Consumer Demand for High-Selenium Beef

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Introduction

- One out of every four deaths in the U.S. is caused by some form of cancer (American Cancer Society).

- Availability of and interest in functional foods continues to grow.
  - “Foods or dietary components that may provide a health benefit beyond basic nutrition.”
  - Forecasts vary but all indicate we will eat, and purchase more functional foods.
“It is widely accepted that the future for functional foods is assured because of consumers’ interest in how their diets can positively impact health.”

J. Mellentin, 2002

“However, this industry is also loaded with hurdles, including a high rate of product failure, difficulty in defining the type of food and product labeling for functional products, and tricky marketing tactics.”

Selenium

- “Hitch-hiker” element.
- Reduces risk of several cancers.
Objective

- Determine consumer’s stated preference for high-selenium steak and hamburger; specifically to identify willingness to pay.
Assessing Consumer Demand

- **Product**
  - Type (hamburger, steak)
  - Labeling (style, content including selenium effect description and support for such, and other benefits)

- **Consumer Segments**
Selecting a Model

- Limited to hypothetical retail environment
- Stated preference
- Revealed preference
  - Experimental auction
  - Choice experiment with conjoint analysis
    - Advantages – appropriate for new product, discrete choice, lower cost
    - Disadvantages – hypothetical (no money involved), limited features identified
Focus Groups

- Department staff
- University faculty and staff
  - Recruited females between 25 and 55; primary shoppers
- Objective was to eliminate endogenous complexity.
Focus Group
“The Who”

- Average age = 41 (30 to 49)
- All married
- Average of 1.8 children (two without)
- Average age of youngest child = 9
- Average of 3.5 persons in household
- Five had M.S. or MBA; all had college
- Three secretaries, 2 lecturers, 1 researcher, 2 specialists; 15 year average
- Grocery shop 7.5 times / month (3 to 20)
- Eat 5 pounds meat / week (1 to 9)
- Half take supplements
- Five of eight overweight
- Half had cancer in family
Focus Group Outline

- Functional foods
- Selenium
- Product labels (using visual aids)
  - Design, origin on package
  - Information provided
- Beef product preferences
- Willingness to pay
Focus Group “Results” -- Variables

- Selenium label
  - None; research-based; government approved

- Source of selenium
  - Natural; naturally-produced in North Dakota; fortified

- Willingness to pay (10% maximum)
  - Follow-up with cancer-exposed increased
What else we learned

- Shoppers with specific “issues” pay attention to those on label (e.g., calcium-enriched orange juice).
- “Contains selenium” may seem negative.
- Government, trusted organization approval important
- “Art work” is key
- Purchasing beef is different.
For Discussion

- Value of Focus Groups
- Efficacy of Choice Experiments
- Product characteristics to include