Meeting the Coronavirus Challenge for Healthier & Sustainable Foods

The Role of Chocolate in Making ‘Better-for-you’ Confectionery, Snacks & Baked Goods
A PERFECT STORM

- The coronavirus pandemic has underscored food’s direct link to consumer health
- Public health and regulators are pressuring industry to reduce sugar & convert to plant-based proteins
- Consumer desire for healthier foods is heightened
- Food that is sustainable is on the rise

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EXECUTIVE SUMMARY

The arrival of the novel coronavirus has further exacerbated public health and regulatory pressures on food suppliers and processors by uncovering the tight linkage between poor food nutrition and obesity, susceptibility to serious illness and adverse environmental impacts.

The entire food supply system has come under question which is placing groundbreaking demands on the industry to change its sourcing, formulation and production practices. Consumers more and more are insisting on products that are sustainably sourced, processed and packaged while offering “better-for-you” benefits.

This paper presents evidence that “better-for-you” and sustainable products are driving growth and that sweets & snacks must answer the call to deliver more of these versions, especially as these categories have been identified as the #1 public health target to make nutritional improvements.

Meeting this challenge will require ingredient R&D expertise to help confectionery, snack and baked goods companies deliver sustainable products with:

- Superior taste
- Reduced sugar
- More plant protein

Chocolate can play a major role in addressing these needs by enabling manufacturers to satisfy both consumer and public health demands.

This white paper was published by the Fuji Oil & Blommer Chocolate Global R&D Center in collaboration with Hank Cardello, director of Food Policy at Hudson Institute.
A PERFECT STORM

1. The coronavirus pandemic has underscored food’s direct link to consumer health

The coronavirus has brought to light that people with compromised health conditions closely linked to dietary factors, such as hypertension, obesity and diabetes, were more likely to be hospitalized with COVID-19. According to the T.H. Chan School of Public Health at Harvard University, “Poorly nourished individuals are at a greater risk of various bacterial, viral, and other infections.”¹

Rates of obesity and diabetes are projected to continue their upward climb over the coming decades.²⁻³ It is imperative that foods improve their nutritional content to help reverse these trends. Research studies show that eating fewer refined carbohydrates, less saturated fat and more plant-based foods can help lower the risk of these conditions.⁴

A Hudson Institute study⁵ titled “Why They Buy: Fighting Obesity Through Consumer Marketing Research” revealed that those with obesity purchase significantly more packaged pastries, sweet baked goods, ice cream, cookies and soda than healthy weight respondents (with chocolate and candy as exceptions). These findings make clear that these categories must make more concerted efforts to improve the nutrition content of the products they sell.

Underlying conditions among adults hospitalized with COVID-19

Note: Based on data from the COVID-19–Associated Hospitalization Surveillance Network for patients hospitalized in 93 counties in 14 states from March 1-30, 2020.

Source: MMWR. 2020 Apr 8:69(early release):1-7
Prior to the arrival of the coronavirus, regulatory and public health pressures had been building to revamp food and beverage nutritional profiles. The World Health Organization declared war on sugar6 and subsequently the Dietary Guidelines for Americans’ cited that sugar should comprise no more than 10% of daily calories. Additionally, as of January 1, 2020, Added Sugar labeling is now required on all manufacturer food packages. Even more draconian are “Black Stop Sign” labels highlighting products high in calories, sugar, saturated fats and sodium, which are now cascading across Latin America.

In January 2019 the EAT-Lancet Commission, a consortium of global public health experts, issued a report8 heralding the need for “Healthy Diets from Sustainable Food Systems,” stating that the food industry was culpable for the “Global Syndemic” of obesity, undernutrition and climate change. The Commission called for drastic changes by 2050, including a 50% reduction in sugar and red meat consumption and an increase in the consumption of plant-based foods by 100%. 

**THE LANCET**

**Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems**

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**Original Label**

**New Label**

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**Nutrition Facts**

Serving Size 2/3 cup (55g)

<table>
<thead>
<tr>
<th><strong>Amount per Serving</strong></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Calories 230</td>
<td>Calories from Fat 72 % Daily Value*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fat 8g</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturated Fat 1g</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trans Fat 0g</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholesterol 0mg</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium 150mg</td>
<td>7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Carbohydrate 57g</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietary Fiber 4g</td>
<td>16%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugars 1g</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein 3g</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin A</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin C</td>
<td>8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>45%</td>
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</tbody>
</table>

*Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.

Calories: 2,000 2,500

**Total Fat** Less than 65g

**Saturated Fat** Less than 10g

**Trans Fat** Less than 2g

**Cholesterol** Less than 300mg

**Sodium** Less than 2,400mg

**Total Carbohydrate** Less than 300g

**Dietary Fiber** 25g

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**Nutrition Facts**

Serving Size 8 servings per container

<table>
<thead>
<tr>
<th><strong>Amount per serving</strong></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<tr>
<td>Cholesterol 0mg</td>
<td>0%</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Total Carbohydrate 57g</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietary Fiber 4g</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sugars 1g</td>
<td></td>
<td></td>
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</tbody>
</table>

**Added Sugars** 19g

**Protein** 3g

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**Vitamin D** 2mg

**Calcium** 300mg

**Iron** 8mg

**Potassium** 2,500mg

*Percent Daily Values (%DV) are based on a 2,000 calorie diet. A serving size of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.*
A PERFECT STORM

3. Consumer desire for healthier foods is heightened

More people around the world are thinking more carefully about the link between food and health. In a survey of consumers in 18 countries regarding their attitudes about food as a result of the coronavirus pandemic, 73% said they are changing the way they eat to improve their health and immunity. When asked what specific steps they would be taking, 45% indicated they would reduce their sugar intake and 37% would eat more protein.

An International Food Information Council (IFIC) survey highlighted that consumers say they are eating healthier now, with eating more fruit and vegetables and limiting sugar intake the top changes. And an April 2020 study conducted by MMR Worldwide found that immunity is now the #2 health concern in the U.S. behind heart health.

Ingredient suppliers and food manufacturers must recognize these trends and help consumers eat healthier diets. Products with reduced sugar and more plant-based proteins are increasingly in demand, especially in snacks, confectionery products and sweet baked goods.

Reducing sugar and increasing protein intake rank in the top 5 actions to eat and drink healthier

<table>
<thead>
<tr>
<th>% of consumers identifying what they will do to eat and drink more healthily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase intake of fruit</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>62%</td>
</tr>
</tbody>
</table>
4. Food that is sustainable is on the rise

According to the International Food Information Council (IFIC),13 59 percent of consumers say that the sustainability of foods is important, and 45 percent indicate that they have changed their diets over the past two years in order to lead a more sustainable lifestyle. Six of ten consumers now believe that food impacts climate change. When asked to rate which aspects of an environmentally sustainable diet are most important, eating healthy for the planet is their highest priority.

This linkage between food and sustainability is highlighted in an Accenture Covid-19 Consumer Research study14 which identified that the most permanent changes shoppers are making are behind health, sustainability and food waste.

With disruptions in the food supply and evidence of lower pollution as a result of the coronavirus crisis, the food industry’s environmental impact will undergo even more scrutiny as its supply system contributes 24% of all greenhouse gas emissions.15 Calls by the EAT-The Lancet Commission will further exacerbate these pressures to change.
BETTER-FOR-YOU AND SUSTAINABLE FOODS ARE DRIVING GROWTH

Strong evidence has been compiled that companies benefit from their Environmental, Social and Corporate governance (ESG) efforts. Deutsche Bank reports that “companies that experienced positive press on climate change saw share prices outperform the MSCI World Index by 26%.” Barron’s amplified these findings citing on February 7, 2020 that “more than half of companies with the highest ESG scores were top performers in the stock market.”

Studies by Hudson Institute have demonstrated that foods and beverages that are better-for-you and lower-calorie are driving sales growth for consumer packaged goods companies, supermarkets and restaurant chains. Nielsen reports that nearly half of U.S. consumers (48%) would definitely/probably change their consumption habits to reduce their environmental footprint, and that since 2014 sustainable product sales have grown at a compound average growth rate (CAGR) at four times the rate of traditional products.

Since 2013, sustainability-marketed products have accounted for more than half of the growth in consumer packaged goods (CPG), despite the fact that these items only comprise 16.6% of dollar sales.

Supporting the rapid growth of more sustainable foods, plant-based foods are experiencing strong sales increases, growing at over five times the rate of all foods sold at retail. Other healthy/sustainable products are enjoying high growth rates, according to NMI’s 2019 Sustainability Trends Database, with vegetarian/vegan items +170%, Fair Trade certified ingredients +97% and products from farms practicing sustainable agriculture +59%.
According to Mintel, taste is the #1 attribute consumers desire in a snack. A May 2020 survey conducted for Blommer Chocolate highlighted that 73% of respondents indicated that taste is most important when buying a chocolate candy product.

Technomic’s 2018 Snacking Occasion Consumer Trend Report\textsuperscript{24} found that 34% of consumers say they are snacking healthier than they were two years ago, with 25% planning to snack healthier in the year ahead. Two areas in particular are driving the ‘better-for-you’ trend:

1. **Sugar Reduction**
   Sugar remains the top item that consumers look for on the nutrition label. Seventy-four percent of consumers are now looking to limit or avoid sugars\textsuperscript{25} and 41% of consumers are looking for snacks with less sugar. For chocolate candy, 32% would be interested in purchasing a 50% reduced sugar version and 30% would likely buy a No Sugar Added product.

2. **More Protein**
   Protein has also established itself as an important attribute. Fifty-two percent of U.S. consumers are eating more plant-based foods and nearly 70% indicated that protein from plant sources is healthy. According to Technomic’s 2019 Center of the Plate report,\textsuperscript{26} more than half (52%) of consumers are finding high-protein snacks appealing.

Despite these attractive trends, sustainability-marketed chocolate, candy and cookie products are grossly underdeveloped, where these items comprise less than 5% of dollar sales. This represents a significant opportunity for producers.

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**Consumers are looking at confectionery, snacks & baked goods to reduce/eliminate sugar\textsuperscript{27}**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candy</td>
<td>48%</td>
</tr>
<tr>
<td>Baked Goods (cookies, cakes, pastries)</td>
<td>35%</td>
</tr>
<tr>
<td>Frozen Desserts (ice cream, frozen yogurt)</td>
<td>25%</td>
</tr>
<tr>
<td>Breads (bagels, dinner rolls)</td>
<td>15%</td>
</tr>
<tr>
<td>Sweet Snacks (granola bars, trail mix)</td>
<td>15%</td>
</tr>
</tbody>
</table>
FORMULATING FOR TOMORROW’S CHOCOLATE LOVER

Sustainable and “better-for-you” chocolate is an underdeveloped business with huge upside advantages.

There are several growth opportunities available for the industry to capitalize on, especially in confectionery, snack and baked goods applications.

Considerations include:

- Chocolate suppliers and manufacturers must deliver more products containing both health AND sustainability benefits
- These “better-for-you” and sustainable products must be developed without compromising on TASTE
- Focus areas include:
  1. Reduced sugar
  2. Plant-based protein versions
  3. Ingredients that are sustainably sourced and environmentally conscious

When considering a partner to successfully reformulate your products to meet these changing times, look for a partner who:

- Brings expertise and capabilities in formulating “better-for-you” ingredients that deliver superior taste
- Has a reputation for sourcing ingredients in the most sustainable way and for making commitments to preserve the environment and to practice plant-friendly procedures
- Understands changing consumer needs to ensure ingredients and products are on trend
- Provides insights on where consumer, public health and regulatory trends are going
REFERENCES


18. “These Are the 100 Most Sustainable Companies in America,” Barron’s, February 7, 2020 https://www.barrons.com/articles/the-100-most-sustainable-companies-51581095228


