# Nutrition labeling for retail food service menu items: College students' preferences for nutrition information and its influence on purchasing intention

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#### **Abstract**

Due to the link that has been established with obesity and foods prepared outside the home, recent research has emphasized examining the potential health benefits of providing nutrition information on restaurant menus in fighting the nation's obesity epidemic. This study examines whether college students find macronutrient facts, specific nutrient facts, or health claims important to appear on restaurant menus and whether the presence of this information affects intent to purchase an item.

**Key words**: food service, nutrition information, restaurant menus, nutrient facts, health claims

### Introduction

Over the past two decades, the rate of obesity among the U.S. population has increased substantially (Center for Disease Control and Prevention, 2009) putting millions of Americans at heightened risk for cardiovascular disease, diabetes, cancer, arthritis and breathing complications (U.S. Department of Health and Human Services, 2007). The Nutrition Labeling and Education Act of 1990 played a role in improving the overall dietary quality in the 70-85% of the population which will sometimes use the nutrition label (Savage & Johnson, 2006). Because about 50% of food expenditures are spent on eating away from home recent research has shifted focus to nutrition content of foods eaten away from the home (Harnack & French, 2008). As such, much of the food the nation eats today is not required to have a nutrition fact panel, nutrition claims, or nutrition reference amount because this information is not mandatory to appear on all food service menus or point of sale materials (Shields, 1996). When nutrition facts are not made available to the consumer, discrepancies occur between actual nutrition content of food and what the consumer believes to be the nutrition content of food. Current research indicates consumers greatly underestimate fat, saturated fat, and sodium levels in food eaten away from the home (Burton, Creyer, Kees & Huggins, 2006).

Due to the link that has been established with obesity and foods prepared outside the home, recent research has emphasized examining the potential health benefits of providing nutrition information on restaurant menus in fighting the obesity epidemic. The addition of calorie and nutrient information has been shown to influence attitudes, purchasing intentions, and

menu selections in the retail food service sector (Burton et al., 2006). Giving consumers easy access to nutrition information for restaurant menu items allows consumers to make well-informed dietary decisions. Given the obesity epidemic, the trend towards eating away from home, and the consumers' tendency to underestimate levels of undesirable nutrients in foods, empowering consumers with the knowledge of nutrition composition of restaurant foods may lead to more healthful menu choices (Harnack & French, 2003). In turn this may have a significant public health benefit, namely in reducing consumers' calorie and undesirable nutrient intake.

Since limited legislation exist requiring restaurants to provide nutrition information for menu items, there is not an established best practice for determining to what extent nutrition information should appear on retail food service menus. Previous research has shown individuals with specific health concerns such as diabetes, high blood pressure, heart disease, and obesity indicated a preference for menu information related to sugar, fat sodium, and overall caloric content (Thomas & Mills, 2006). Hwang & Lorenzen (2008) investigated the effectiveness of various amounts of nutrition information, concluding the most effective type of nutrition information on a menu includes total calories, macronutrients (protein, carbohydrates, fat), and specific fat information (saturated fat and trans fat). Recent studies indicate health claims about food items are considered useful to consumers when making menu selections as well (Thomas & Mills, 2006).

This study investigates a distinct class of consumers' perceptions of nutrition information on retail food service menus and point-of-sale materials. Most college students' dietary intakes do not meet daily recommendations for most food groups (American College Health Association, 2009). Poor dietary behaviors among this demographic are of particular concern to health professionals because dietary knowledge, beliefs, and behaviors established during the college years of life may carry over into adulthood and strongly influence future health status (Dinger & Waigandt, 1997). Studying the effect of marketing nutrition information and determining the most important nutrition information to the college students will give valuable insight about what influences this class of consumer to spend their money on healthier food options. Knowing what is important to this generation in regards to nutrition information will allow marketers and nutrition educators to engineer the strategies toward this demographic. Thus allowing food service venues to continue generate revenues from this population while potentially enhancing the health of these consumers throughout their lifetime.

The purpose of this research study is to identify traditional college student's most preferred type of nutrition information to appear on commercial food service menus and point of sale materials. It investigates whether the report of total calories and macronutrients, specific vitamin and nutrients, or health claims are most important to the consumer and to what extent the respective items influence purchase intention.

## Methodology

The study population consists of traditional undergraduate college students attending one of three geographically dispersed land-grant universities in the United States. A web survey method will be employed to collect data from students in the middle of the fall 2010 semester. All undergraduate students majoring in hospitality management and dietetics at the three selected

universities will be invited to participate through an e-mail correspondence containing a link to the survey.

The questionnaire is composed of four sections including food related lifestyle, nutrition information on restaurant menus, health claims on restaurant menus, and demographic data. The aim of the food related lifestyle items is to identify what kinds of food service establishments respondents patronize (Mills & Thomas, 2008) and frequency of eating outside of the home. In the nutritional information and health claims sections, participants are asked to rate the importance of specific nutrients and health claims when making menu selections on a 7-point Likert scale developed from the survey instrument used in the Josiam & Buster (2009) study. Also in this section, respondents are asked whether the presence of such information would influence their intent to purchase an item.

Frequency in SPSS is employed to determine means and standard deviations. Regression analysis is then employed to explain the relationship between macronutrient information and purchase intention, the relationship between nutrient facts and purchase intention, and the relationship between health claims and purchase intention.

The results of this study will contribute to the body of knowledge pertaining to nutrition labeling on restaurant menus. As current legislation is changed to mandate restaurants' availability of nutrition information, this body of knowledge can be used to determine what information is important to appear on restaurant menus.

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