Consumer Preferences for Attributes of Organic Processed Foods: 
The Case of Soymilk In the United States

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BACKGROUND
- Organic soymilk has been the biggest seller in the organic, non-dairy beverage sector. Recent changes occurring in its market are representative of trends seen in the U.S. organic industry.
- Soymilk is now widely available at traditional supermarkets and mass merchandisers in the U.S. As of 2008, conventional supermarkets became the leading channel for soy-based food and beverage, accounting for 88% of the market share (Mintel 2008).
- Searing demand for soymilk product attracted various types of retailers to introduce store-brand soymilk products. While store brand soymilk companies introduced organic soymilk products at lower prices, the dominant national brand Silk, which accounts for 75% of the current market share, put in efforts on advertising and marketing soymilk with a focus on improved taste. The effectiveness of these strategies depends on consumer valuations towards these two attributes: taste and price.
- Due to a low adoption rate of organic soybeans by farmers, there is a gap between domestic demand and domestic supply of organic soybeans in the U.S. Feed grain distributors and soy product manufacturers reported sourcing organic soybeans from other countries (Greene et al. 2009). In 2009, the Organic Consumers Association called for a boycott of Silk products because Silk had reportedly sourced organic soybeans from China and Brazil with disputable standards. In response, Silk brand soymilk started to substitute U.S. grown non-genetically modified (GM) soybeans for imported organic soybeans.
- The impacts of these trends on the organic soymilk market are ultimately determined by U.S. consumers’ preferences towards organic processed products under different types of brands and production locations of the ingredients.

OBJECTIVE
- Investigate U.S. consumers’ perceptions towards soymilk products under different types of brands.
- Examine U.S. consumers’ attitudes towards production origins of organic soymilk products.
- Analyze the impacts of imports and different brand marketing strategies on producers, retailers, and consumers in the U.S. organic soymilk industry.

RESULTS & IMPLICATIONS
- In the sample, about 62.7% of respondents were male. The majority (60.1%) of respondents were between 35 and 64 years of age. About a third (32.6%) of the respondents earned household annual income above $100,000, significantly a higher share than the national average, 20.2%.

METHOD
- A stated choice method was used to elicit consumer preferences towards various attributes of soymilk products. A national consumer survey was conducted on-line in November, 2010 throughout the U.S., and 316 valid responses were collected.
- Experiment Design
  - Attributes and Attribute Levels in Choice Experiment
    - Price: $1.79, $3.00, $5.10
    - Brand: Original Store-Brand, Specialized Brand, National Brand
    - Production provider: Certified Organic, Non-GMO, Yes-China
    - Origin of Ingredients: U.S. grown, No-Label
- Estimation method: mixed logit model
  \[ U_i = \alpha X_{ij} + \mu Z_i + \epsilon_i \]
  where $X_{ij}$ is a vector of attributes of alternative $j$ for individual $i$, $\mu$ is a vector of random terms with zero mean and $Z_i$ are error components which define the stochastic portion of utility along with $\epsilon_i$ in the functional form, $X_{ij}$ is defined as:
  - $X_{ij} = (\text{Price}, \text{Specialized brand}, \text{National brand}, \text{Organic}, \text{Non-GMO}, \text{Grown within U.S., Import})$.

REFERENCES
- Annabel M., “Soy vs Cow milk”, good magazine, issue 6, graph.
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