Shopper Marketing Nutrition Interventions

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Rural Grocery Summit
Behavioral Economic Approaches to Grocery Store Health Interventions

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Who Are We?
NMSU Consumer Behavior Lab
(http://cobelab.nmsu.edu/)

- Multidisciplinary Perspectives on Consumer Health
- Collaborators from Health, Psychology, Anthropology, Management, Economics, Agriculture, Neuroscience
- Understand How Marketing Can Help both Business & Consumer Health
The Whole Presentation in 1 Slide

• 1. What is Shopper Marketing?

• 2. Improve Nutrition

• 3. Keep constant shopper budgets

• 4. Increase store profitability

• 5. What’s next?
What is Shopper Marketing?
Shopper Marketing Nutrition Interventions

1. Improve Nutrition (60% all food purchases)
2. Keep constant shoppers’ budget
3. Increase store profitability

Fresh Fruits and Vegetables
1. Improve Nutrition

Fresh Fruits and Vegetables

Dramatically below recommended purchase and intake
(Volpe and Okrent, 2012)
1. Improve Nutrition:

Direct and Indirect Attempts

Example of Direct Attempt (WIC program)

Example of Indirect (Front of package Labeling)

Example of Direct (Nutritional Profiling)
1. Improve Nutrition: 

Direct and Indirect Attempts 

1. Government $\rightarrow$ parent
2. Government $\rightarrow$ retailer $\rightarrow$ parent
3. Government $\rightarrow$ retailer $\rightarrow$ child $\rightarrow$ parent
4. Government $\rightarrow$ manufacturer $\rightarrow$ retailer $\rightarrow$ child $\rightarrow$ parent
5. Government $\rightarrow$ manufacturer $\rightarrow$ retailer $\rightarrow$ parent

6. Manufacturer $\rightarrow$ parent
7. Manufacturer $\rightarrow$ child $\rightarrow$ parent
8. Manufacturer $\rightarrow$ retailer $\rightarrow$ parent
9. Manufacturer $\rightarrow$ retailer $\rightarrow$ child $\rightarrow$ parent

10. Retailer $\rightarrow$ child $\rightarrow$ parent
11. Retailer $\rightarrow$ parent
12. Child $\rightarrow$ parent

Example of Indirect (Front of package Labeling)
1. Improve Nutrition:

Direct and Indirect Attempts

Crucial Events for FOP

- FDA and FTC worried public not getting nutritional information to make healthy choices.

1. Improve Nutrition: Direct and Indirect Attempts

Crucial Events for FOP

3. Commercial firms’ natural response to NFP:
   - Engage in federally protected commercial speech
   - Within guidelines, emphasize food’s relative health benefit downplaying nutritional detriments.

Examples…
1. Improve Nutrition:

**Direct and Indirect Attempts**

**Crucial Events for FOP**

Trade organization (grocery manufacturer association)
FOPs (January 2011) “Facts Up Front”…

Not as good as heuristic-based traffic light symbols

(Roberto, et. al., American Journal of Preventative Medicine)
1. Improve Nutrition: Direct and Indirect Attempts

Example of Direct (Nutritional Profiling)
1. Improve Nutrition: Direct and Indirect Attempts

Shopping with Guiding Stars is as simple as:

- one: Good
- two: Better
- three: Best

Coming Soon…

All NuVal Scores—available at NuVal.com!

Thousands of scores, Search by Name or UPC, Compare products side-by-side

Watch this space for more information!
1. Improve Nutrition: Direct and Indirect Attempts

Results? (Martin, 2007, New York Times; Sutherland, Kaley, and Fischer 2010):

<table>
<thead>
<tr>
<th>Food</th>
<th>Increase?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fat Free Milk</td>
<td>+1%</td>
</tr>
<tr>
<td>Fruit &amp; Vegetables</td>
<td>0%</td>
</tr>
<tr>
<td>All “more healthy”</td>
<td>1.4%</td>
</tr>
</tbody>
</table>
1. Improve Nutrition:

### Other Attempts

<table>
<thead>
<tr>
<th>Source</th>
<th>Tool</th>
<th>Sample</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Promotion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sutherland et al. (2010)</td>
<td>Nutritional profiling: 3-tier star-coded icons point-of-purchase</td>
<td>Sales data 168 stores</td>
<td>Effect: unclear; no specific data for fruit &amp; veg, but increase of star-coded items over 2 yrs = 1.39%</td>
</tr>
<tr>
<td>Curhan (1974)</td>
<td>Display space, price, newspaper advertising, location quality</td>
<td>Sales data 4 stores</td>
<td>Effect: positive; increased display space for all fruit and veg; price for soft fruit; advertising &amp; prime local on hard fruit and cook vegetables, p ≤ .25 used as criterion</td>
</tr>
<tr>
<td>Gittelsohn et al. (2007)</td>
<td>Out-of-store mass-media (radio, newspaper ads, video) and in-store demonstrations/taste tests/shelf labeling</td>
<td>287</td>
<td>Effect: mixed; increase in purchasing of local vegetables; no difference for local fruit or imported vegetables</td>
</tr>
<tr>
<td><strong>Economic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anliker et al. (1989)</td>
<td>Fruit &amp; veg coupons</td>
<td>489</td>
<td>Effect: unclear; 79.1% used some coupons 57% used all; don’t know base purchasing</td>
</tr>
<tr>
<td>Mhurchu et al. (2010)</td>
<td>Fruit &amp; veg price discounts, education, discount + education</td>
<td>1104</td>
<td>Effect: positive; discounts of 12.5% increased fruit and veg by 1.06 lbs/week after 6 months and .62 lbs after 12-months. No effect for education.</td>
</tr>
<tr>
<td>Herman et al. (2008)</td>
<td>Fruit &amp; veg vouchers for low-income women</td>
<td>454</td>
<td>Effect: unclear; 90% vouchers redeemed ($10 value)/week; don’t know base purchasing</td>
</tr>
<tr>
<td>Herman et al. (2006)</td>
<td>Fruit &amp; veg vouchers for low-income women</td>
<td>602</td>
<td>Effect: unclear; 90% vouchers redeemed ($10 value)/week; increased self-reported consumption of fruits and veg by about 1 serving. don’t know base purchasing</td>
</tr>
<tr>
<td><strong>Information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winett et al. (1991)</td>
<td>Interactive kiosk system</td>
<td>77</td>
<td>Effect: none</td>
</tr>
<tr>
<td>Anderson et al. (2001)</td>
<td>Interactive kiosk system</td>
<td>296</td>
<td>Effect: none</td>
</tr>
<tr>
<td>Rodgers et al. (1994)</td>
<td>Shelf labels, food guides, produce signs, monthly bulletins</td>
<td>Sales data 40 treatment,40 control stores</td>
<td>Effect: unclear; significant 2.4% increase in market share for fresh produce compared to control, but didn’t control for population characteristics &amp; treatment store’s sale of salad items.</td>
</tr>
</tbody>
</table>
2. Keep constant shoppers’ budget

Fresh Fruits and Vegetables!!

- Budgets fixed @ store. SM doesn’t increase dollar volume it shifts existing dollars to higher margin fruit and vegetables
2. Keep constant shoppers’ budget

Financial Resources

What shoppers use

Grocery Store Expenditures

How Shoppers Spend

Follow green arrow for a healthy [weight]

ERROR
2. Keep constant shoppers’ budget

- Planned purchases deliberative and committed—50% of purchases
2. Keep constant shoppers’ budget

50% of all purchases unplanned purchases

- Forgotten Needs & Unplanned wants
- Consumers report bringing money to the store for this purpose
2. Keep constant shoppers’ budget

- Government benefit inefficiencies
  - (22% of F&V WIC benefit unused)
  - (only 20% SNAP used for F&V)
We focus our Shopper Marketing Efforts here

- Forgotten Needs & Unplanned wants (easiest to change)

2. Keep constant shoppers’ budget
3. Increase store profitability

Fresh Fruits and Vegetables!!

- Fresh F&V generally higher margin (~30%).
3. Increase store profitability

This is what shoppers face!

And this!!!

Can people use nutrition facts panels and “facts up front?”
3. Increase store profitability

Grocery Stores Set Normative Purchasing Behavior

• Which would lead you to buy more?

  – Limit 18/person vs. No Limit/person

  – 4 for $4.00 vs. 1 for $1.00
3. Increase store profitability

Grocery Stores Set Normative Purchasing Behavior

- What if we set NORMS in the grocery store for more nutritive foods?

3 Examples
Example #1

The Half Cart

1. Salient
2. Easy to Interpret
3. Easy to Compare Against Current Behavior
Example #1
The Half Cart

Total Purchases
No Difference

Produce
76%

F&V
102%
Example #2: Floor Stickers (or Mats)

1. Salient
2. Easy to Interpret
3. Easy to Compare Against Current Behavior
Example #2: Floor Stickers(or Mats)

- Collection of 207,633 person grocery store transactions as daily sales reports
Example #3: Grocery Cart Placards

En Esta Tienda, La Mayoría de la Gente Elige al Menos 5 Frutas y Verduras
Los más Populares: Plátanos, Limones, Aguacates, Maíz, Naranjas, Tomates, Jalapeño, Pimientos Verdes, Cebollas, y Duraznos

In This Store, Most People Choose at Least 5 Produce Items
Most Popular: Bananas, Limes, Avocados, Corn, Oranges, Tomatoes, Jalapeno & Long Green Peppers, Onions, and Peaches

1. Salient
2. Easy to Interpret
3. Easy to Compare Against Current Behavior
Example #3: Grocery Cart Placards

Produce

10%

Total Purchases
No Difference
Shopper Marketing for Dieticians

1. Improve Nutrition
2. Keep constant shoppers’ budget
3. Increase store profitability

How Did We Do?
What’s next?

1. Working w/USDA to move SNAP WIC participants to F&V purchases

2. Sales Circular Configuration to boost F&V purchases

3. Traffic control system to boost F&V

4. Mirrors in grocery carts
Thank you!

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