

Assessing the Opportunities and Challenges of Soy Foods for Consumers, Markets and Public Policy

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Progress Report (covers period of 1/1/08-12/31/08)

This project aims at developing economic/behavioral models that facilitate the commercialization and resultant widespread use of soy foods. We use stated consumer preference data from a survey to determine whether recent scientific findings concerning the health benefits of soy-based foods and FDA's decision in 1999 to permit food companies to use such health claims on product labels have stimulated market demand for soy-based foods.

We designed a 9-page survey instrument that was administered online by Ipsos-Observer in the summer of 2007. The survey instrument consisted of five major sections including (i) questions measuring nutritional awareness, (ii) general health knowledge, (iii) specific health knowledge, (iv) soy food consumption behavior, and (v) experiment designed to examine the relationship between behavioral intentions and health claims. The last section represents between-subject design that provides the basis for measuring the impact of FDA health claims on consumers' behavioral intentions. Ipsos-Observer maintains an on-line panel that consists of 400,000. Appropriately stratified by geographic regions, income, education, and age to correspond to the 2000 U.S. Census, a sample of 9,000 households were drawn out of the online panel in such a way that is representative of the U.S. population. Consisting of responses from 2,879 households, data were collected in June 2007.

Research Activities and progress for the past year. We conducted an array of quantitative analyses using the Ipsos-Observer data. Six manuscripts were developed based on the statistical and econometric analyses. The following is a list of manuscripts that were published in review with an academic journal, presented or that will be presented in professional journals:

Soyfood Consumption: Effects of Perceived Product Attributes and the Food and Drug Administration (FDA) Allowed Health Claims. *British Food Journal* 110(2008); 596-607.

Soy Food Consumption Patterns: Effects of Psychological and Demographic Characteristics. *Journal of Food Distribution Research* (forthcoming).

FDA Approved Health Claims and Consumers' Behavioral Intentions: The Case of Soy-Based Food. In review with *Journal of Consumer Affairs*.

Changes in Soy Food Consumption: 2001 and 2007. Presented at 2008 annual meeting for Southern Agricultural Economics Association. Dallas, TX. Feb 2-5, 2008.

Antecedents of Soy-Consumption Behavior: A Structural Equation Model Approach. To be presented at 2009 annual meeting for American Applied Economics Association. Atlanta, GA. Jan 31-Feb 3, 2009.

Self Efficacy as a Mediator Between Dietary Knowledge and Health Behavior. To be presented at 2009 annual meeting for Southern Agricultural Economics Association. Milwaukee, WI. July 26-July 30, 2009.

Major findings of the article: FDA Approved Health Claims and Consumers' Behavioral Intentions: The Case of Soy-Based Food. This research evaluates the impact of two soy-specific health claims (highlighting FDA approval along with scientific results and simply describing scientific results) on stated behavioral intentions toward soy-based food using a survey administered by Ipsos-Observer to a nationally representative web panel in the summer of 2007. Three ordered probit models (non soy users; infrequent soy users; regular soy users) show that non-soy users and infrequent soy users who were exposed to either FDA health claim or general health claim are significantly more likely to eat soy-based food products. FDA or general health claim, however, did not change the behavioral intentions of regular soy users. These results suggest that soy consumption status moderates the impacts of health claims on behavioral intentions. However, the impact of FDA health claim did not differ from that of general health claim, indicating that the word "FDA" did not add any value to consumers beyond the general health claim.