Trends in Consumer Food Preferences

The University of Hawaii
“Go Global: Food Processing and Safety”
February 26, 2008

David Schmidt
President and CEO
International Food Information Council (IFIC)
International Food Information Council (IFIC)

Mission:
To effectively communicate science-based information on food safety and nutrition to health professionals, educators, government officials, journalists and others providing information to consumers.

Primarily supported by the food, beverage, and agricultural industries.
IFIC & IFIC Foundation Partners

- American Academy of Allergy, Asthma and Immunology
- American Academy of Family Physicians Foundation
- American Association of Diabetes Educators
- American College of Sports Medicine
- American Dietetic Association
- American Veterinary Medical Association
- Association of Women's Health, Obstetric, and Neonatal Nurses
- Centers for Disease Control and Prevention
- Consumer Federation of America
- The Food Allergy and Anaphylaxis Network
- Food Marketing Institute
- Harvard School of Public Health
- Institute of Food Technologists
- Inter-American Institute for Cooperation on Agriculture
- International Consultative Group on Food Irradiation
- National Association of Pediatric Nurse Associates and Practitioners
- National Center for Food Protection & Defense
- National Institutes of Health
- National Policy and Resource Center on Nutrition and Aging, Florida Int’l University
- President’s Council on Physical Fitness and Sports
- School Nutrition Association
- Scripps Clinic and Research Foundation
- U.S. Agency for International Development
- U.S. Department of Agriculture
- U.S. Department of State
- U.S. Environmental Protection Agency
- U.S. Food and Drug Administration
- University of Illinois Functional Foods for Health Program
IFIC Foundation Web Site
In English and Spanish

IFIC.org
and
IFIC.org/sp
IFIC Foundation’s Food Insight

- 45,000 circulation
- 7% international
- 6,000 media
- Also available electronically

Calories Count, but...
Consumers Don't Seem to Know How:
Food and Health Survey Highlights
Six “Diet Disconnects”

Informations that will both encourage and instruct those invested in communicating nutrition messages to the American public can be found in the recent annualIFIC Foundation’s Food and Health Survey: Consumer Attitudes toward Food, Nutrition, and Health.

The research provides the opportunity to see how consumers view their own food choices, their efforts to improve these, and their understanding of the inter-relationship between dietary habits, physical activity, and health.

The survey of 1,000 American adults was conducted over threeweeks in February and March of 2007. Overall, American perceptions of their health improved with 23 percent indicating that they are “fit and healthy,” while 47 percent reported an improvement in their diet.

In addition, 50 percent of Americans reported eating more fruits and vegetables in the last year. However, nearly half (47 percent) of Americans who reported eating more fruits and vegetables in the last year also reported that they are not “fit and healthy.”

The “diet disconnects” revealed in the latest look at consumer attitudes toward food, nutrition, and health include the following:

1. Consumers often estimate that they consume more fruits and vegetables than they actually do, even when they do increase their fruit and vegetable consumption.
2. Consumers don’t associate physical activity with eating healthy foods.
3. Consumers identify physical activity as “too much work” and opt for easier or less time consuming methods to improve their health.
4. Consumers are less likely to report that they “try to control what they eat” and try to lose weight or gain muscle than they actually do.
5. “Try to control what they eat” and try to lose weight or gain muscle than

Dicovering these disconnected beliefs, the survey found that almost one-third of all Americans believe that they are not eating healthy because they are not exercising enough. Moreover, nearly half (47 percent) of Americans who reported eating more fruits and vegetables in the last year also reported that they are not “fit and healthy” because they do not “balance diet and physical activity” to manage their weight.

Breakfast initiation was the most important meal of the day, with 20 percent of Americans indicating the morning meal was “extremely important.”

The survey also showed that the type and amount of breakfast foods eaten in the past year significantly impact the health of the individual after 1 year ago (7 percent vs. 6 percent).

(continued on page 4)
IFIC and IFIC Foundation
Trended Research

IFIC Consumer Attitudes Toward Functional Foods 2007

IFIC Foundation Food & Health Survey 2007

http://ific.org
Methodology

<table>
<thead>
<tr>
<th>METHODOLOGY</th>
<th>Web survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPULATION</td>
<td>Representative sample of Americans aged 18+</td>
</tr>
<tr>
<td>DATA COLLECTION PERIOD</td>
<td>February 19-March 9, 2007</td>
</tr>
<tr>
<td>SAMPLE SIZE (ERROR)</td>
<td>n=1,000 (± 3.1 pp)</td>
</tr>
</tbody>
</table>
Prevalence of Dietary Changes

Over the past six months, have you made any changes in an effort to improve the healthfulness of your diet?

- **2007**
  - Yes: 66% ▲
  - No: 34% ▼

- **2006**
  - Yes: 57%
  - No: 43%

▲ Significant increase from ‘06  
▼ Significant decrease from ‘06

(n=1000)

IFIC Foundation Food & Health Survey 2007
Changes Made to Improve Healthfulness of Diet

[Prompted] What have you done to improve the healthfulness of your diet in the past six months?

<table>
<thead>
<tr>
<th>Action</th>
<th>2007</th>
<th>2006</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consuming less of a specific type of food or beverage</td>
<td>65%</td>
<td>68%</td>
<td>▲</td>
</tr>
<tr>
<td>Changing meal/snack patterns</td>
<td>59%</td>
<td>55%</td>
<td>▲</td>
</tr>
<tr>
<td>Reducing amounts of food and beverages</td>
<td>58%</td>
<td>57%</td>
<td>▲</td>
</tr>
<tr>
<td>Eating fewer calories</td>
<td>48%</td>
<td>42%</td>
<td>▲</td>
</tr>
<tr>
<td>Consuming more of a specific type of food/beverage</td>
<td>40%</td>
<td>31%</td>
<td>▲</td>
</tr>
<tr>
<td>Eating more of a certain food component</td>
<td>36%</td>
<td>29%</td>
<td>▲</td>
</tr>
<tr>
<td>Eating less of a certain food component</td>
<td>25%</td>
<td>16%</td>
<td>▲</td>
</tr>
</tbody>
</table>

▲ Significant increase from ’06

IFIC Foundation Food & Health Survey 2007
Changes Made to Improve Healthfulness of Diet: Subtractions

(Aided): What have you done to improve the healthfulness of your diet in the last six months?

Q12 (unaided): Over the past year, what changes have you made to your diet in an effort to improve or maintain your health? (n=1000)

- Trying to consume less fat 15%
- Reducing calorie intake/eating less 11%
- Reduce sugar intake 10%
- Lower carbohydrate intake 5%
- Reducing salt intake 5%
- Stopped/Reduced junk/fast food 4%
- Eating less meat 4%
- Stopped/Reduced fried foods 4%
- Drink less soda 3%

IFIC Foundation Food & Health Survey 2007
Changes Made to Improve Healthfulness of Diet: Additions

(Aided): What have you done to improve the healthfulness of your diet in the past six months?

- **2007 (n=660)**
  - 36% Consuming more of a specific type of food/beverage
  - 11% Eating more vegetables
  - 9% Eating more fruit
  - 3% More fiber in diet
  - 3% Drink more water
  - 2% More grain
  - 2% Taking vitamins/supplements

- **2006 (n=574)**
  - 23%

Q12. Over the past year, what changes have you made to your diet in an effort to improve or maintain your health? (n=1000)

11% Eating more vegetables
9% Eating more fruit
3% More fiber in diet
3% Drink more water
2% More grain
2% Taking vitamins/supplements

IFIC Foundation Food & Health Survey 2007
Drivers of Dietary Changes

For which of the following reasons, if any, are you trying to improve the healthfulness of your diet?

- To improve my overall well-being *: 70%
- To improve my physical health: 65%
- To lose weight: 70% ▲
- Specific health condition: 37% 37%
- Maintain my weight: 20% 19%

* Modification from 2006: “To improve my overall health” (69%) was changed to two items, including “To improve my overall well-being” and “To improve my physical health”.

▲ Significant increase from ’06

IFIC Foundation Food & Health Survey 2007
Healthfulness Increases as Top Factor Influencing Purchasing Decisions

How much of an impact do the following have on your decision to buy foods and beverages?

- **Taste**
  - 2007: 53% Great impact, 35% Some impact
  - 2006: 54% Great impact, 31% Some impact

- **Price**
  - 2007: 37% Great impact, 35% Some impact
  - 2006: 35% Great impact, 28% Some impact

- **Healthfulness**
  - 2007: 25% Great impact, 40% Some impact
  - 2006: 26% Great impact, 32% Some impact

- **Convenience**
  - 2007: 23% Great impact, 32% Some impact
  - 2006: 19% Great impact, 30% Some impact

▲ Significant increase from ‘06

IFIC Foundation Food and Health Survey 2007

(n=1000)
IFIC Quantitative Research

Measure consumer interest in and awareness of “functional foods” and “personalized nutrition”


Sample population: randomly selected U.S. Adults (18 ≥ years old)

Completed interviews/sample size: 1,000 (2007)

Conducted in partnership with Cogent Research
Americans’ Top Health Concerns

What are your top three health concerns, listed in order of importance to you? (MULTIPLE RESPONSE)

- Heart/Circulatory Health Issues* (53%)
- Weight (33%)
- Cancer (24%)
- Diabetes (17%)
- Nutrition/Diet (16%)
- Exercise (11%)
- Lung / Respiratory (7%)
- Arthritis (5%)

*Includes heart disease, blood pressure, cholesterol, and stroke

(n=1000)
Top Functional Foods Named by Consumers

What is the (first/second/third) food or food component that comes to mind that is thought to have health benefits beyond basic nutrition? (n=1000)

1. Fruits and vegetables (69%)
2. Fish, fish oil, seafood (14%)
3. Milk (13%)
4. Whole grains (10%)
5. Fiber (6%)
6. Oats, oat bran, oatmeal (6%)
7. Green tea (6%)
8. Meat, red meat, (6%)
9. Water (4%)
10. Herbs/spices (4%)
11. Dairy (other than milk) (4%)
12. Cereal (4%)
13. Nuts (3%)
14. Juice (3%)
15. Vitamin/mineral supplements (3%)

IFIC Consumer Attitudes Toward Functional Foods 2007
High Awareness of Some Long-Established Diet & Health Pairs

Q41-64. For each of the following food components or nutrients, please tell us whether you are aware that food component or nutrient is thought to provide each of the following health benefits.

- Calcium for the promotion of bone health (n=503) - 89%
- Fiber for maintaining a healthy digestive system (n=497) - 86%
- Vitamin D for the promotion of bone health (n=497) - 81%
- Omega-3 fatty acids for reduced risk of heart disease (n=497) - 76%
- Fiber for reduced risk of heart disease (n=497) - 74%
- Fiber for reduced risk of cancer (n=503) - 73%
- Whole grains for reduced risk of heart disease (n=503) - 72%
- Antioxidants for protection against free radical damage implicated in aging and various chronic diseases (n=497) - 72%

IFIC Consumer Attitudes Toward Functional Foods 2007
Decreased Awareness of Some Diet & Health Associations

<table>
<thead>
<tr>
<th>Diet &amp; Health Association</th>
<th>Awareness Percentage 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antioxidants for protection against free radical damage</td>
<td>(72% vs. 79% in 2005)</td>
</tr>
<tr>
<td>Monounsaturated fats for reduced risk of heart disease</td>
<td>(63% vs 73% in 2005)</td>
</tr>
<tr>
<td>Folate/folic acid for reduced risk of birth defects and heart disease</td>
<td>(55 vs 63% in 2005)</td>
</tr>
<tr>
<td>Lycopene for reduced risk of prostate cancer</td>
<td>(49 vs 57% in 2005)</td>
</tr>
</tbody>
</table>
## Increased Awareness of Lesser-Known “Functional Food”/Health Pairs

<table>
<thead>
<tr>
<th>Pair</th>
<th>Awareness Change 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probiotics or Prebiotic fiber for maintaining a healthy digestive system</td>
<td>(58% vs. 49% in 2005)</td>
</tr>
<tr>
<td>Probiotics for maintaining a healthy immune system</td>
<td>(54% vs. 46% in 2005)</td>
</tr>
<tr>
<td>Soy protein/soy for reduced risk of heart disease and cancer</td>
<td>(55% vs. 41% in 2005)</td>
</tr>
</tbody>
</table>
Specific Food Components Consumed for Benefits

*Please indicate how likely you are to begin eating each of the food components or nutrients for each of the health benefits in the next 12 months.*

<table>
<thead>
<tr>
<th>Food Component</th>
<th>Very or somewhat likely to consume (%)</th>
<th>Already eating for that effect (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber for maintaining a healthy digestive system (n=427)</td>
<td>37%</td>
<td>57%</td>
</tr>
<tr>
<td>Calcium for the promotion of bone health (n=449)</td>
<td>37%</td>
<td>56%</td>
</tr>
<tr>
<td>Whole grains for reduced risk of heart disease (n=362)</td>
<td>40%</td>
<td>56%</td>
</tr>
<tr>
<td>Vitamin D for the promotion of bone health (n=403)</td>
<td>39%</td>
<td>53%</td>
</tr>
<tr>
<td>Antioxidants for protection against free radical damage implicated in aging and various chronic diseases (n=357)</td>
<td>41%</td>
<td>52%</td>
</tr>
</tbody>
</table>

IFIC Consumer Attitudes Toward Functional Foods 2007
Specific Food Components Consumed for Benefits...continued

Please indicate how likely you are to begin eating each of the food components or nutrients for each of the health benefits in the next 12 months.

- Omega-3 fatty acids for reduced risk of heart disease (n=379):
  - Very or somewhat likely to consume: 44%
  - Already eating for that effect: 45%

- Folate or Folic acid for reduced risk of brain or spinal cord (neural tube) birth defects (n=275):
  - Very or somewhat likely to consume: 41%
  - Already eating for that effect: 42%

- Probiotics for maintaining a healthy digestive system (n=287):
  - Very or somewhat likely to consume: 45%
  - Already eating for that effect: 41%

- Plant sterols for reduced risk of heart disease (n=150):
  - Very or somewhat likely to consume: 50%
  - Already eating for that effect: 37%

- Soy protein/soy for reduced risk of cancer (n=234):
  - Very or somewhat likely to consume: 50%
  - Already eating for that effect: 25%

IFIC Consumer Attitudes Toward Functional Foods 2007
Consumers are interested in getting health benefits from a wide variety of foods.

Which of the following types of food, if any, would you be interested in consuming if they had any of the specific benefits that you wanted from food components? (n=891)

- Meat, poultry and fish
  - Not at all interested: 3%
  - Not very interested: 4%
  - Somewhat interested: 31%
  - Very interested: 63%
- Cereals or breads
  - Not at all interested: 2%
  - Not very interested: 4%
  - Somewhat interested: 33%
  - Very interested: 61%
- Dairy products
  - Not at all interested: 3%
  - Not very interested: 6%
  - Somewhat interested: 35%
  - Very interested: 56%
- Salad dressings or condiments
  - Not at all interested: 5%
  - Not very interested: 10%
  - Somewhat interested: 39%
  - Very interested: 46%
- Beverages or beverage mixes
  - Not at all interested: 8%
  - Not very interested: 10%
  - Somewhat interested: 40%
  - Very interested: 42%

IFIC Consumer Attitudes Toward Functional Foods 2007
Food Biotechnology:
A Study of U.S. Consumer Trends, 2007

Population: U.S. adults (18+)
Methodology: 100% web
Data collection period: July 11 – July 27
Sample Size: n=1,000
Sample Composition: Data weighted on age and education to be nationally representative

Survey conducted by www.cogentresearch.com
Q8. [IF AVOIDED FOODS] What foods or ingredients have you avoided? [OPEN END]
Food Labeling: Satisfaction with Current Labels

As seen in previous years, few consumers can think of additional information they would like to see on food labels (and less than 1% mention wanting to see biotech foods labeled).
Q11. How confident are you about the safety of the US food supply? Would you say...

Confident
- Somewhat confident: 51% (2006), 54% (2007)
- Not very confident: 9% (2006), 9% (2007)

Not confident
- Not at all confident: 2% (2007)
- Neutral: 18% (2006), 19% (2007)
# Food Safety Concerns

<table>
<thead>
<tr>
<th>Category</th>
<th>2006</th>
<th>2007</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease/contamination</td>
<td>36%</td>
<td>38%</td>
<td>+2%</td>
</tr>
<tr>
<td>Handling/preparation</td>
<td>35%</td>
<td>26%</td>
<td>-9%</td>
</tr>
<tr>
<td>Food sources</td>
<td>6%</td>
<td>20%</td>
<td>+14%</td>
</tr>
<tr>
<td>Preservatives/Chemicals</td>
<td>15%</td>
<td>9%</td>
<td>-6%</td>
</tr>
<tr>
<td>Agricultural production</td>
<td>12%</td>
<td>8%</td>
<td>-4%</td>
</tr>
<tr>
<td>Health/nutrition</td>
<td>6%</td>
<td>8%</td>
<td>+2%</td>
</tr>
<tr>
<td>Biotech</td>
<td>3%</td>
<td>6%</td>
<td>+3%</td>
</tr>
<tr>
<td>Packaging/labeling</td>
<td>15%</td>
<td>5%</td>
<td>-10%</td>
</tr>
<tr>
<td>Processed foods</td>
<td>2%</td>
<td>1%</td>
<td>-1%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>4%</td>
<td>---</td>
</tr>
</tbody>
</table>
Sustainability: Definition and Awareness

- Although Americans use a wide variety of terms to describe “sustainability,” 83% equate the term to mean “long-lasting” or “self-sufficiency”

- Close to three in four consumers say they have heard “nothing” about the concept of “sustainable food production” specifically

2007

- Nothing: 70%
- A Lot: 2%
- Some: 11%
- A Little: 17%
Although few are familiar with the term itself, many find the concept of “sustainable food production” to be important.

Q44. [NEW QUESTION] How important is it to you that the food products you purchase come from a food producer that is enrolled in a scientifically validated sustainability program? By sustainability, we mean to operate in a manner which does not jeopardize the availability of resources for future generations.
## Sustainability: Importance of Crop Growing Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Selected first</th>
<th>Selected second</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing the production of food staples in the world, thereby reducing world hunger.</td>
<td>34%</td>
<td>25%</td>
</tr>
<tr>
<td>Reducing the amount of pesticides needed to produce food.</td>
<td>31%</td>
<td>24%</td>
</tr>
<tr>
<td>Creating high-yield crops so valuable land like rain forests is NOT needed as growing space for increased food production.</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td>Producing plants that require less fresh water for growth, thereby conserving the world's fresh water supply.</td>
<td>11%</td>
<td>16%</td>
</tr>
<tr>
<td>Using no-till farming methods, thereby reducing green house gas emissions.</td>
<td>7%</td>
<td>14%</td>
</tr>
</tbody>
</table>

[Selected first](#) [Selected second](#)
HAPPY BIRTHDAY SAM!!
Questions?

schmidt@ific.org

THANK YOU!