
**U. S. Food and Drug Administration
Center for Food Safety and Applied Nutrition
Consumer Impacts of Health Claims
January 1997**

Consumer Impacts of Health Claims: An Experimental Study

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EXECUTIVE SUMMARY

The purpose of this experimental study of health claims was to evaluate, in a controlled setting, some of the model health claims presented in the Food and Drug Administration (FDA)'s 1993 regulations as well as several alternatives suggested by the Keystone National Policy Dialogue on Food, Nutrition, and Health to improve the communication effectiveness of health claims. In the present study, eight different executions of a product-appropriate health claims were examined for each of three different food products to evaluate the impacts of communication devices such as message length, placement and endorsements on several practically important aspects of consumer experience with health messages on food labels: attitudes toward the product, perceptions of product health benefits, and label reading behavior.

Respondents were given a realistic mock-up of a product package, and then answered a series of questions about the product, its possible health benefits and its packaging. The package was available for inspection throughout the interview. The procedure was repeated three times so that every respondent saw one example of the three different products (raisin bran cereal, lasagna frozen dinner, strawberry yogurt). Each package label embodied one of ten possible label conditions; eight different versions of a product-appropriate health claim, a condition containing only the product-appropriate nutrient content claims (Content) and a condition with neither a health nor a nutrient content claim (Control). The eight versions of health claims consisted of four different presentation styles, each with a long/short version of the health claim. The generic presentation style was based on the current style for approved health claims, a statement of the diet-disease relationship without attribution or endorsement. Two presentation styles involved some form of endorsement; in the NIH style the health claim was stated as a recommendation from a reputable public health organization such as the American Heart Association or the National Institutes of Health. In the FDA style the generic claim was accompanied by a logo certifying that the claim had been approved by the FDA. The SBP (see back panel) presentation style had a short form of the generic claim on the front and a note to see the back panel for additional information. In the SBP-Long condition there was additional health claim information on the back panel, but in the SBP-Short condition there was no additional health claim information on the back.

Experimental conditions (product, order of presentation, label condition) were appropriately randomized and counterbalanced among participants to avoid confounds between main effects.

The Keystone Dialogue Group concluded that the appropriate standard for evaluating the effectiveness of health claims was that they be "compelling, but not misleading." Such a standard combines the manufacturer's interest in making the product appear more attractive, and more likely to be purchased, with the nutrition educator's interest in assuring that consumers do not attribute exaggerated benefits to

the product that may lead consumers to make unwise or inappropriate dietary choices, the "magic bullet" effect. Health claims that meet the "compelling, but not misleading standard" are presumed to help consumers achieve healthier diets

To address the concerns of the Keystone Dialogue the study utilized two types of measures. Measures of attitudes towards the product, (e.g., purchase intentions, ratings of product healthfulness, belief that some people in particular would benefit from eating the product) were used as indicators of "compellingness". The impacts of label condition on perceptions of product health benefits and nutritional characteristics were assessed by a series of context-specific accuracy measures based on both open-ended questions about perceived product health benefits and ratings of specific health effects and nutrient characteristics attributed to the product. Context-specific accuracy measures distinguished between perceived characteristics that follow from message points explicitly mentioned on the front label of the product package (i.e., direct hits) and those that might be true about the product, but were not mentioned on the front label, and those that were more fanciful or even incorrect.

In addition, the study included a third type of measure, label reading behavior, based on interviewers' observations of which part of the package (front or Nutrition Facts panel) respondents were looking at as they answered the interview questions. This measure provided an indication of how health claim statements on the front of the package influence information search.

The analysis of results was based on five hypotheses that address both general and specific questions about the consumer impacts of health claims:

Hypothesis 1: Content claims communicate positive attitudes about the product more effectively and communicate health information about the product more accurately than no claim at all.

Hypothesis 2: The average health claim communicates positive attitudes about the product more effectively than a content claim and communicates health information about the product more accurately than a control label.

Hypothesis 3: Short health claims communicate positive attitudes about the product more effectively and communicate health information about the product more accurately than long health claims.

Hypothesis 4: Health claims with endorsements communicate positive attitudes about the product more effectively and communicate health information about the product more accurately than non-endorsed claims.

Hypothesis 5: Split message health claims communicate positive attitudes about the product more effectively and communicate health information about the product more accurately than non-split claims.

The study findings were complex and not easily summarized. The attitudinal effects of health claims were particularly surprising. Product-appropriate health claims had no effect, a positive effect, or a negative effect on respondents' attitudes toward a product depending on the particular product, the perceived plausibility of applying the health claim to that product, and whether the health claim provided "new" information. A claim that provided information that the respondent did not already know about the product seemed to have a positive effect on attitudes toward that product. A claim that provided no new information, but seemed plausible for the product, seemed to have no effect. A claim that provided no new information, but which seemed implausible, produced negative reactions toward the product. The complicated interplay between what consumers already knew about the product, their

judgments about the propriety of the product bearing a certain health claim, and the ability of the claim to be compelling, suggested that consumers did not assume that health claims on product labels fulfilled a public health information function. Rather it appeared that they applied critical standards to health claims on food labels analogous to persuasion contexts such as advertising.

The contributions of specific devices to the compellingness of health claims were relatively modest and equally liable to this kind of critical consumer analysis. The FDA endorsement of health claims tended to have a negative impact on consumers. Split-message presentations were more compelling on the yogurt package, which was small and densely printed, than they were on the cereal package, which was large and had ample space for messages. Short messages worked best on the cereal package, where the alternative long health claim was very long.

The communication effects of health claims were also surprising. Health claims appeared to have limited ability to communicate information of educational value about the products' health benefits. More than twenty percent of respondents did not acknowledge that a product had any health benefits even when the package carried an explicit health claim. Less than forty percent of respondents recognized that there would be distinctive product health benefits for certain kinds of people even when such a message was a major element of the health claim on the product package. Fewer than 20 percent of these respondents (less than ten percent of the sample) indicated that they had read and/or correctly understood the information about the risk group who would be most likely to get a health benefit from the product.

Respondents' perceptions of product health benefits seemed to be based largely on prior beliefs about the type of product rather than on specific information provided by the health claim. Health claims increased the likelihood that respondents would repeat or "playback" the key message points from the health claim when asked about the product's health benefits but this increase in perceived accuracy of product health benefits was associated with certain costs. As a consequence of seeing a health claim on the front of the package, consumers were less likely to acquire other relevant information from the product label about the healthful characteristics of the product. Health claims also led consumers to believe that the product was likely to have positive health effects that it did not have. The effect of health claims on label reading behavior was to reduce the likelihood consumers would read the nutrition information on the back of the package, which may explain why health claims appeared to inhibit the acquisition of information from the back of the package. The pattern of findings makes it hard to conclude that the impact of health claims is to produce more accurate perceptions of products' health benefits.

There was no indication from the study findings that short health claims on food labels encouraged inappropriate or exaggerated beliefs about products' health benefits compared to long health claims. In fact, the dominant tendency for most respondents seemed to be to avoid attributing disease-specific effects to the foods. Similarly, message devices such as endorsements or split presentations seemed to have little impact on the communication effectiveness of the health claims.

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Hypertext updated by dms, 01/16/97