Social Marketing Low-fat Milk to Low-Income Families in the U.S.

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Mixed Methods

• Qualitative: Focus Group Discussions
• Quantitative: True/False Quiz, Brief Pre- & Post-Questionnaires
• Theory: Stages of Change
Qualitative

• 7 focus group discussions (n = 53)

  ▪ Inclusion criteria
    • Consumes whole or 2% milk
    • Income eligible < 185% of Federal Poverty Level

  ▪ Whole milk users (n = 33)
  ▪ 2% milk users (n = 20)
Focus Group Topics

- Main use of milk
- What they know about the different types of milk
- What influences the type of milk they buy
- What the term low-fat milk means
- Impressions of low-fat milk
- Benefits of low-fat milk
Focus Group Topics

• What people know about the milk nutrition labels
• How low-fat milk differs nutritionally from whole or 2% milk
• What are the benefits of switching to low-fat milk
• What milk nutrition education materials would be useful
Quantitative

- Pre- & Post-Discussion Questionnaires
  - Knowledge of milk nutrition facts (15 true/false questions)
  - Milk uses & purchasing behaviors
  - Demographic data
  - Willingness to switch to 1% or skim milk (stages of change)
  - What would make it easier to switch?
Previous Interventions

• Promoting low-fat fluid milk
  ▪ California (1% or Less) (Maddock et al., 2007)
    • Adapted for Hispanic/Latino population (Hinkle et al., 2008; Wechsler & Wernick, 1992)
  ▪ Florida (Moove to Low-fat or Fat Free) (Bobroff, 2002; Schmidt, 2001)
  ▪ West Virginia (1% or Less) (Reger et al., 1998)
  ▪ New York (“Lowfat Lucy”)
  ▪ Arizona (Milk Messaging Study) (WestGroup Research, 2009)

• Most have been health communication efforts

• No published, peer reviewed formative research on audience psychographics
Previous Findings

• Sensory experience of milk influences consumption
• Prevalent misperceptions of the nutrient content of the different types of milk
• Taste, family preference, and health concerns influence the type of milk purchased
# Types of Milk

<table>
<thead>
<tr>
<th>Types of Milk</th>
<th>Grams of Saturated Fat per Cup</th>
<th>Percent Daily Value</th>
<th>Government Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>5</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>2%</td>
<td>3-3.5</td>
<td>15-18%</td>
<td>Reduced Fat</td>
</tr>
<tr>
<td>1%</td>
<td>1.5</td>
<td>8%</td>
<td>Low Fat</td>
</tr>
<tr>
<td>Skim</td>
<td>0</td>
<td>0</td>
<td>Non-fat</td>
</tr>
</tbody>
</table>
Expert View

- Whole and 2% milk are significant sources of fat in the American diet
- Overall, consumption of milk is declining
- However, the trend is toward increased consumption of lower fat milk products
  - 71% of all fluid milk consumed is either whole (31%) or 2% milk (40%)
- 85% of the fluid milk consumed was either whole or 2% milk in SNAP households (Castner & Mabli, 2010)
- Consumption of low-fat milk is positively related to age, education and income (Robb, 2006)
Trends in Dairy Consumption

Figure 1. Proportion of milk group intake from fluid milk, yogurt, and cheese
Expert View

• 2010 USDA Dietary guidelines recommend -
  ▪ 3 cups of low-fat milk per day for adults and children 9 and older
  ▪ 2 to 2-1/2 cups of low-fat milk per day for children age 2 and older depending upon specific age-range

(USDA, 2010)
Low Consumption

Average consumption of milk and soft drinks, by age

Number of 8-oz servings

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Milk</th>
<th>Soft drinks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>1.4</td>
<td>0.6</td>
</tr>
<tr>
<td>4-8</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>9-13</td>
<td>0.9</td>
<td>1.5</td>
</tr>
<tr>
<td>14-18</td>
<td>0.7</td>
<td>2.7</td>
</tr>
<tr>
<td>19-30</td>
<td>0.6</td>
<td>2.6</td>
</tr>
<tr>
<td>31-50</td>
<td>0.6</td>
<td>2.2</td>
</tr>
<tr>
<td>51-70</td>
<td>0.5</td>
<td>1.8</td>
</tr>
<tr>
<td>71+</td>
<td>0.5</td>
<td>1.3</td>
</tr>
</tbody>
</table>


Expert Views

- Milk has high nutrient value for an affordable price
- Low-fat milk is readily available
- Cost is the same or less than whole milk
- Low-fat milk has all the nutrients except the fat
Marketing Mix

• Product, Price, Place, Promotion
• Customer centered
• Strategies to change behavior must be based on target audience’s psychographics (needs, wants, beliefs, values, and perceptions)
Current Attitudes & Behaviors

• Actual price influenced selection of the brand but rarely the type of milk
• Main uses of milk
  ▪ Drinking
  ▪ Cereal
  ▪ Ingredient in cooking
• Poor Nutritional knowledge of milk
  ▪ Knowledge slightly worse than chance alone
  ▪ No statistically significant difference between mean quiz scores of whole and 2% milk users
<table>
<thead>
<tr>
<th>Knowledge Barriers</th>
<th>Whole Milk</th>
<th>2% Milk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk is a good source of fiber*</td>
<td>45.5%</td>
<td>75.0%</td>
</tr>
<tr>
<td>All types of milk have the same amount of calcium</td>
<td>21.2%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Whole milk is best for children under 2 years old</td>
<td>63.6%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Skim milk is just watered down whole milk</td>
<td>51.5%</td>
<td>45.0%</td>
</tr>
<tr>
<td>Reduced fat milk and low fat milk are the same</td>
<td>65.6%</td>
<td>45.0%</td>
</tr>
<tr>
<td>The only difference between all types of milk is the percent of fat</td>
<td>66.7%</td>
<td>65.0%</td>
</tr>
<tr>
<td>All children under 18 need whole milk to grow properly</td>
<td>45.5%</td>
<td>60.0%</td>
</tr>
<tr>
<td>Whole milk has more vitamin D than the other types of milk</td>
<td>36.4%</td>
<td>30.0%</td>
</tr>
<tr>
<td>2% milk is considered “low-fat” milk</td>
<td>21.2%</td>
<td>20.0%</td>
</tr>
<tr>
<td><strong>Low-fat milk contains fewer vitamins and minerals</strong>*</td>
<td>50.0%</td>
<td>85.0%</td>
</tr>
<tr>
<td>There is no fat in skim milk</td>
<td>56.3%</td>
<td>45.0%</td>
</tr>
<tr>
<td>All types of milk have the same shelf life</td>
<td>28.1%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Milk is a good source of iron</td>
<td>34.4%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Whole milk is one of the leading sources of saturated fat in the American diet</td>
<td>59.4%</td>
<td>65.0%</td>
</tr>
<tr>
<td>Vitamin D and whole milk are the same</td>
<td>65.6%</td>
<td>55.0%</td>
</tr>
</tbody>
</table>

* p < .05
Current Attitudes

- 2% Milk is perceived as low-fat milk
  - 80% of both groups believe this
- Participants often stated
  - “[if] it’s not whole milk it’s low fat”
- Consuming 2% milk is a compromise between health benefits and taste
  - “2% is probably as far as I could go”
  - “I don’t think it’s necessarily for the good; but...for me it’s...the health values...that extra calories and fat....I know 2% don’t cut a lot of it out, but it cuts out some and every little bit helps”
Product - Barriers

• The taste and texture of low-fat milk makes it an inferior product
• The rich texture provided by fat is what constitutes “milk”
• Focus group participants comments included:
  ▪ “1% tastes so nasty, it’s so watered down”
  ▪ “it feels like I’m pouring water on my cereal”
  ▪ “it tastes like water with a little bit of milk in it”
  ▪ “it is just ‘not milk’ ”
Product - Barriers

- Low-fat milk is considered less nutritious
- Participants describe low-fat milk as
  - “stripped of all the nutrition”
  - “it doesn’t have a lot of vitamins in it”
- Concern for the impact of low-fat milk on children
  - “[S]erving a kid 1% milk, they’re going to be deprived nutritionally”
- Other misconceptions
  - That low fat milk did not have vitamin D
  - Do not understand that children do not need whole or 2% milk after age 2
Price - Barriers

• Family tradition influences the type of milk purchased
  ▪ Whole milk users prefer it “because that’s all I was raised on”

• Other concerns
  ▪ Family preference influences the type of milk purchased
    · “like my kid, they’re not going to drink that”
  ▪ Many expressed it is difficult to cook with low-fat milk products
Place

• Where people purchase milk
  ▪ do not appear to be receptive

• Where milk is consumed
  ▪ Schools
    • Many have made the switch
  ▪ For home use
    • This is where we need to intervene
Stages of Change

- Never consider switching: 42%
- Not thought about it: 20%, 21%
- Would consider switching: 15%
- Ready now: 25%
- Sometimes drink 1% or skim: 15%, 3%
Target Audience

• People who consume whole milk are more resolute in their current behavior
  • No special effort should be made to change their behaviors

• Consumers of 2% milk are more willing to consider changing to low-fat milk
## Promotion

<table>
<thead>
<tr>
<th>Reason</th>
<th>Whole Milk</th>
<th>2% Milk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tastes good</td>
<td>84.4%</td>
<td>90.0%</td>
</tr>
<tr>
<td>If I wanted to lose weight</td>
<td>75.0%</td>
<td>85.0%</td>
</tr>
<tr>
<td>Other family members want it</td>
<td>71.9%</td>
<td>80.0%</td>
</tr>
<tr>
<td>Learned it has as many vitamins, proteins and calcium</td>
<td>66.7%</td>
<td>90.0%</td>
</tr>
<tr>
<td>If my doctor recommends it</td>
<td>78.1%</td>
<td>80.0%</td>
</tr>
<tr>
<td>Quick and easy cooking ideas</td>
<td>78.8%</td>
<td>75.0%</td>
</tr>
<tr>
<td>It is healthier</td>
<td>90.6%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Knew it was natural</td>
<td>78.8%</td>
<td>85.0%</td>
</tr>
<tr>
<td>Knew it was safe</td>
<td>72.7%</td>
<td>85.0%</td>
</tr>
</tbody>
</table>
2% milk users

• Are the “low-hanging fruit”
  ▪ Have acquired a preference for lower-fat milk
  ▪ Are the most reachable and responsive audience segment
    • Already changed behavior in positive direction from whole milk
    • Successfully modified an established habit from childhood
    • Show concern for the health and well-being for themselves and family
Positioning Statements

• 1% or non-fat milk has fewer calories and less fat but all the vitamins and minerals
• Drinking 1% or non-fat milk is part of healthy eating
• Make the healthy choice, use 1% or non-fat milk
• After the age of 2, serving 1% or non-fat milk to your children will provide them all the vitamins and minerals without all the fat
• Serving 1% or non-fat milk to your children when they are young will help develop healthy habits
• 1% or non-fat milk is the healthy choice for your family

(adapted from WestGroup Research, 2009)
Positioning Statements

1% or non-fat milk has fewer calories and less fat but all the vitamins and minerals
Positioning Statements

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Positioning Statements

Make the **healthy choice**, use 1% or non-fat milk
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Positioning Statements

1% or non-fat milk is the healthy choice for your family
Positioning Statements

Start a healthy family tradition, use 1% or skim milk
Next Steps

• Use the positioning statements
  ▪ Nutrition Education Calendar
  ▪ Develop a Brochure
  ▪ ONIE webpage: http://www.ouhsc.edu/onie/
  ▪ Or Google “Oklahoma Nutrition”
• Create recipes using low-fat milk
References


