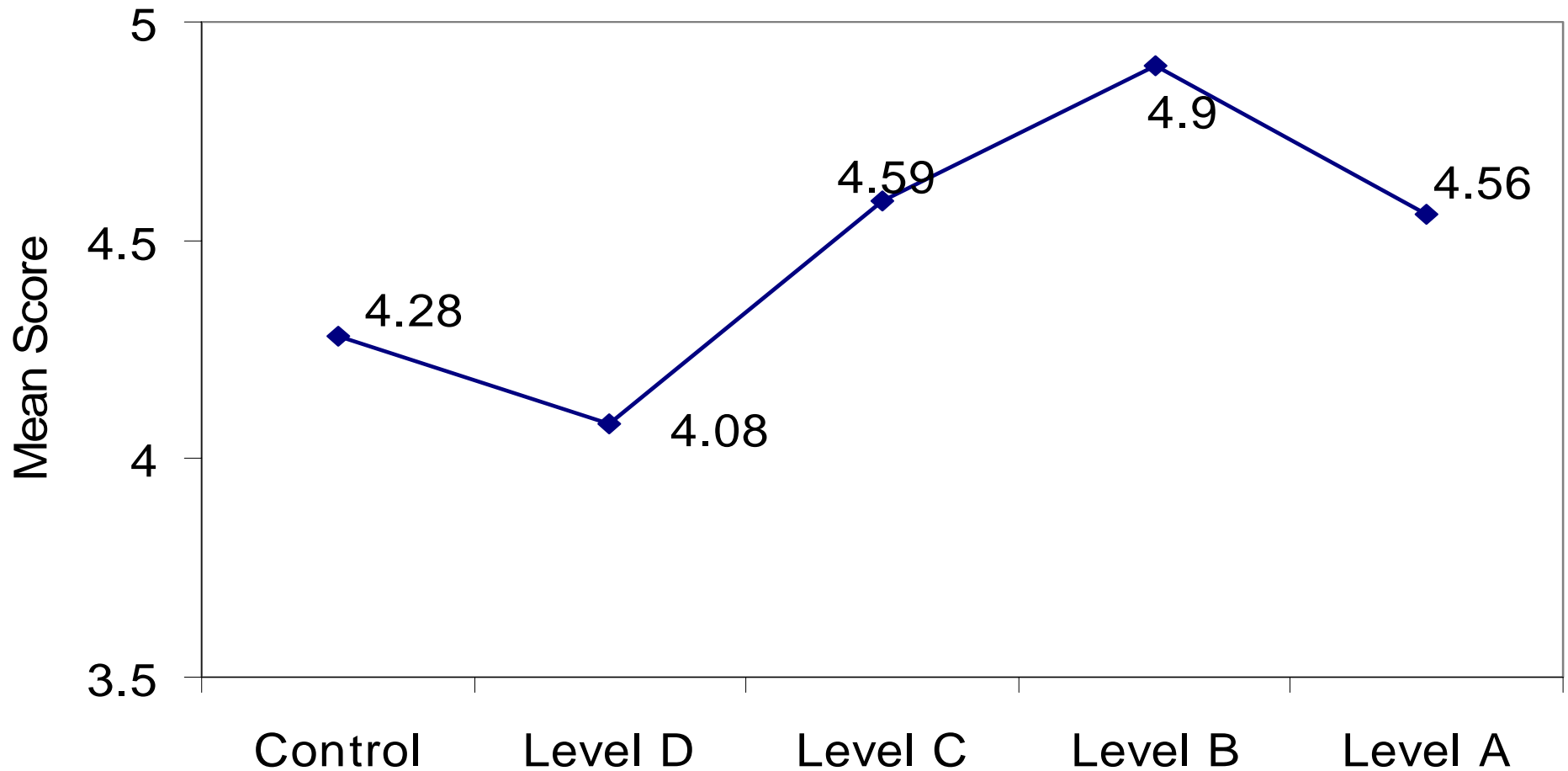
Calories per gram

Fat 9 • Carbohydrate 4 • Protein 4

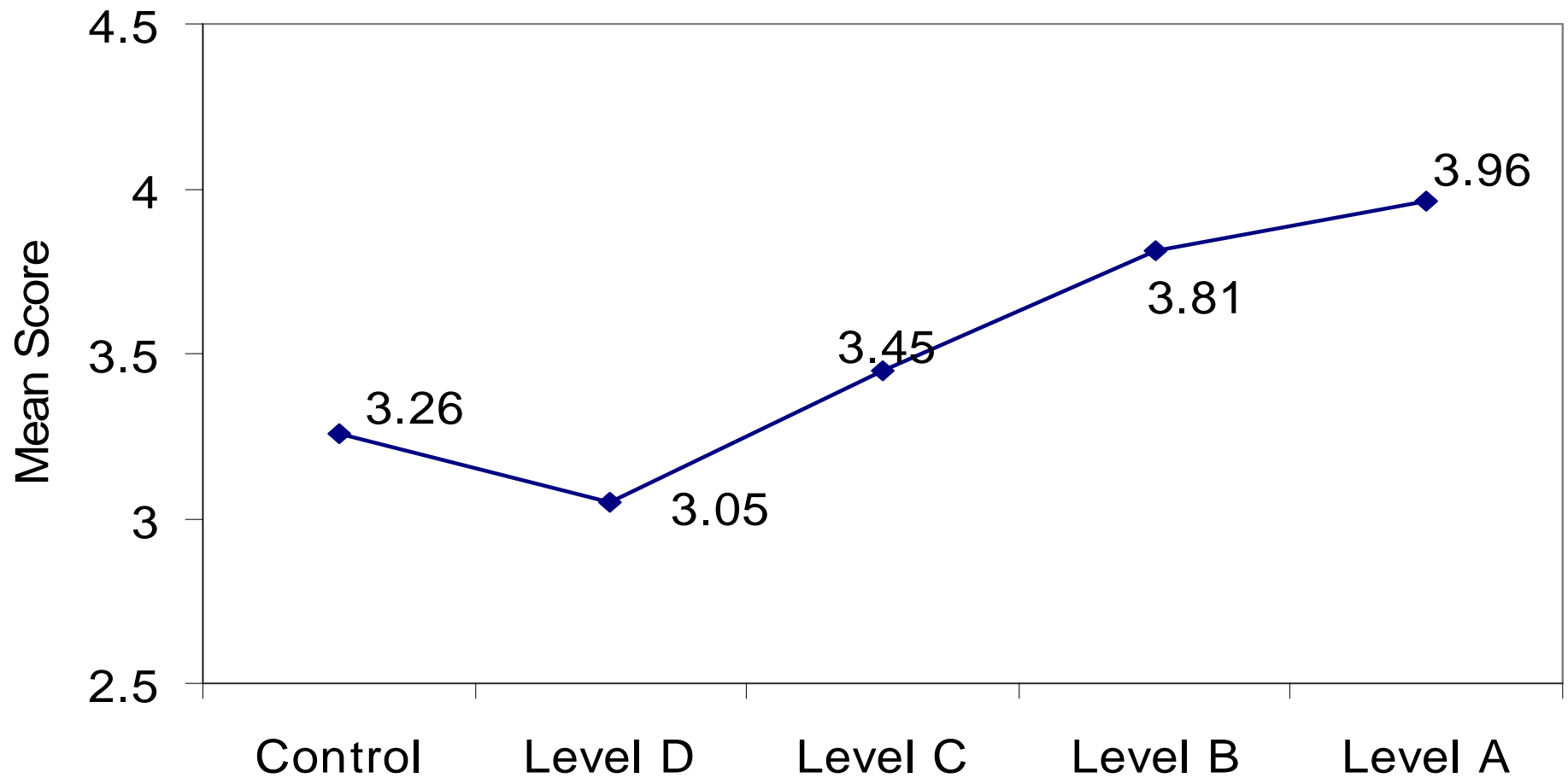
[Dependent Measures]

- Mean score from multi-items with seven-point scales
 - Attitude toward the product (5 items)
 - Confidence in claim (2 items)
 - Perceived health benefit of product (2 items)

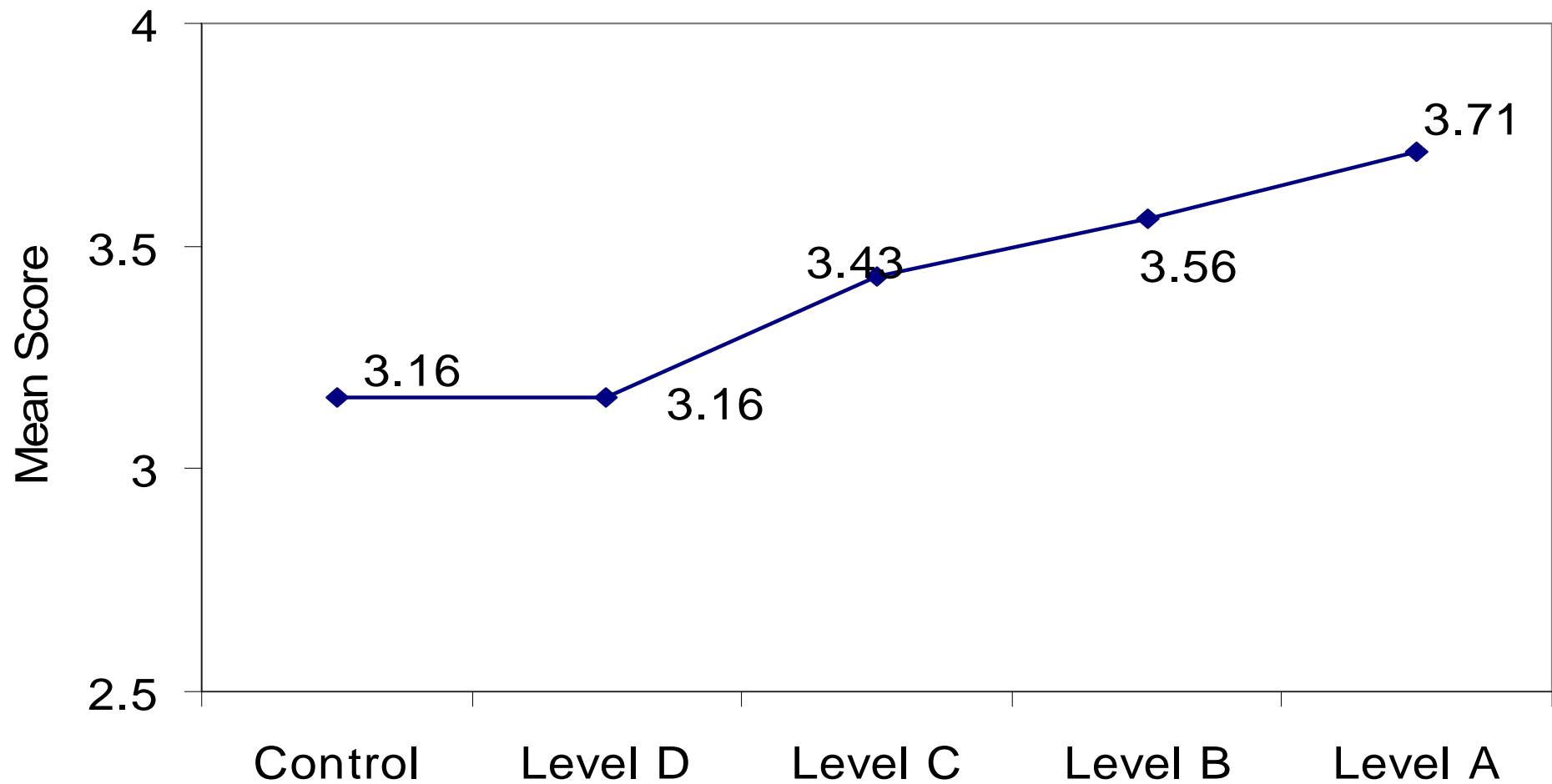
Attitude Towards the Product



Confidence in Claim Information



Perceived Health Benefits



Statistical Tests

- All 3 measures have significant multivariate effects (MANOVA)
- Significant main effect for attitude and confidence but not health benefit (ANOVA)
- Attitude lower if D compared to B, confidence lower if D compared to A (HSD)
 - No other significantly different pairings

[Thought Listings]

- Open-ended opinions
- Grouped into 6 categories
 - Product attributes/ingredients
 - Label design
 - Product appeal
 - Health benefits/healthfulness
 - Usefulness of information
 - Inconsistency of information

[Thought Listings]

- Control subjects list thoughts on label design (55%), product appeal (61%), ingredients (39%), and healthfulness (34%)
 - “the product looks healthy” or “the product is good for you”
- When health claims are present, many list benefits (>45%)
 - “it may reduce the risk of cancer” or “it may reduce the risk of heart disease”

Thought Listings

- When information is consistent commented that such information is informative
 - Focus on **product** being healthy
 - Felt that FDA approved the message
- Qualified health claims trigger thoughts of inconsistency of the health and nutrition information (42% for Level D, 35% for Level C, and 29% for Level B)
 - “Why do they put the information on the front label if it is inconclusive? This makes me very skeptical.”
 - “The report card is confusing seems to contradict itself.”
 - “I would never buy something that has a “C” on a scale of how much evidence there is to support the claim.”

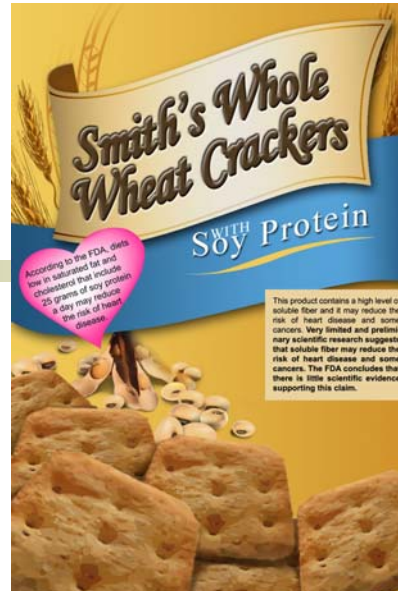
[Study 2: Objectives]

- To determine how report card influences consumer response to different claim levels
 - Comparing A and D

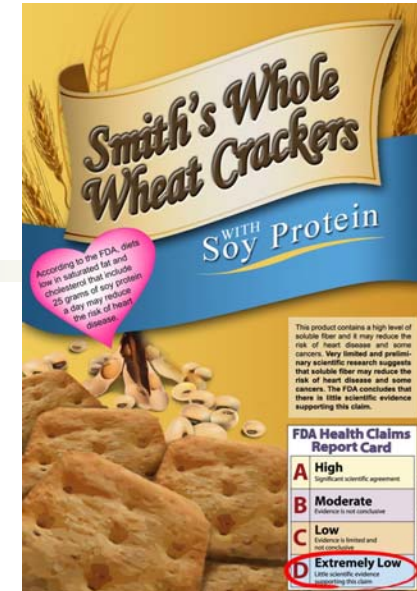
[Methodology]

- 2 (claim) X 2 (report card) between-subject design
- Same dependent measures
- 109 students participated for extra credit
 - 53% Female; 21-22 years old; 72% Caucasian

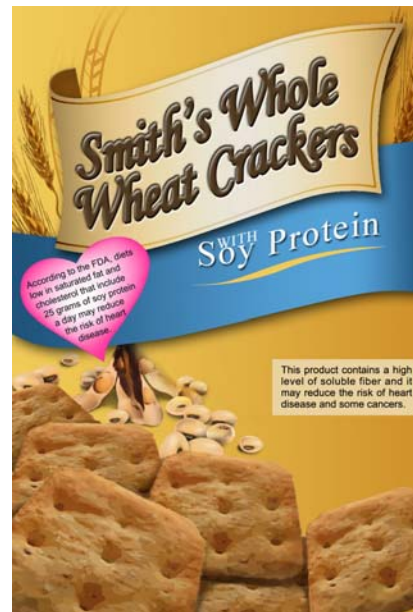
4 Versions of Front Labels with Different Qualified Claims



Level D Without Report Card



Level D with Report Card

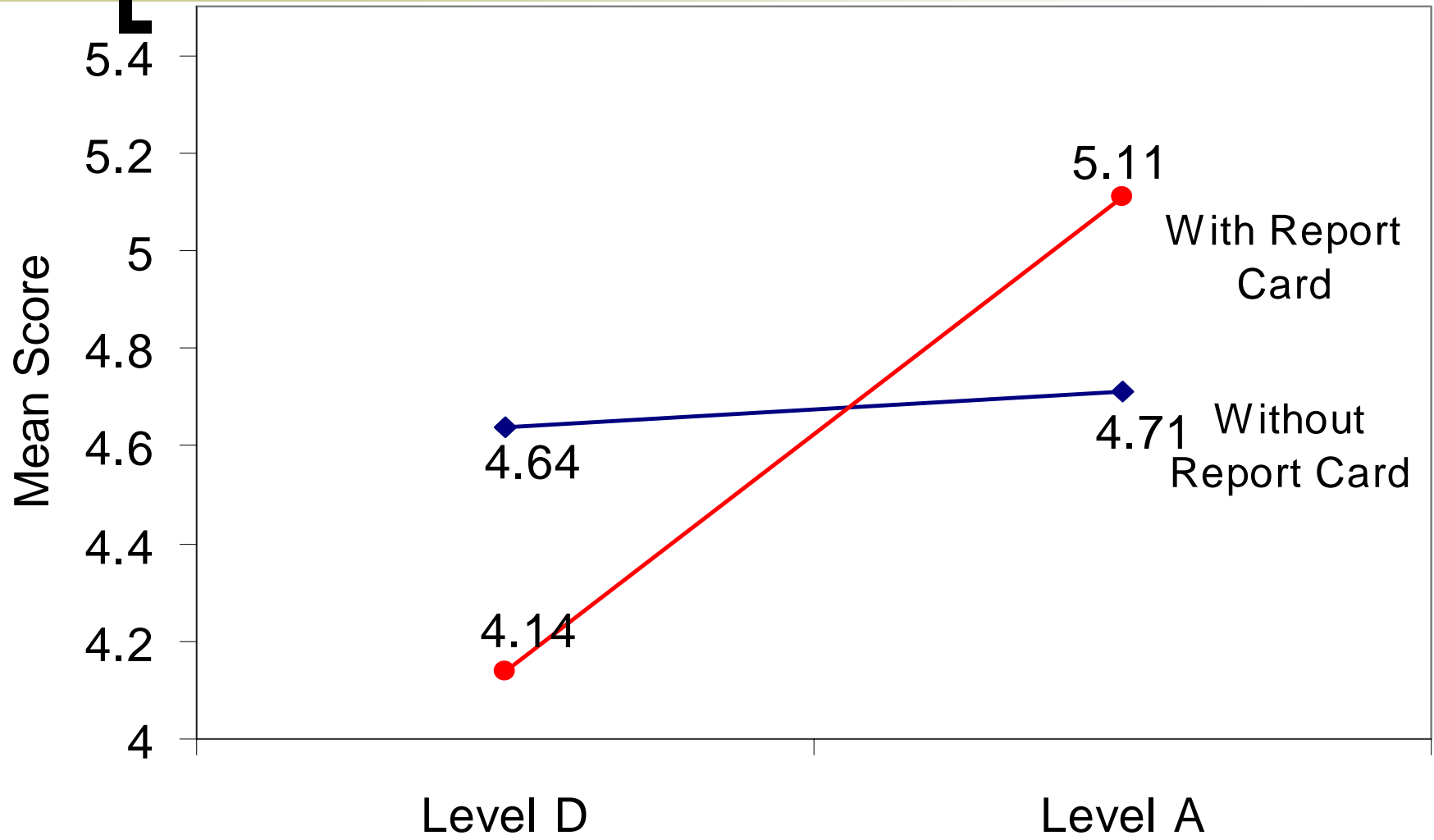


Level A without Report Card

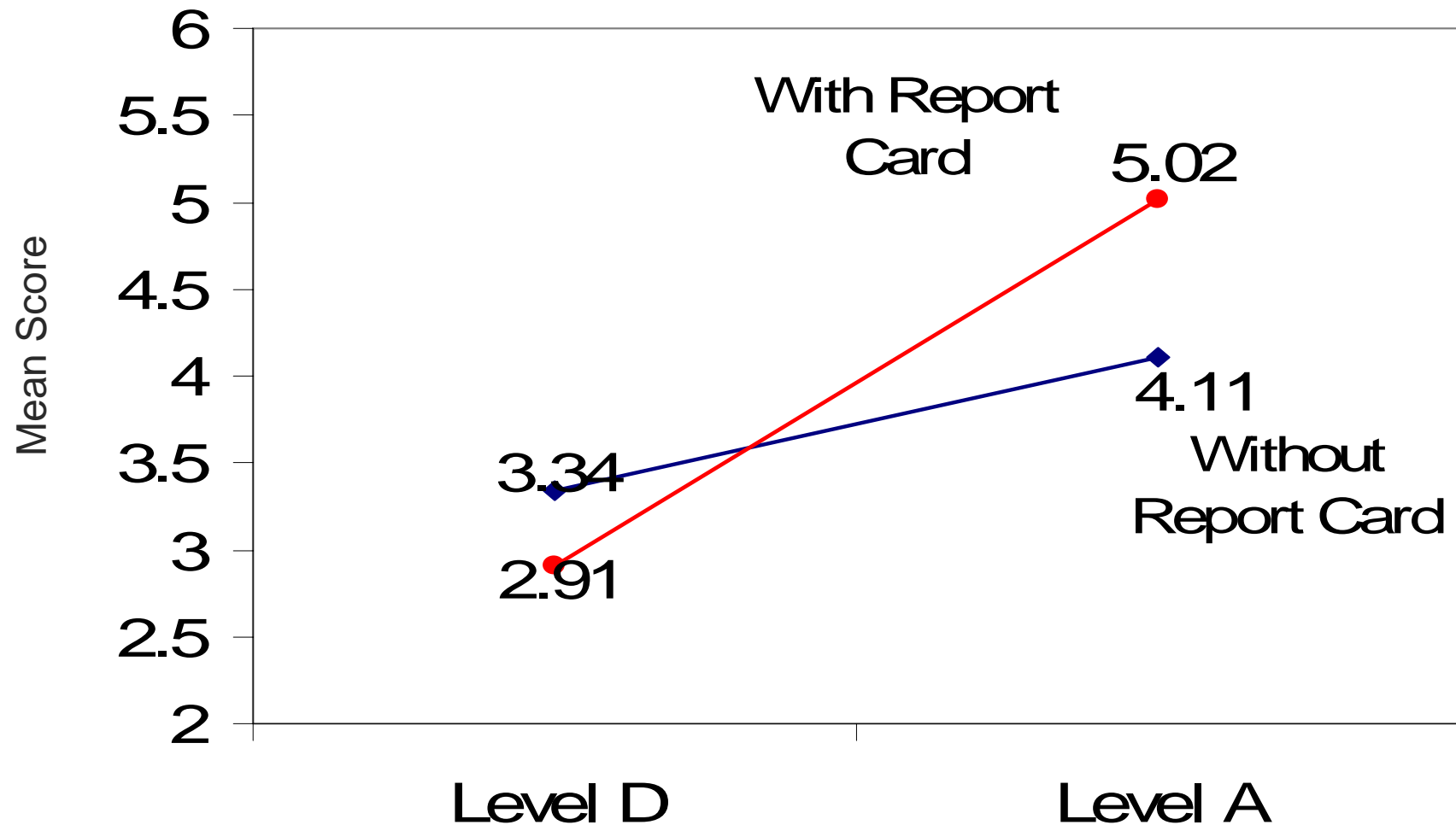


Level A with Report Card

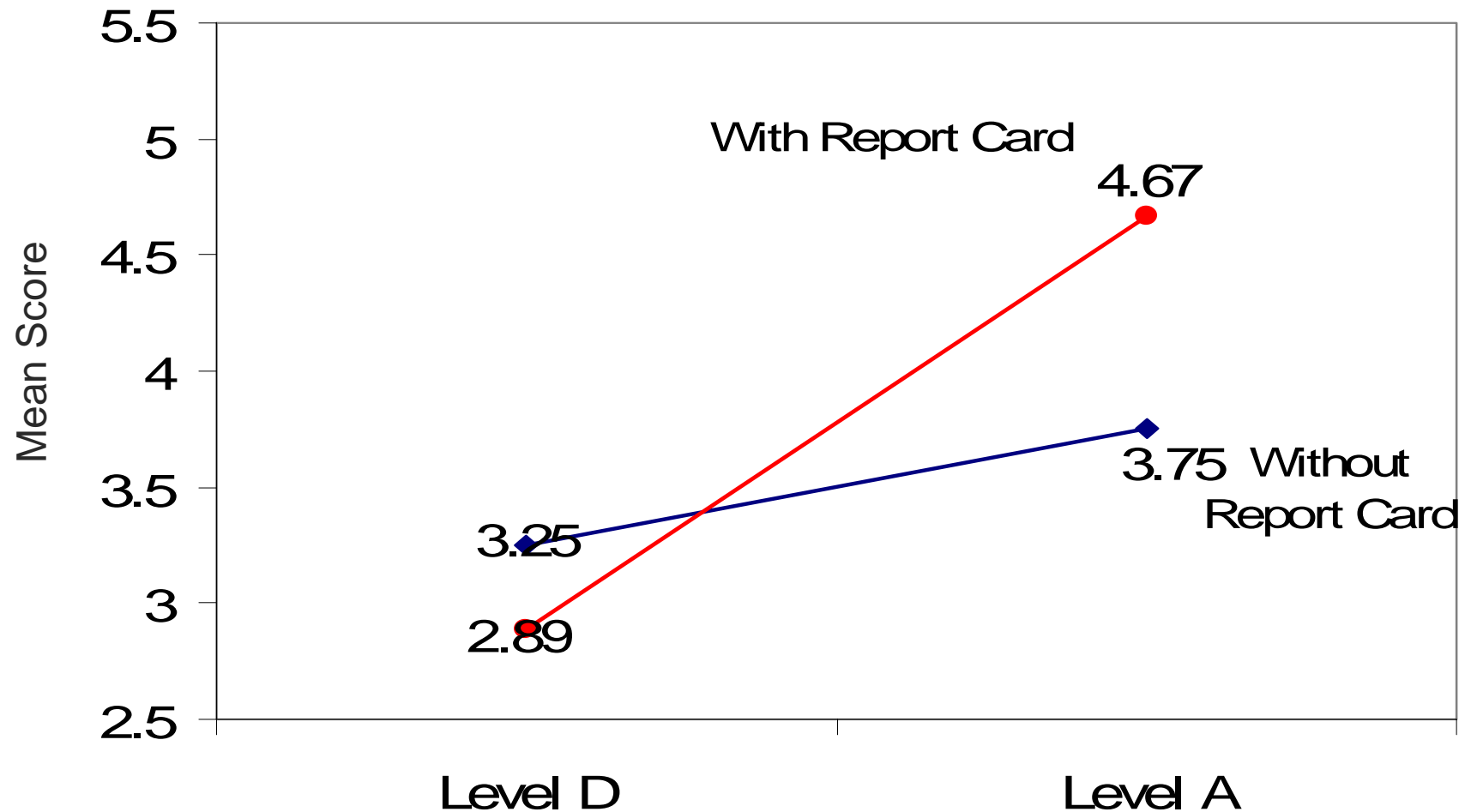
Attitude Towards the Product



Confidence in Claim Information



Perceived Health Benefits



[Statistical Tests]

- All 3 measures have significant multivariate effects (MANOVA)
- Significant interaction effect for all measures (ANOVA)
 - Simple effects are significant – report card presence makes a difference

Thought Listings

- Most participants commented on product appeal, health benefit, and health benefits of the product
- Report card reinforced information usefulness
 - Participants indicate that “A” is congruent with the health and nutrition information, leading to a strong perception that the product is healthy and good for them
 - Report card stands out the most - linked to healthfulness of the product
 - ~ 42% of those who saw report card commented on usefulness of the information, compared to 16% of those not seeing a report card

Thought Listings

- Level D ~ 30% noticed the inconsistency of the health and nutrition information
- Participants skeptical about information when seeing qualified claim level D
 - “I am a little disturbed ... promise on the label has very little evidence to back it up.”
 - “After reading the FDA part, it seems that the product is not really good as they claim.”
- Many do not believe the information when seeing a “D”
 - “The label is covered by messages about the healthy nature of the product, yet the FDA gives a D rating. This made me wonder about the actual health benefits of the product.”
 - “Why is there little scientific evidence to support the health benefits of this product? Are they unhealthy although they say that it reduces the risk of ...”

[Conclusions]

- Only level D can be differentiated from other levels
- Visual aid (report card) helps consumers distinguish claim levels
- Future studies and other research questions
 - Qualitative studies: to find a more distinct disclaimer
 - Dual/synergistic health benefits and disclaimers

[Thanks]

- Hooker.27@osu.edu
- fst.osu.edu/ifafs