

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

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IMBA Project 2007-1

Project period: 1/1/07-12/31/08

Progress Report (covers period of 1/1/07-12/31/07)

Despite the growing scientific findings that soy foods provides various health benefits relative to chronic diseases such as cardiovascular heart disease, osteoporosis, and cancer, the utilization of soy-based foods is very low in the U.S. This project proposes to analyze the attitudes, perceptions, and behavioral intentions of non-soy users, infrequent users, and regular users with regard to soy-based foods. The expected results will provide insights useful in conceiving and marketing soy-based food products, thereby positively impacting soybean farmers and food industry that uses soy as ingredients as well as improving public health.

Specifically, 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. This issue is timely and relevant given that we have little knowledge of the scope and extent of the effect of such scientific revelations on the development of the soy-based food markets. Specific objectives tied to this overall goal include investigating:

- (i) consumer knowledge of health benefits/risks of soy foods and their substitutes
- (ii) the impact of such knowledge on the consumption of soy foods and substitutes
- (iii) impact of the FDA approved health claim on consumer behavior

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. The Ipsos-Observer is private consulting firm specializing in consumers research and public opinion polls on socially important issues including tracking trends in food consumption patterns. The Ipsos-Observer maintains a 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. Various analyses using the disaggregate data are under way. The following represents a list of specific topics that were presented, or will be presented in professional meetings. Presented papers will be developed into manuscripts suitable for publication in peer-reviewed journals in the discipline of Agricultural Economics, Nutrition, or Marketing.

Demographics and Lifestyles in Consumers' Nutrition Consideration in Food Selection. American Association of Agricultural Economics Meeting, Portland, OR July 29-Aug 1, 2007.

Soy Food Consumption Patterns: Effects of Psychological and Demographic Characteristics. In review with *Journal of Food Distribution Research*

FDA Approved Health Claims and Consumers' Behavioral Intentions: The Case of Soy-Based Food. To be presented at AAEA annual meeting in Orlando, FL July 2008.

Rimal, A., W. Moon, and S.K. Balasubramanian. Investigating Changes in Consumer's Nutritional Consideration in Food Selection. To be presented at AAEA annual meeting in Orlando, FL. July 2008.

Rimal, A., W. Moon, and S.K. Balasubramanian. Changes in Soy-Based Food Consumption, 2001 and 2007. To be presented at AAEA annual meeting in Orlando, FL. July 2008.

Antecedents of Soy-Consumption Behavior: A Structural Equation Model Approach. To be presented at the annual Marketing Science conference.