

Front-Panel Health Claims: When Less is More*

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Abstract

Instead of focusing on *whether* consumers process product health claims, there is growing interest in *how* consumers process these claims. This article examines how the length of a front-label claim influences the nutritional beliefs and evaluation of a product when used in combination with complete back-label information. The results indicate that the presence of a shorter health claim on the front of the package (in combination with a more complete claim on the back) leads a person to generate more attribute-specific thoughts about the product and fewer general evaluative thoughts compared to longer health claims. These shorter health claims also led to more favorable beliefs about the product and to a more positive image of the product. This article concludes with a discussion of the implications of the findings for policy makers, consumers, and researchers.

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How much nutritional label information is “too much”? There is much debate on how the amount and type of product information on a label might influence nutritional beliefs and purchase patterns (1). Some researchers have empirically shown that a miscomprehended nutrition label or one containing too much information can decrease the accuracy of one’s judgments about products (2; 3; 4). Other researchers argue that more information can instead lead to better understanding and willingness to purchase the product (5). Because consumers can make inferences from small amounts of product information (6), it may be the case that a small amount of label information can still go a long way in influencing the effectiveness of a label.

In this article, we investigate how different amounts of information on the front-panel of a package – when combined with a complete health claim on the back-panel – can influence one’s processing of a health claim. Because it is known that nutrition health claims on the front-panel of a package influence consumer buying habits (7), our research question then becomes one of *how much* front-panel information is needed to enhance persuasiveness (when combined with the complete nutritional details on the back-panel).

The purpose of this research is twofold: 1) To examine whether the length of a health claim on the front-panel of a package influences a person’s processing of nutritional information, and 2) to identify whether or not shorter claims on the front of a package provide more persuasive and motivating information when accompanied by a more complete health claim on the back-panel of a product. These two fundamental questions are of interest to policy makers, consumers, researchers, and to manufacturers. Providing the appropriate level of health information can influence understanding, attitudes, and compliance. Consider soy, which received approval for

the most recent of the FDA health claims.¹² In considering the appropriate health claim, an important issue was how this claim should be worded on packages. While some believed a longer, more complete health claim would be most accurate, others believed a shorter claim would be more easily processed and understood by consumers. Knowing how to best present such health-related information can make the difference between nutrition information that influences people or is ignored by them. In examining the health claims for soy, we are offered a relevant opportunity to field test how front and back labels may interact to influence consumers.

BACKGROUND

Past research indicates that labeling can influence a person's perceptions, preferences, prior expectations, and post-trial evaluations of a product. Such research has examined what influences whether a consumer examines and understands the information in a product label (1). A person's individual characteristics (such as product knowledge, awareness, familiarity, skepticism, motivation, and health status), as well as the information format and content of the label contributes to how they use the nutritional information found on packages (8).

We are interested in how the presentation of health claims on labels influences how they are processed and the extent to which they influence beliefs. While excessive information can be distracting, too little information can lead people to simply form unfounded inferences from the product's packaging (6). As such, a trade-off can occur between the length of the message and the possibility of an incorrect interpretation by a consumer (9). Moreover, additional informa-

¹ Paragraph 21 CFA 101.82(c)(2)(i) of the regulation specifies what elements must be included in the soy protein/heart disease health claim statement and some specific things that the claim may not include. While manufacturers are free to craft their own claim statements consistent with these requirements, the regulation also provides a couple of model claim statements as examples of suitable statements (at 21 CFR 101.82(e)).

tion (such as that on the back of a package) may not be sought out by people who have either limited time, attention, or interest (10).

One solution may be to combine abbreviated health claim information with more complete information. If people view front-panel information as summary information (13), the presence of simplified shorter claims on the front-panel may help health claims be more easily processed and more persuasive without leading consumers to overly exaggerate the claims or the efficacy of the product.

A person's processing of such a health claim should be reflected in the types of thoughts (or cognitive responses) he or she generates when examining the package. When shown a product and asked to comment on it or to consider it, a person who either ignores the health claim or who does not understand it is more likely to make general evaluative statements about the product ("it's good" or "it's bad") compared to someone who reads and understands the claim.

Someone who reads and understands a claim should be more likely to make more specific attribute-related comments (such as "it is really filling," or "it has a bad aftertaste"). That is, a person viewing a short health claim should be more likely to generate attribute-specific thoughts and less likely to simply make general evaluations compared to a person who ignores the information because it is overly complex. It is generally accepted that people who generate a higher number of attribute-specific thoughts have been more involved with processing the message than those who instead generate general thoughts (Sujan 1985). When these attribute-specific thoughts are supportive of the claim (in contrast to counter-arguing the claim), this leads to greater levels of persuasion (12).

If a shorter claim is more likely to be either read and understood compared to a longer more

² An acceptable claim would be in the following format: "25 grams of soy protein a day, as a part of a diet low in saturated fat and cholesterol, may help reduce the risk of heart disease. A serving of this product provides x grams of

complex claim, this should be reflected in the statements one makes about the product. We hypothesize:

H₁: In comparison with a longer front-panel claim, a shorter claim will . . .

- a. generate a greater number of specific attribute-related thoughts.
- b. generate a smaller number of general evaluative thoughts.

Roe et al (7) used eight health claims of varying formats (length and wording) and found that front-panel health claims enabled hurried or uninvolved consumers to truncate their information search after reading the front-panel. They suggested that people appear to view package label information on the front-panel as a favorable summary of the product and, as such, give more weight to the front-panel information than to the side-panel or back-panel nutrition fact information. Insofar as the specific attribute-related thoughts one generates are favorable toward the product, they should result in favorable beliefs about the health benefits of the product. Thus, we expect:

H₂: In comparison with a longer front-panel claim, a shorter claim will generate more favorable beliefs about the product.

METHOD

The objective of this study is to examine how the length of front-panel health information influences how actual consumers process health-label information and form beliefs about a product. To do this we professionally modified the package of a commercially available soy burger. In the upper right hand corner of one package, a

soy protein”

complete (long) health claim³ was provided in black with a light yellow background while an abbreviated (shorter) health claim was provided in the same place on the second package. Both claims were printed in 12-point Palatino font on a yellow background. Both packages had complete health claims on the back of their package which were boxed in a light yellow background on the bottom central portion of the box.⁴ The short claim stated “Soy protein may reduce the risk of heart disease.” The long claim stated “25 grams of soy protein a day, as a part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease.” The claim on back was similar to the long claim but also added “A serving of Harvest Burger provides 28 grams of soy protein.”

Participating in the experiment were 118 shoppers (63% female; average age 31.2) at a grocery store in central Illinois. A small table was set up in the store, and when people approached the table, they were asked if they would evaluate a new product that was coming out on the market. Approximately 70% of the people who were asked to be in the study complied. The study was conducted in on eight afternoons (from 3:00 to 6:00 on Mondays through Thursdays) over a 2 week period.

After agreeing to be involved in the study, shoppers were told they would be asked a variety of questions about the product. They were then randomly given one of the two packages of soy-burgers. Following their investigation of the product’s package (10-40 seconds), they were given a clipboard and a booklet that asked them to write down their thoughts and feelings about the product, and which then asked them to evaluate a number of health-related statements about the product by indicating whether they agreed or disagreed on a 9-point scale (1= strongly disagree; 9=strongly agree).

³ It should be noted that the placement of a health claim statement is not mandated by regulation, and it may be placed anywhere on the food package. Food labeling regulations do mandate that wherever the claim is placed, all required information is to appear in one place without other intervening material (21 CFA 101.14(d)(2)). There is a provision for using front-panel “short statement” of the form “See back-panel for more information.”

⁴ This study also collected data from a third group of people who served as a control condition. In the first week, this group was given a box with no health claim and asked the same questions that were asked of our two target groups. In the second week of the study, this third group of people was asked these questions without the benefit of having seen any box for the product. For brevity, these data are not reported here, but an earlier working paper is available from the authors.

One way to measure how people react to package labels is to have them write down any and all thoughts and feelings that came to mind as they read the label. Each of these thoughts or feelings can then be coded as to whether they are attribute-specific or are instead more general or evaluative (11). Attribute-specific thoughts (such as “soy helps reduce heart disease” or “this product has 20 grams of soy in it”) are thoughts that involve the restating or the processing of a attribute-related fact. General evaluative thoughts (such as “this looks good” or “I think I’d try it”) make no explicit reference to attributes or to health consequences, but tend to be summative.

Two coders categorized the written thoughts (cognitive responses) of the shoppers for each of the four different front-panel conditions. Based on Sujana (1985), the thoughts that consumers had written after viewing the products were coded based on their subject matter and based on whether they represented general evaluations about the product or whether they mentioned specific attribute-related thoughts. Two graduate students who were blind to the purpose of the study and to the nature of the manipulation coded the thoughts. They were in agreement with 88.5% of the responses, and disagreements were resolved through discussion.

RESULTS

Recall that H_1 predicted that short claims on the front-panel would lead people to generate a smaller number of general evaluative thoughts and a greater number of attribute-specific thoughts compared to longer claims. Consistent with this, there was a basic interaction between the length of the claim people saw and the type of thoughts they generated ($F_{3,68} = 4.03, p < .05$). The differences between attribute-specific thoughts and general evaluative thoughts are illustrated in Figure 1. Consumers who saw a short claim on the front-panel generated 0.4 attribute-specific thoughts and 0.9 general evaluative thoughts. In contrast, consumers who saw a long claim gen-

erated 0.2 attribute-specific thoughts and 1.2 general evaluative thoughts. Using Sujan's (1985) analysis procedure of comparing the relative totals of general thoughts minus attribute-specific thoughts indicated that those who saw the short claim had a more balanced style of processing than those seeing long claims (0.5 vs. 1.0; $t = 2.19$; $p < .05$).

----- Insert Figure 1 around here -----

The one-tailed t-test results presented in Table 1 indicate that shoppers generated more favorable beliefs about the product when they read a short claim on the front-panel compared to a long claim. Short claims generated more favorable ratings as to how beneficial for health ($t = 2.44$; $p < .05$), how appealing ($t = 1.91$; $p < .05$), and how low in saturated fat ($t = 1.69$; $p < .05$) the product was perceived. These results support H_2 .

----- Insert Table 1 around here -----

CONCLUSION

We have examined a question of emerging importance to researchers, consumers, and policy makers: How does the length of a claim on the front-panel influence health-related beliefs about a product? These results suggest that the presence of short health claims on the front-panel of a product may generate attribute-related positive thoughts and help communicate beneficial aspects of the product. Our results also suggest that people generate more positive inferences from short claims than from long claims on the front-panel. This suggests that short claims on the front-panel may provide people with more understanding of the attributes or benefits of the product.

Before we can draw specific conclusions from this study, we need to note how the limitations of the research design constrain the generalizability of the findings. Because the key manipulation (length of claim) was operationalized in a obtrusive shopping context, we did not indirectly monitor how shoppers process information on the front and back-panel; its effect in a more rigorous market context still needs to be confirmed. For example, the effect of claim length shown in this study needs to be reconfirmed since we did not exert time pressure on shoppers.

Policy makers may find it interesting that in this study, short claims on the front-panel generated stronger beliefs than did longer claims. If a short health claim on the front-panel provides reasonable and relevant information, it may be better understood and believed by people. It has been shown that many people limit their information search to the front-panel [13] and longer health claims on the front panel tend to be less fully processed than shorter claims. Thus, policy makers can accomplish their purpose of consumer education and people thus can benefit from the presence of a shorter health claim on the front-panel.

Second, these findings may extend to the communication of health benefits of other types of products. With the presence of a shorter claim on the front-panel, marketers may increase the persuasiveness of a product's claim. Thus, the use of short claims on the front-panel may provide people at the point-of-purchase with another type of promotional message that a consumer's initial perception of a product might be anchored on.

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Table 1
The Influence of Front-Panel Claim Length on Ratings of Product Beliefs

Product Rating	Front-panel Condition (Ratings: 1=low; 9=high)		
	Short Claim	Long Claim	One-tailed t-test
Beneficial for health	6.8	5.9	2.44**
Appealing	4.6	3.5	1.91**
Low in Saturated Fat	7.3	6.7	1.69**
Helps Lower Risk of Cancer	5.4	4.7	1.39*
Beneficial for nutrition	6.8	6.2	1.37*
Low in Fat	7.0	6.6	1.14
Helps Reduce Heart Disease	6.7	6.3	1.02

* p<.10; **p<.05

Figure 1.**The Influence of Front-Panel Claim Length on Information Processing**