Introduction

- 1. Obesity is a major problem in America.
 - a. It is estimated that 64%-68% of adults and 32% of children are obese (Arsenault, 2010; Burton, Creyer, Kees, & Huggins, 2006; Savage & Johnson, 2006).
 - b. Accounts for 400,000 deaths annually in USA (Savage & Johnson, 2006)
 - i. Heart disease, type 2 diabetes, certain cancers
 - c. Costs US economy ~\$117 billion per year (Savage & Johnson, 2006)
- 2. Frequent dining out is associated with obesity.
 - a. The consumption of fast food has been positively correlated with being overweight (Kuo, Jarosz, Simon, & Fielding, 2009; Roberto, Roberto, Schwartz, & Brownell, 2009; Wooten & Osborn, 2006 as cited by Savage & Johnson, 2006).
 - b. Americans are increasingly eating meals away from home

Missing period

- Consumption of food outside the home increased from 26% in 1976 to 46% in 2004 (Savage & Johnson 2006).
- ii. Consumers spend more than \$400 billion annually eating in restaurants (Burton et al., 2006).
- c. Restaurant food and fast food is higher in calories, fat, sugar, and sodium than home cooked food (Roberto et al., 2009; Savage & Johnson 2006).
- 3. Calorie labeling on menus will assist individuals in choosing healthier foods.

- a. People tend to underestimate the number of calories in meals eaten away from home consumed (Burton, Howlett & Tangari, 2009).
- b. Follow up research on the Nutrition Labeling and Education Act (NLEA) of 1990 suggested that menu labeling may improve dietary choices
 (Burton et al., 2009; Roberto et al., 2009).
- c. Posting calorie information on menus increases the number of people who are aware of the information.
 - Studies indicate that food labels are read by 70-85% of American consumers at least sometimes (Burton et al., 2006; Savage & Johnson, 2006; Wansink, 2006 as cited by Dumanovsky, et al., 2010).
 - ii. Prominent posting of calorie information on menus increases
 consumer awareness of calorie information (Dumanovsky, Huang,
 Bassett., & Silver, 2010; Elbel, Kersh, Brescoll, Dixon, 2009).

Background

- Menu labeling is endorsed by many public health experts as a method to address obesity through increased consumer awareness of calorie consumption (Burton et al., 2006; Dumanovsky et al., 2010; Roberto, Larsen, Agnew, Baik, & Brownell, 2010; Savage & Johnson, 2006)
 - a. many consumers unknowingly underestimate calories consumed
 (Burton et al., 2009).
 - rationale behind mandatory calorie labeling on menus is that by
 providing calorie information, consumers will make a healthier food

- selection since there appears to be a correlation between eating out and obesity (Kuo et al., 2009; Roberto et al., 2009).
- c. There are no studies supporting or negating menu labeling as a significant means to influence consumer food choices (Arsenault, 2010; Kuo et al., 2009).
- d. Of the studies available, none have used a randomized trial design over a long period of time to conclude the impact of menu labeling on diet and/or body weight.
- e. Many studies purporting that nutrition labeling will impact obesity have been based upon assumptions from small studies in which the data has been extrapolated and used out of context to support the researcher's hypothesis (Arsenault, 2010; Kuo et al., 2009).

Rationale for Study

- There is a need for research which includes socioeconomic information since a significant number of studies link obesity with poverty and low-income, correlating the abundance of cheap fast food to the increasing obesity epidemic (Loewenstein, 2011).
- There is a gap in the literature addressing obesity from a systems perspective
 which examines the underlying cause of cheap fast food and the population
 exploited by its availability.

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