INCREASING WHOLE GRAIN CONSUMPTION: POLICY AND ECONOMICS

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Overview

- Drivers of change and lessons from other markets
- Progress towards dietary recommendations
  - Intake, purchases, demographics
  - Product Introductions
  - Relative cost
- Labeling
- Food assistance programs
- Prospects for progress
Data and Research from Economic Research Service, USDA

- Maintain and report multiple sources of data regarding consumer purchases, food intake, food prices, market trends
- Whole grains reports use data ending about 2007-2010, so don’t know most recent situation
- Whole grains often reported as part of larger study of dietary quality
- Following slides draw heavily on ERS reports published during past 10 years
Drivers of change

- Policy
  - WG health claim under DLEA
  - 2005 Dietary Guidelines
  - WIC (2007) and School Lunch standards (2012)

- Economics
  - Consumer response
  - Cost and Availability
  - Retail venue
  - Labeling and product introductions
Past experience with health attributes

- Increase in consumer awareness and change in behavior among some consumers
  - Labeling, media, education
- Increase in product offerings
  - Industry motivated to capture market share, enhance brand reputation
- Widespread market change with benefits for all consumers
- Example: Trans fat reductions in food products since 2003 label regulation reflected in lower transfat in blood samples from 2009 NHANES
Overview: WG market response to 2005 DG

- WG purchases increased, mainly in grocery store purchases of WG bread and cereals
- WG price declined relative to refined grain products, but still average 24 to 46% higher
- More products introduced with WG claims
- Consumers appear to have been motivated by both information and price change to increase purchases
- Little WG consumption away from home
How close to WG recommendation of 50 percent of total grains?

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Total Food Intake</th>
<th>Food at Home</th>
<th>Food Away</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>12</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Children</td>
<td>10</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Adults</td>
<td>13</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Low Income</td>
<td>11</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>High Income</td>
<td>13</td>
<td>17</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: 2007-10 National Health and Nutrition Examination Survey (NHANES). Data obtained from Economic Research Service, USDA.
How close to WG recommendation of 48 grams/day intake?

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<tr>
<td>Total</td>
<td>46</td>
<td>43</td>
<td>4</td>
</tr>
<tr>
<td>Children</td>
<td>37</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>Adults</td>
<td>49</td>
<td>46</td>
<td>4</td>
</tr>
<tr>
<td>Low Income</td>
<td>40</td>
<td>37</td>
<td>3</td>
</tr>
<tr>
<td>High Income</td>
<td>50</td>
<td>46</td>
<td>4</td>
</tr>
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Source: 2007-10 National Health and Nutrition Examination Survey (NHANES). Data obtained from Economic Research Service, USDA.
Which progress measure relevant?

- Total grain consumption by average U.S. consumer is nearly double the recommended amount
- Whole grain intake has been increasing in both absolute quantities and relative to total grain
- Purchase data show more relative progress than intake data, which may underestimate whole grains due to lags in conversion factors
- Should diet messages be in shares or absolute amounts?
Grocery store sales of WG products increased with Dietary Guidelines.
Increases in WG purchases are the only area of progress.
Figure 5

Percentage of new products with health- and nutrition-related claims, 2001-2010

Source: Datamonitor, Product Launch Analytics database. ERS/USDA analysis.
Figure 5
Annual average price of packaged whole grains relative to packaged refined grains, by division (metro areas only)

Percent above price of packaged refined grains

Release of 2005 Dietary Guidelines

Source: USDA/ERS analysis using Nielsen data.
Demographics

- High income consumers purchase and eat more whole grains than low income consumers
- Whites consume more whole grains than blacks or Asians; Hispanics consume the most.
- Whole grains consumption likely to be more important to those who follow other health-oriented behaviors.

Source: USDA/ERS
Response to the whole-grains recommendation in the 2005 Dietary Guidelines (DGs) varied by income

Average pounds per month

<table>
<thead>
<tr>
<th></th>
<th>Higher income shoppers</th>
<th>Lower income shoppers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole-grain bread</td>
<td>0.48 0.66 0.79</td>
<td>4.26 3.65 3.77</td>
</tr>
<tr>
<td>Refined-grain bread</td>
<td>3.42 3.13 2.98</td>
<td></td>
</tr>
<tr>
<td>Residual effect of DGs (Higher income):</td>
<td>+19% -5% 0%</td>
<td>+3%</td>
</tr>
<tr>
<td>Residual effect of DGs (Lower income):</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: USDA, Economic Research Service analysis of Nielsen Homescan data.
How do consumers identify WG?

- WG health claim 1999
- FDA guidance 2006
- Whole Grain Stamp
  - 2 kinds of stamps: Basic and 100% WG
- Food assistance program standards follow FDA guidance

- Evidence of confusion over different kinds of grain content claims
Confusing labels in my own pantry

- 6 breakfast cereals
  - 3 Post; 1 General Mills; 2 Quaker
  - 5 have Whole Grains Council stamp, but every box has the stamp in a different location and a different size
  - 1 has no stamp but claims on front “100% of day’s whole grains”
  - Why not put stamp in same position on product?
  - Why do stamps reference “grams” when no other metric info on labels?
Standards in USDA Food Assistance

- **WIC and WG**
  - 8.6 million participants
  - 2007 interim rule revised WIC package
    - 2009 implementation; 2014 final
  - Standards for participating retailers to carry recommended foods

- Research has shown:
  - Increased availability of WG products in low income neighborhood stores
  - Increased consumption of WG among WIC participants
Standards in USDA Food Assistance

- **School Lunch and Breakfast Program**
  - 31 million children
  - 2012 standards
    - More F&V, more WG, low-fat milk, fewer calories
    - 2014-15 all grains must be WG
    - Competitive foods must also meet WG standard
  - Congress moved to allow delay of all WG standard
Prospects for progress

- Clear progress in spite of challenges in communication and cost
- One of only a few areas of widespread progress in dietary quality
- Challenges to long run progress
  - High cost relative to refined grains
  - Negative media attention to school lunch issues
  - Little or no WG in FAFH
  - Confusion in labels, definitions
Bibliography


See www.ers.usda.gov for more information.