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Shopper Response to Front-of-Package Nutrition Labeling Programs: Potential Consumer and Retail Store Benefits

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Abstract

A myriad of front-of-package (FOP) nutrition labeling systems have been developed by both food retailers (e.g., Walmart, Safeway, Hannaford) and manufacturers (e.g., Kellogg's, General Mills) to help consumers identify more healthful options at the point-of-purchase. Given the uniqueness of these different approaches, two studies examine the effects of alternative FOP systems on shoppers' product evaluations, choices, and retailer evaluations. When a single food item is evaluated in isolation, both the reductive and evaluative systems had a positive effect on product evaluations. However, when several choice options are presented simultaneously in a realistic retail environment, the evaluative (reductive) system has a stronger (weaker) influence on product evaluation and choice. Results also show that FOP nutrition labeling systems have both direct and moderating effects on attitude toward the retailer and perceived retailer concern for shoppers. These retailer-related outcomes, in turn, mediate the effects of the labeling system on shoppers' intentions to patronize the retailer. Results suggest that FOP nutrition labeling may help retailers build a non-price competitive advantage.

Keywords: Front-of-package nutrition labeling; Consumer health; Obesity; Shopper marketing; Attribution theory; Food disclosures

Introduction

Shopper marketing is a popular and important phenomenon in today's retail environment. Whereas traditional *consumer* marketing focuses primarily on consumers and their consumption patterns, *shopper* marketing refers to those marketing activities that influence a shopper along the shopping cycle (Ailawadi et al. 2009; Shankar et al. 2011). This holistic marketing approach is rooted in the philosophy that opportunities exist in-store to turn shoppers into buyers, especially at the point of purchase, resulting in a "win-win-win" outcome for retailers, manufacturers, and consumers. Current estimates show that retailers and manufacturers spend $50–$60 billion annually on shopper marketing (GMA 2011), and expenditures on in-store advertising, design, and promotions are estimated to continue to grow over 20% annually (Knox 2009).

Shopper marketing is especially prevalent in the food industry. This may be attributable, in part, to the highly competitive nature of the business. Many retailers and manufacturers have long recognized the importance of being involved with health and wellness efforts, and have consequently implemented numerous shopper marketing initiatives that promote the health-related benefits of more nutritious foods at the point-of-purchase (Garry 2012). More specifically, one of the most popular ways to raise consumer awareness of the health benefits associated with the consumption of specific foods is through the use of front-of-package (FOP) nutrition labeling. This simplified in-store nutrition information movement has quickly gained momentum as a wave of unique, retailer-sponsored nutrition labeling systems such as Safeway's SimpleNutrition Benefit Tags, Hannaford's Guiding Stars, and Wegmans' Wellness Keys began to appear in supermarkets across the country. According to the Food Marketing Institute's 2011 "Food Retailing Industry Speaks" survey, nearly half (48.5%) of all surveyed retailers claimed to have some type of nutrition labeling program, twice the number in 2010. Another 15% state that there are in the process of implementing a labeling program (FMI 2011).

This proliferation of nutrition labeling systems has created an unprecedented diversity of health and nutrition icons, all

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competing for a space on packages and a share of shoppers' attention. However, given that FOP nutrition labeling is rarely consistent across retailers or manufacturers, identifying healthier food items at the shelf continues to be somewhat challenging for many consumers (Institute of Medicine (IOM) 2011). In fact, a recent survey reported that many consumers still believe it is harder to identify healthier products while shopping than to do their own taxes (International Food Information Council (IFIC) 2012). Thus, great opportunities exist for retailers to satisfy unmet consumer needs by implementing and refining in-store shopper marketing programs designed to assist consumers make more healthful purchase decisions. The preponderance of existing research on FOP nutrition labeling, though, has only focused on how it may influence consumers' *product* evaluations. To our knowledge, very little research has examined how these different labeling programs affect shoppers' evaluations of the participating *retailer.* As such, whether or not the implementation of a FOP nutrition labeling system can potentially benefit the retailer is uncertain.

Therefore, this research takes an integrated approach to the study of FOP nutrition labeling by considering its potential benefits for both the shopper and the retailer. The primary purpose of this research is to provide insight into how shopper marketing efforts associated with alternative FOP nutrition labeling systems affect consumers' evaluations, purchase intentions, and choices of foods that vary in terms of nutritional value, as well as consumers' evaluations of the retailer using the systems. This latter point is particularly important to retailers for two main reasons: (1) many retailers implement these types of labeling systems in order to differentiate themselves from their competitors on attributes other than price, and (2) such programs are only sustainable in the long term if they offer substantial benefits to *both* consumers and retailers (Shankar et al. 2011).

To explore these issues, two studies were conducted. In the first study, we compare how two commonly used FOP nutrition labeling systems influence evaluations of a single food item and affect shoppers' perceptions of the retailer. Study 2 examines how FOP nutrition labeling systems affect evaluations in a realistic retail setting in which multiple items are offered within a given product category. We draw from both attribution and comparative/non-comparative processing theories for predictions, and extend the findings from Study 1 to a broader domain of specific retailer-related outcomes in Study 2.

Conceptual development and hypotheses

Today, approximately 1 out of every 3 U.S. adults (35.7%) is obese, and more than two-thirds (68.8%) are either overweight or obese (Flegal et al. 2012). One approach used in an attempt to address this national crisis has focused on the provision of front-of package (FOP) nutrition labeling. Two influential trade organizations, the Grocery Manufacturers Association (GMA) and the Food Marketing Institute (FMI), will jointly spend more than $50 million to promote their "Facts Up Front" FOP nutrition labeling system. This system presents, on the front of the package, calories and three nutrients to limit (i.e., saturated fat, sodium, and sugars) drawn from the federally mandated Nutrition Facts Panel typically found on the back of packaged food products (FMI 2012a). We characterize this type of FOP labeling as "reductive" since a reduced amount of information is extracted from the Nutrition Facts panel and placed on the front of the package.

While the Facts Up Front program seems to be positioned to achieve widespread acceptance by the industry, it is not the only type of nutrition labeling system in use. Many other systems do not offer specific, objective nutrient information, but rather provide shoppers with an overall *evaluation* of a product's healthfulness. With most of these programs, a product qualifies for a FOP "evaluative icon" only if it exceeds predetermined nutritional guidelines. This enables shoppers to easily spot more healthful products by quickly looking for the icon. Some examples of these evaluative programs include the American Heart Association's Heart-Check Mark, the IOM's proposed 'Healthy Stars' program, Wal-Mart's 'Great for You' initiative, and Wegmans' Wellness Keys. While prior research has shown that FOP nutrition labeling can influence consumers' product evaluations and purchase intentions (e.g., Andrews, Burton, and Kees 2011; Urala, Arvola, and Lähteenmäki 2003), it is still unclear whether a reductive icon and an evaluative icon have equivalent effects. Furthermore, whether or not these two types of icons interact to influence shoppers' evaluative processes is unknown.

From a shopper's perspective, evaluative and reductive FOP nutrition labeling systems have different strengths and weaknesses. Prior research on consumers' processing modes (e.g., van Horen and Pieters 2012) may provide insight regarding when each type of system may be more or less effective. Consumers engage in non-comparative processing when evaluating a single product in isolation ("How healthful is product X?") and comparative processing when evaluating numerous products simultaneously ("How healthful is product X in the presence of products Y and Z?") (van Horen and Pieters 2012). These two different types of processing modes have been shown to influence intentions, attitudes, and behavior differently (e.g., Hsee and Zhang 2010; Nowlis and Simonson 1997). Although evaluative FOP systems provide more interpretation than reductive FOP systems, they may not always provide a complete and accurate representation of the total nutrient composition of the product (Andrews, Burton, and Kees 2011; Tuttle 2008). Thus, when consumers are in non-comparative processing modes and faced with a simpler evaluation task, a reductive icon that extracts key individual nutrient information from the Nutrition Facts panel and conveys concrete information about a single product should be most beneficial. In this case, there is less need for evaluative information since the interpretation of health information about a single product is not as cognitively challenging as that of numerous competing products. Further, relative comparisons need not be made.

Comparative processing, on the other hand, is often time-consuming and arduous (Kardes et al. 2002); shoppers may only have a limited opportunity to process nutrition information in a supermarket environment (Feunekes et al. 2008). Thus, when shoppers must evaluate many products at once at the retail shelf, we expect an evaluative icon that facilitates simple comparisons