THE IMPACT OF ADVERTISING CLAIMS ON PRODUCT PURCHASE DECISIONS CONCERNING CONSUMERS' HOPE

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ABSTRACT

This study examines the effects of two types of claims in functional food advertisements on a consumer's hope and the relationship between a consumer's hope and his evaluation of the advertised product. The results reveal that health claims trigger a higher hope compared to nutrition information, and that a higher hope results in a more favorable evaluation. This study also examines the effects of a consumer's nutrition knowledge. The results indicate that a more knowledgeable consumer generates a higher hope than a less knowledgeable consumer regarding ad claims. However, health claims have a stronger effect on less knowledgeable consumers than on more knowledgeable consumers. Managerial implications and directions for future research are also discussed.

Keywords: *advertising, consumer's hope, nutrition knowledge, health*

INTRODUCTION

Marketing is the process of identifying customer needs and determining how best to meet those needs. Marketing refers to preparing a product for the marketplace. In contrast, advertising is making your product and service known to people within that marketplace. Thus, advertising is the exercise of promoting a company and its products or services through paid channels. In other words, advertising is a step in the marketing process. An advertising claim is a statement made in advertising about the benefits, characteristics, and/or performance of a product or service designed to persuade the customer to make a purchase.

Hope is ubiquitous in marketing contexts and is particularly relevant for advertising.

Marketers induce hope from consumers (e.g., promoting the idea that functional food can decrease the risk of disease or enhance physical function) to make their products appealing to consumers. MacInnis and Mello (2005) suggested that consumers' hopes triggered by marketing tactics will influence consumers' brand attitudes, satisfaction, and other related variables. Previous studies (Andrews et al. two thousand; Kozup et al. 2003) have estimated the effect of advertising in the food industry on consumers' behaviors through consumers' product attitudes and purchase intentions. Furthermore, a number of studies (Jacoby et al. 1977; Levy et al. 1993) have indicated that consumers have problems understanding product-related claims in food advertisements. Collins and Loftus (1975) suggested that the level of nutrition knowledge plays a

vital role and affects how a consumer processes claims in food ads. However, there have been few empirical studies investigating the relationship between a consumer's hope and their evaluation of the advertised product. This study employs an empirical approach to examine the effects of two types of food ad claims on consumers' hopes and their evaluations of the product. This study also examines how a consumer's nutrition knowledge moderates the relationship between ad claims and the consumer's hope.

The effect of advertising claims on hope

According to Levidge and Steiner (1961process), marketers could convey information to consumers through means of advertisement. Moreover, scholars found that consumers think that the product is healthy when health claims or nutrition information are presented on the products (Roe, Levy and Derby, 1999; Williams, 2005). If different ad claims had a great effect on consumers' evaluations of nutritional value (Kozup et al, 2003), consumers can imagine the health outcomes that they yearn for after consumption of the promoted product.

Consumers desire healthier bodies and want to avoid having serious diseases nowadays. Additionally, health claims convey that the product would "enhance specific physical function" and "reduce the disease risk" when people consume it. The article uses two methods to view the effect of health claims on consumers' hope.

Health claims which include enhancement of physical function and reduction of disease risk will assist consumers in imagining their future outcomes, such as healthier lives and fewer disease-related risks. Consumers will evaluate nutritional value and perceive the risk of disease associated with consumption. Thus, the claims will increase individuals' assessment that a goal-congruent outcome will occur, and in turn, increase the possibility of hope.

When appraising health claims, consumers would notice the importance of health outcomes and yearn for decreasing disease risk as well as maintaining a specific function of the body to enhance the goal congruency of the outcome. Additionally, the messages of claims increase the importance by perceived deficiencies between the current and desired health condition, thereby, stimulating consumers' hope. Besides, Kozup and his associates (2003) also found that the availability of nutrition information also is associated with the same general pattern of results as well as health claims, but the effect of nutrition information on hope will be decreased because of the lack of specific disease information. Thereby, the nutrition information would generate the relevance between the disease and a specific product and thus, enhance yearning for a goal-congruent outcome, though the information does not expose the specific disease issue. This article extrapolates that consumers' hope will be triggered after reading claims in functional food advertising. Additionally, the health claims will have a stronger influence on consumers' hopeful thinking. On the discussion above, we posit the following hypothesis:

> *H1: Compared to the nutrition information, the health claims in functional food advertising will evoke higher hope.*

Nutrition knowledge

Consumer knowledge can be defined as the information stored in memory that's relevant to the purchase, consumption, and disposal of goods or services (Blackwell, Miniard and Engel, 2006). What we know or do not know strongly influences our decision-making processes. In the food industry, prior research indicated that consumers show their interest in nutritional information; however, they lack the necessary knowledge and skills to effectively comprehend this information (Jacoby, Chestnut, and Silberman, 1977). In addition, the nutrition research indicated that consumers, in general, had experienced many problems in understanding nutritional information (Andrews, Burton and Netemeyer, 2000a). According to spreading activation theory, (Collins and Loftus, 1975) the knowledge would help individuals build the nodes in a semantic network and the intersection between them, and thus increase the ability of memory searching. Thereby, nutrition knowledge levels may play a crucial role in how consumers process nutritional information in advertisements (Andrew, Netemeyer and Burton, 1998). Consumers with greater knowledge structures and networks can better use expanded amounts of information and encode them in terms of specific nutrient content (Andrew, Netemeyer and Burton, 2000). Additionally, the previous research found that highly knowledgeable people would use other criteria (e.g., experience) rather than promoted nutrients in evaluating the nutritiousness of advertised products (Brucks, Mitchell and Staelin, 1984). Shimp (1983) also indicated that prior knowledge might help consumers avoid accepting incorrect implications from product advertising.

Companies try to provide promoted claims to tell people how to achieve their goals. Accordingly, the advertising can reveal secrets, or previously unknown steps to achieve consumers' goal-congruent outcomes. According to the hope model (Snyder, 2000), pathway thinking enhanced hopes by affecting perceptions of possibility. When highly knowledgeable consumers are exposed to health claims or nutrition information in ads, they would use prior knowledge and utilize expanded amounts of information rather than promoted nutrients in evaluations. Conversely, lower-knowledge consumers whose lack of generalized knowledge (Cowley and Mitchell, 2003) causes them to think that these messages provide another pathway or tip to achieve their goal-congruent outcomes, thus evoke hope for those consumers. Moreover, this paper predicts that the health claims which include enhanced function and reduction of disease risk will evoke higher hope when consumers have lower nutrition knowledge. Based on this discussion, the article expects that：

H2: Compared to consumers with high nutrition knowledge level, the relationship between ad claims and hope is stronger for those with lower nutrition knowledge level.

The effect of hope on product attitude

Attitude refers to an individual's relatively consistent evaluations, feelings and dispositions toward an object or idea (Kotler and Armstrong, 2001), and thus makes individuals

generate a liking or disliking thought. Additionally, attitudes are the evaluative judgments and will influence consumers' purchase and consumption intentions. Therefore, companies are very interested in understanding about consumers' attitudes toward their products. Consequently, the goal of most advertising is to form positive product attitudes based on the claims presented in the advertisements (Munch, Boller and Swasy, 1993).

In order to explain consumers' processing of advertising claims and attitude formation, previous research often relies on multi-attribute attitude model (Fishbein and Ajzen, 1975). A multi-attribute object (e.g., product or brand) is viewed as a bundle of attributes resulting to costs and benefits of differential desirability to people (Wilkie and Pessemier, 1973). Meanwhile, beliefs about a product's attributes are important because they determine the favorability of one's attitude toward products. Fishbein's model was written, for example, where A_0 =the overall attitude toward the object o, b_i =belief about attribute i in relation to the object, and e_i =the evaluative consequence of the belief (Rossiter and Percy, 1980). Therefore, the model indicated that product attitude is based on the summed set of beliefs about the product's attributes weighted by their evaluation of them (Wilkie and Pessemier, 1973). According to this model, a consumer forms beliefs about whether product attributes and performance results are true and desirable, and creates a product attitude consistent with the beliefs and emotional reactions. Thus, product attitude is defined as constituting the consumer's overall degree of affect or liking for the product.

The effect of hope on product attitude

The emotion generated by an advertisement would impact consumers' attitudes toward a product and form a brand belief. Moreover, Alcock (1995) indicated that when people are yearning for a goal-congruent outcome, they are more vulnerable to believing what they want to believe. Therefore, consumers are willing to believe and are persuaded by any message they can get to fulfill their yearning. Food manufacturers can evoke consumers' beliefs and then influence their product attitudes by exposing different types of claims in the advertisement.

As indicated in the illustration above, emotion also is an important factor for consumers in decision-making. When a strong sense of hope by exposing ad claims, we expect consumers are more likely to encode information that suggests that the outcome is possible. In this way, consumers will tend to believe the advertisements and are more vulnerable to trusting the messages which can fulfill their desired goal. Forming consumers' beliefs would impact the favorability of their attitude toward the product. Therefore, the hypothesis proposes:

H3 ： Compared to consumers with lower hope, those with higher hope will have more favorable product attitudes.

The effect of hope on purchase intention

Many surveys included purchase intention in such areas as new food products, purchased packaged foods, automobiles, and capital equipment (Morrison and Donald, 1979). Furthermore,

Whitlark, Geurts and Swenson (1993) indicated that sales forecasting provides a basis of estimating profits associated with implementing a particular strategy. A common forecasting method used by companies is asking customers about the likelihood of buying the product. For example, companies ask customers by using probability statements, like "probably will buy" or "definitely will buy a given product" in order to forecast sales of new products or modified products (Whitlark, Geurts and Swenson, 1993). To sum up, the definition of purchase intention represents what consumers think they will buy. Using consumers' purchase intention as a predictive measurement, companies can forecast their sequence behaviors (Morwitz and Schmittlein, 1992). In this study, we will examine how marketers pursue different claims in food advertising to influence consumers purchase intention by evoking their hope.

The effect of hope on purchase intention

Previous researchers found that purchase intention is positively associated with perceived value (Dodds, Monroe, and Grewal, 1991; Grewal, Krishnan, Baker, and Borin, 1998). When examining the effect of hope on consumers' intentions, this paper will find the link between hope and consumers' perceived value with a given product, in turn, to evoke consumers' intentions.

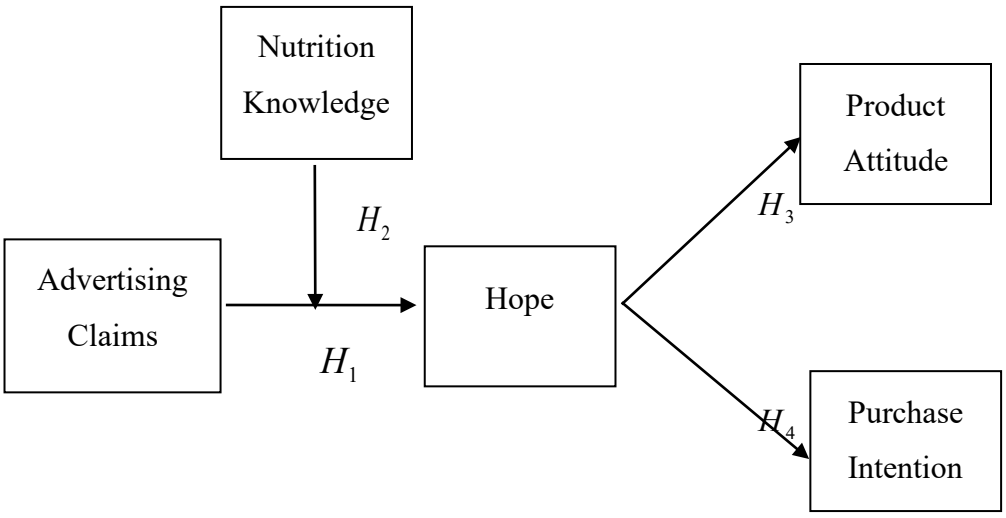
Maclinns and Mello (2005) noted that consumers would experience the higher value of products or services depending on the stronger intensity of hope. Moreover, studies posited that value is an evaluation of what consumers receive in an exchange versus what they give up (Dodds, Monroe and Grewal, 1991). Meanwhile, the purchase price has both external properties and internal representations that are derived from the perceptions of price, thus resulting in some meaning to consumers. Moreover, price is the indicator of the amount of sacrifice and the level of quality (Dodds, Monroe and Grewal, 1991). When consumers' hopeful thinking is stimulated by the nutrition information or health claims in advertising, consumers are yearning for the goal-congruent outcomes. The greater yearning associated with more intense levels of hope suggests that consumers are willing to bear whatever costs are necessary to achieve the outcome (Maclnnis and Mello, 2005). Hence, consumers will have higher perceived value for the product. On the other hand, perceived quality refers to a buyer who evaluates a product's cumulative value (Grewal, Monroe and Krishnan, 1998). The more important a person perceives a goal-congruent outcome, the greater the value is that is attached to its occurrence (Maclnnis and Mello, 2005). Therefore, hopeful consumers strongly desire the benefits which suggest that the outcome occurred would, in turn, to have highly perceived value. Therefore, the high perception of quality and less sacrifice results in high perception of value. Meanwhile, perceived value has its positive effects on consumers' purchase intention (Dodds, Monroe and Grewal, 1991; Grewal, Krishnan, Barker and Borin, 1998; Grewal, Monroe and Krishnan, 1998). To sum up, consumers have high purchase intentions to buy the product when they have strong intense levels of hope.

H4: Compared to consumers with lower hope, those with higher hope will have higher purchase intentions.

Research framework

Based on the literature review above, this study developed a research framework as shown in Figure 1. It was supposed that consumers' exposed to advertising that includes health claims or nutrition information will influence consumers' hope. Meanwhile, consumers' nutrition knowledge would generate a moderated effect on this causal relationship. Additionally, in the pre-purchasing stage, consumers' hope would influence their product attitudes and purchase intentions.

Figure 1 The Research Framework



Research hypotheses

Based on the discussion in previous sections, four hypotheses were developed in Table 1 :

Table 1 Research Hypotheses

Concept	Hypotheses
Effect of Ad Claims	H_1: Compared to the nutrition information, health claims in functional food advertising will evoke higher hope.
Moderating Role of Nutrition Knowledge	H_2: Compared to consumers with high nutrition knowledge level, the relationship between ad claims and hope is stronger for those with low nutrition knowledge level.
Effect of Hope	H_3: Compared to consumers with lower hope, those with higher hope will have more favorable product attitudes. H_4: Compared to consumers with lower hope, those with higher hope will have higher purchase intentions.

METHOD

Participants

The population used for this study was the public in attendance at a shopping center in Taiwan. Two hundred forty-six samples participated in the experiment with 224 valid questionnaires in our final analyses. The twenty-two questionnaires eliminated from analysis were from participants who failed to successfully complete the experiment. Table 2 shows the descriptive statistics of the valid sample.

Table 2 Characteristics of the Participants

	Frequency	%		Frequency	%
Gender			Spending per Month		
Male	106	47.3	Under NT$10,000	187	83.5
Female	118	52.7	NT$10,001 ~ 15,000	30	13.4
Consumption Experience with Yogurt			NT$15,001 ~ 20,000	6	2.7
Never	7	3.1	NT$20,001 ~ 25,000	0	0
Seldom	98	43.8	NT$25,001 ~ 30,000	1	0.4
Sometimes	107	47.8	Over NT$30,001	0	0
Often	11	4.9	Consumption Frequency During Last Month		
Always	1	0.4	0 times	104	46.5
Health Condition		Mean*	1 ~ 5 times	108	48.2
Eat too much in one meal		3.01	6 ~ 10 times	10	4.5
Lack of appetite		2.23	11 ~ 15 times	1	0.4
Diarrhea		2.39	16 ~ 20 times	1	0.4
Poor digestion		3.21	21 ~ 25 times	0	0

*We calculated the mean based on 5-point rating scales, where 1 = “Strongly Disagree” and 5 = “Strongly Agree”.

Products and Advertisements

The experiment stimulus was a printed advertisement promoting a new strawberry yogurt made by a fictitious company. We chose yogurt as the target product because it is qualified for presenting health claims and nutrition information, and it is familiar to most participants. Roe et al. (1999) indicated that familiar products may minimize potential confounding effects associated with the participants' learning about a new product. Additionally, as a functional food, yogurt has multiple benefits, which allows the participants to imagine different health outcomes.

All ads contained the same product information except for the claims. Referencing the actual ad of a yogurt product in *Environmental Nutrition* (2006), the nutrition information was presented to participants as: "*There is 1 gram of fat and over 200 billion units of acidophilus per 100 grams of strawberry yogurt*." On the other hand, the health claim was: "*Rich acidophilus bacteria can decrease the risk of intestinal disease and improve your digestive system. Lower fat levels and calorie count may help you maintain a well-balanced figure*."

Variables and Measurements

The dependent variable in this study is ad claim, while the independent variables are a participant's nutrition knowledge, product attitude, hope, and purchase intention. Four control variables related to an individual's health consciousness were also measured: health environment sensitivity, physical fitness, personal health responsibility, and nutrition and stress management.

Hope

MacInnis and Mello (2005) argued that hope level is equal to the product of an individual's yearning and possibility. They developed six indicators for possibility and three categories of yearning: desire, importance, and deficiency. The current study uses eighteen items to measure a participant's hope with 5-point rating scales that ranged from 1 for "Strongly Disagree" to 5 for "Strongly Agree". See Appendix A for these items.

Nutrition knowledge

We measured a participant's nutrition knowledge based on the mean of correct answers from a 15-item questionnaire (Andrews et al. 1998, 2000). Higher scores indicate a greater level of nutrition knowledge. Appendix B shows four of the fifteen items.

Product attitude

The current study uses 3 items to measure a participant's product attitude (Howard and Gengler 2001; Berens et al. 2005) with 5-point rating scales again ranging from 1 for *"*Strongly Disagree*"* to 5 for *"*Strongly Agree*"*. See these items in Appendix C.

Purchase intention

A participant's purchase intention was measured with a 3-item questionnaire using 5-point rating scales, where 1= *"*Strongly Disagree*"* and 5= *"*Strongly Agree*"* (Grweal et al. 1998; Kozup et al. 2003). See these items in Appendix D.

Procedure

Participants read a magazine and saw an ad for a new product. Each participant was randomly assigned a document containing the ad and a questionnaire. The participant's answers were rated with 5-point rating scales ranging from one for *"*Strongly Disagree*"* to 5 for *"*Strongly Agree*"*. The participants were then evaluated for their levels of nutrition knowledge. The content of the type of ads was identical.

Pretest

The sample consisted of twenty graduate students. SPSS was used to examine the reliability of three variables. We adopted the *t*-test to evaluate the effects of ad claims on respondents' hopes and used regression analysis to evaluate the effects of a respondent's hope on their product attitude and purchase intention. The ad claims did not significantly influence respondents' hopes (t=1.72, p= .10), but the means were in the desired direction. Additionally, participants' hopes significantly influenced their product attitudes (F=7.78, p= .01) and purchase intentions (F = 3.99, p= .06).

RESULTS

Reliability analysis

The participants answered a questionnaire containing eleven variables, including a participant's yearning, possibility, product attitude, purchase intention, health environment sensitivity, physical fitness, personal health responsibility, and nutrition and stress management. We measured the internal consistency of all variables through Cronbach's coefficient. The coefficients were greater than 0.6 for five variables: the participant's yearning, possibility, product attitude, purchase intention, health environment sensitivity, and physical fitness. However, the coefficients of a participant's personal health responsibility and nutrition and stress management were .287 and .488, respectively. Malhotra (2004) stated that a value of .6 or less generally indicated unsatisfactory internal consistency. Therefore, we removed a participant's personal health responsibility and nutrition and stress management from further analysis. Furthermore, we removed one item from the measurement of a participant's health environment sensitivity because its Cronbach's coefficient increased from .680 to .703 after we removed the item.

Hypotheses Testing

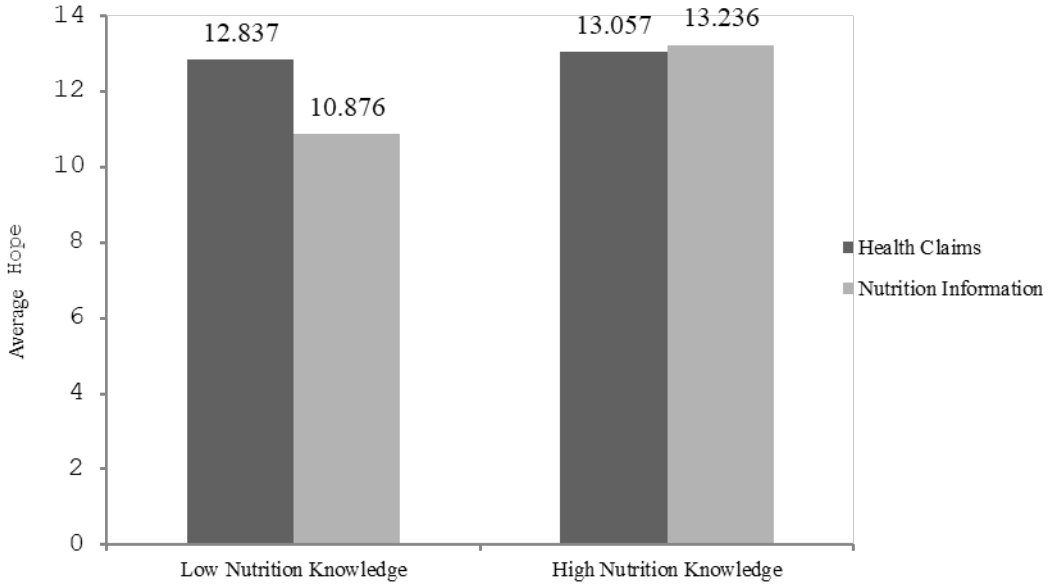
Effects of ad claims on participants' hopes

The average hope evoked by health claims (12.947) was greater than that evoked by nutrition information (12.056). The difference between the two average hopes was significant (F=4.233, p = .041), thus supporting H1.

Moderating effect of participants' nutrition knowledge

There were 110 participants with low nutrition knowledge and 114 participants with high nutrition knowledge. The average nutrition knowledge scores between the two nutrition knowledge levels were significantly different ($M_{\text{(high nutrition knowledge)}}$ =9.64, $M_{\text{(low nutrition knowledge)}}$=5.69, p< .001). We found a significant interaction effect (F=6.103, p= .014) between ad claims and participants' nutrition knowledge, indicating a moderating effect of a participant's nutrition knowledge on the relationship between ad claims and the participants' hope. A participant's nutrition knowledge affected his hope (F=8.877, p= .003). When reading health claims, participants with high nutrition knowledge had a higher average hope (13.057) than participants with low nutrition knowledge (12.837). As seen in Figure 2, among participants with high nutrition knowledge, their hopes were not significantly different between the two ad claims (t=-.322, p=0.748). However, among participants with low nutrition knowledge, their hopes were significantly different between the two ad claims (t=2.939, p= .004). These results support H2.

Figure 2 Average hope of participants with low nutrition knowledge and high nutrition knowledge, triggered by health claims and nutrition information, respectively



This study adopted simple linear regression to examine the correlation between participants' hopes and their product attitudes. The simple regression model was: $Y_1=\alpha_1+\beta_1 X$, where the dependent variable Y_1 is a participant's product attitude, and the independent variable X is the participant's hope. As seen in Table 3, the participants' hopes and their product attitudes were positively related (β_1= .086, p< .001). This correlation indicates that a participant with a higher hope has a more favorable product attitude. This result supports H3.

Table 3 Summary of Simple Regression Analysis for a Participant's Hope Predicting His Product Attitude towards the Advertised Product

	Coefficients	***t***	***p***
Intercept	2.396	13.023	.000***
X (Hope)	.086	6.061	.000***
Regression Statistics			
R-Square	.142		
R-Square (Adjusted)	.138		
ANOVA			
F	36.736		
p	.000***		

*p< .1, **p< .05, ***p< .01

The effect of participants' hopes on their purchase intentions for the advertised product

We adopted simple regression to examine the correlation of participants' hopes on their purchase intentions. The simple regression model was: $Y_2=\alpha_2+\beta_2 X$, where the dependent variable Y_2 is a participant's purchase intention, and the independent variable X is the participant's hope. As seen in Table 4, the participants' hopes and their purchase intentions were positively related (β_2= .107, p<.001). The correlation suggests that a participant with a higher level of hope is more willing to buy the target product than a participant with a lower level. This result supports H4.

Table 4 Summary of Simple Regression Analysis for a Participant's Hope Predicting His Purchase Intention for the Advertised Product

	Coefficients	***t***	***P***
Intercept	2.171	11.836	.000***
X (Hope)	.107	7.560	.000***
Regression Statistics			
R-Square	.205		
R-Square (Adjusted)	.201		
ANOVA			
F	57.148		
p	.000***		

*p< .1, **p< .05, ***p< .01

Moderating effect of control variables

This study also examined the moderating effects of two control variables: a participant's health environment sensitivity and physical fitness on the relationship between ad claims and participants' hopes. We employed two-way ANOVA for this analysis. As shown in Table 5, participants' health environment sensitivity and ad claims had strong interaction (F=3.833, p= .052). This suggests that a participant's health environment sensitivity influences the relationship between ad claims and the participant's hope. As shown in Table 6, personal physical fitness and ad claims did not have a significant interaction (F= .087, p= .769). Therefore, personal physical fitness did not influence the relationship between ad claims and participants' hopes.

Table 5 Two-Way ANOVA of Interaction between Ad Claims (A) and a Participant's Health Environment Sensitivity (HES)

	SS	*df*	MS	*F*	*p*
A	52.256	1	52.256	4.910	.028**
HES	60.585	1	60.585	5.692	.018**
A × HES	40.793	1	40.793	3.833	.052**
Error	2341.595	220	10.644		
Total	37389.373	223			

*p< .1, **p< .05, ***p< .01

Table 6 Two-Way ANOVA of Interaction between Ad Claims (A) and a Participant's Physical Fitness (PF)

	SS	DF	MS	*F*	*p*
A	47.446	1	47.446	4.363	.038**
PF	40.153	1	40.153	4.428	.036**
A× PF	.942	1	.942	.087	.769
Error	2392.346	220	10.874		
Total	37389.373	223			

*p< .1, **p< .05, ***p< .01

DISCUSSION

(1) The results demonstrate that health claims are more effective than nutrition information in evoking hope in consumers. These findings verify the suggestion of MacInnis and Mello (2005) that marketers should design a set of marketing strategies to stimulate consumers' hope.

(2) This study shows that nutrition knowledge has a moderating effect on the relationship between ad claims and consumers' hope. When consumers have high nutrition knowledge, there is no significant difference between their hope triggered by nutrition information and those by health claims, respectively. This finding is consistent with the findings of Brucks

et al. (1984), which indicated that more knowledgeable people use their experience and other information rather than the nutrition information presented in ads to evaluate the nutrition of the advertised products. However, this study shows that people with high nutrition knowledge have higher levels of hope than those with low nutrition knowledge. In addition, health claims effectively provide another pathway for less knowledgeable consumers to achieve their goal-congruent outcomes and, in turn, to evoke their hope.

(3) The results also show that consumers with higher levels of hope will have more favorable product attitudes and stronger purchase intentions. This finding suggests that effective elicitation of hope in marketing can improve consumers' evaluation of the advertised products.

IMPLICATIONS

Through consumers' hope, marketers can convey nutrition-related claims to target market segments and evoke consumers' strongly favorable feelings and willingness to buy the advertised products. This study not only verifies the effect of consumers' hope on their product evaluations, but also shows that research involving *"hope"* is necessary and has its value in marketing.

Implications for marketers

(1) Marketers should understand that hope is an important variable and can influence consumers' product evaluations. Hope stimuli in ads trigger not only a favorable product attitude, but also a strong purchase intention from a consumer. Therefore, marketers should not ignore the significance of the emotion of consumers' hope. Rather, they should utilize consumers' psychological thoughts to develop effective marketing activities. The results of this study also imply that marketing tactics, such as increasing yearning and turning impossibilities into possibilities, will affect consumers' appraisals and elicit their hope.

(2) Marketers in the food industry can use health claims in advertising as a marketing tactic. Marketers also need to focus on consumers with low nutrition knowledge. Less knowledgeable consumers can be influenced when health claims are presented. Therefore, marketers and regulators should ensure the correctness and validity of health claims, so that consumers will not be misled by incorrect or deceptive ones.

LIMITATIONS AND FUTURE RESEARCH

1) Lohmann and Kant (2000) indicated that the functional food industry promotes their products through different media types. In this study, we studied only the effects of print ads. Future research may be done to examine the influence of other media types on consumers.

2) This study adopted a laboratory experimental design to isolate the effects of the variables of interest. However, other crucial factors may also affect a participant's decisions. The entire process was also simulated in under thirty minutes. This period may have been too brief for participants to properly develop hope emotions.

3) Future research could extend the research scope to other stages of consumers' decision-making process. In this way, we may be able to extend our understanding of the effects of hope on different consumer-related variables. This would allow researchers to provide more valuable advice to marketers in different industries.

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APPENDICES

Appendix A Items Designed to Measure an Individual's Hope

Yearning

1. I really want to be healthy.
2. Being healthy and avoiding diseases are especially important to me.
3. I need a healthier body.
4. I really want to have a well-balanced figure.
5. I really want to decrease my risk of intestinal disease.
6. Having a well-balanced figure is particularly important to me.
7. Decreasing my risk of intestinal disease is especially important to me.
8. I need a well-balanced figure.
9. I need a healthier digestive system.

Possibility

1. I can have a healthy body.
2. Being healthy and decreasing my risks of diseases could happen.
3. I cannot be healthy. (Reverse)
4. I can keep a well-balanced figure.
5. I can avoid having intestinal disease.
6. Keeping a well-balanced figure could happen.
7. Having a healthy digestive system could happen.
8. I cannot keep a well-balanced figure. (Reverse)
9. I cannot decrease my risk of intestinal disease. (Reverse)

Related reference: MacInnis and Mello (2005)

Appendix B 4 of 18 Items Designed to Measure a Participant's Nutrition Knowledge

1. Saturated fats are usually found in:

(A) Vegetables and vegetable oils
(B) Animal products like meat and dairy
(C) Grain products such as bread and cereal
(D) None of the above
(E) Do not know

2. Which kind of fat is more likely to be a liquid rather than a solid?

(A) Saturated fats
(B) Polyunsaturated fats
(C) They are equally likely to be liquids
(D) None of the above
(E) Do not know

3. Which kind of fat is more likely to raise people's blood cholesterol level?

(A) Saturated fats
(B) Polyunsaturated fats
(C) Both
(D) None of the above
(E) Do not know

4. Which kind of fat is higher in calories?

(A) Saturated fats
(B) Polyunsaturated fats

(C) They are both the same
(D) None of the above
(E) Do not know

Related reference: Andrews, Netemeyer, and Burton (1998, 2000)

Appendix C Three Items Designed to Measure a Participant's Product Attitude

1. This product gives me a pleasant feeling.
2. My judgment of this product is favorable.
3. I personally find this product attractive.

Related reference: Howard and Gengler (2001); Berens, Cees B.M. van Riel, Gerrit H. van Bruggen (2005)

Appendix D Three Items Designed to Measure a Participant's Purchase Intention

1. I will purchase this product.
2. If I were interested in buying yogurt, the probability that I would consider buying this product is extremely high.
3. My willingness to buy this product would be exceedingly high if there were no differences in the price of various yogurts.

Related reference: Grweal, Krishnan, Baker, and Borin (1998); Kozup, Creyer and Burton (2003)