An Insider’s Perspective to Weight Management Product Development

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THE INTERNATIONAL FOOD NETWORK, INC.

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Biography

- Creativity
- Innovation

- PD
- IFN
- Cornell University
- Kraft Foods
- Iowa State University
Weight Management Biography

![Graph showing weight management over years]

- **Actual**
- **Recommended**

Year:
- 1990
- 1995
- 2000
- 2005
- 2010
- 2015
- 2020

Weight (lbs):
- 160
- 180
- 200
- 220
- 240
Everybody talks about the weather, but no one seems to do anything about it

- Leading brands in the packaged food and supplement industries are developing a pipeline of new products to expand this market
  - Calorie reduction
  - Satiety
  - Metabolism enhancers
- Products are only part of the weight management equation
  - Longer work commitments
  - Fuller schedules
  - Reduced time for physical activity
  - Tastier options
- David Kessler’s “Holy Trinity”, The End of Overeating (2009)
Expanding Opportunities

Daily Consumption Cycle

- Breakfast
- Morning Commute
- Lunch
- Afternoon snacking
- Evening Commute
- Evening snacking
- Dinner

Key behavior cues
- What they do
- When they do it
- Which products they do it with
- Why they do it that way
Weight Management Goals

- Gain
- Lose
- Maintain
Weight Management Systems

- Nutrisystem®
- Weight Watchers®
- Jenny Craig®
- Bariatric Surgery
- Cross-Fit®
Product Development Alignment

- Consumable good
- Primary package
- Secondary package
- Tertiary package
- Brand
Conflicting Product Expectations

**Retailer Requirements**
- Kroger compliance
- Whole foods compliance
- Shelf life minimums
- Price points

**Eating Healthy**
- Free from
- Recognizable ingredients
- Organic
- Non-GMO

**Nutritional Content**
- Calories
- Fat
- Protein
- Carbohydrates
- Sugar
- Fiber
- Sodium

**Perceived Value**
- Size
- Quality
- Delivery
Product Development Strategies

Generate incremental revenue

Attract new consumers

Expand usage occasions

Improve margins

Generate incremental revenue
# Key Financial Metric: Cost in Use

<table>
<thead>
<tr>
<th>Ingredient Cost</th>
<th>Sugar</th>
<th>Natural High Intensity Sweetener</th>
<th>Conventional High Intensity Sweetener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>0.50$/lb</td>
<td>100*$/lb</td>
<td>125*$/lb</td>
</tr>
<tr>
<td>Usage Level</td>
<td>15g/serving</td>
<td>0.075g/serving</td>
<td>0.060g/serving</td>
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<tr>
<td>Cost in Use</td>
<td>0.017$/serving</td>
<td>0.017$/serving</td>
<td>0.017$/serving</td>
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<tr>
<td>Sweetness Equivalency Value</td>
<td>1.0</td>
<td>200</td>
<td>250</td>
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</tbody>
</table>

*Theoretical maximums for equivalent cost in use
Shared Formulation Strategy
Calorie Reduction Tactics

- **Replace Sugar**
  - High intensity sweeteners
  - Low calorie sweeteners

- **Replace Carbs**
  - Hydrocolloids
  - Fibers
  - Resistant carbohydrates

- **Replace Bulk**
  - Air
  - Water

- **Replace Fat**
  - Hydrocolloids
  - Carbohydrates
  - Proteins
Beverages

Sugar
- High Intensity sweeteners
- Low calorie sweeteners

Carbs
- Hydrocolloids
- Resistant carbohydrates

Fat
- Hydrocolloids
- Carbohydrates
- Proteins

Bulk
- Water
<table>
<thead>
<tr>
<th></th>
<th>Full Sugar</th>
<th>Reduced Calorie</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weight (g)</td>
<td>% (w:v)</td>
</tr>
<tr>
<td>Other Carbs</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Sugar</td>
<td>28</td>
<td>7%</td>
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<tr>
<td>Fat</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Protein</td>
<td>1</td>
<td>0%</td>
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<tr>
<td>Water</td>
<td>346</td>
<td>92%</td>
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<tr>
<td></td>
<td>377</td>
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</table>
Cookies

Sugar
• High Intensity sweeteners
• Low calorie sweeteners

Carbs
• Resistant carbohydrates
• Fibers
• Hydrocolloids

Fat
• Carbohydrates
• Protein
• Hydrocolloids

Bulk
• Low calorie sweeteners
• Resistant carbohydrates
• Fibers
## Case Study: Sugar Cookies

<table>
<thead>
<tr>
<th>26g Serving</th>
<th>Full Sugar</th>
<th></th>
<th>Reduced Calorie 1</th>
<th></th>
<th>Reduced Calorie 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weight (g)</td>
<td>% (w:w)</td>
<td>Calories</td>
<td>Weight (g)</td>
<td>% (w:w)</td>
<td>Calories</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Weight (g)</td>
<td>% (w:w)</td>
<td>Calories</td>
</tr>
<tr>
<td>Other Carbs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>27%</td>
<td>28</td>
<td>12</td>
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<td>0%</td>
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</tr>
<tr>
<td>Fat</td>
<td>5</td>
<td>19%</td>
<td>45</td>
<td>8</td>
<td>33%</td>
<td>76</td>
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<tr>
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<td>33%</td>
<td>76</td>
<td>5</td>
<td>19%</td>
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<tr>
<td>Protein</td>
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<td>4%</td>
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<td>2</td>
<td>7%</td>
<td>7</td>
</tr>
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<td>7%</td>
<td>4</td>
<td>1</td>
<td>4%</td>
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<tr>
<td>Water</td>
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<td>15%</td>
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<td>15%</td>
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<td>26</td>
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<td>81</td>
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<td>100%</td>
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</tbody>
</table>
Bars

Sugar
- High Intensity sweeteners
- Low calorie sweeteners

Carbs
- Low calorie sweeteners
- Fibers
- Hydrocolloids

Fat
- Carbohydrates
- Protein
- Hydrocolloids

Bulk
- Air (Puffed crisps)
- Air (Whipped layers)
## Case Study: Bars

| 1 Bar Serving | Full Sugar | | | | | Reduced Sugar | | | | | Reduced Weight | | |
|---------------|------------|--|---|---|---|------------|--|---|---|---|---|------------|--|---|---|---|---|---|
|               | Weight (g) | % (w:w) | Calories | Weight (g) | % (w:w) | Calories | Weight (g) | % (w:w) | Calories |
| Other Carbs   | 8          | 16%      | 32       | 17         | 34%      | 41      | 6          | 16%      | 15       |
| Sugar         | 12         | 24%      | 48       | 3          | 6%       | 12      | 10         | 24%      | 38       |
| Fat           | 5          | 10%      | 45       | 5          | 10%      | 45      | 5          | 13%      | 45       |
| Protein       | 19         | 38%      | 76       | 19         | 38%      | 76      | 15         | 38%      | 61       |
| Water         | 6          | 12%      | 0        | 6          | 12%      | 0       | 4          | 10%      | 0        |
|               | 50         | 100%     | 201      | 50         | 100%     | 174     | 40         | 100%     | 160      |
Summary

- While many strategies are available, focusing on calorie reduction per serving has broadest application
  - Food
  - Supplement
- Evaluate multiple options to achieve desired results
  - Reduce fat
  - Reduce carbohydrates
  - Reduce serving size
Future Is Merging Worlds

Conventional  Natural
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