INSTRUCTOR’S FOREWORD

When Katherine Disenhof first proposed to write about multi-media corn syrup advertisements for our class on “Visual Rhetoric Across the Globe,” I was a little skeptical of the potential research rigor of her project. But when she handed in her first draft focusing on the manipulative strategies of the Sweet Surprise ad campaign, I realized that her keen eye for logical fallacies, her engaging writing style, and her passionate position against the poisoning of the American diet all combined to make her project one of the most significant of the class. As Katherine then delved into her research, she researched widely, including studying Michael Pollan’s work, attending the Stanford lecture series on the Ethics of Food and the Environment, and examining FDA decisions on corn syrup. As she revised draft after draft, her shrewd assessment of the campaign videos, website, and still ads evolved to offer a chilling perspective on diverse food cultures within America. Her innovative research embodies the Stanford motto, “The wind of freedom blows” while her writing conveys her ideas with creativity and grace. Yet this was no mere academic exercise for Katherine. Her concern to warn America fueled her project, and thus it is the words of her cover letter, explaining the importance of her project, that I would like to cite as the most appropriate introduction to her fine essay:

Dear America,

After viewing the “party” commercial from the Sweet Surprise campaign, you might have thought something you never imagined you would ever think: maybe high fructose corn syrup isn’t all that bad after all. It’s made from corn, a healthy vegetable, and contains no artificial ingredients. Moreover, it’s fine in moderation and has the same nutritional value as sugar. You might have avoided high fructose corn syrup because you heard that it was unhealthy, but what exact reasons do you have to condemn it? I am here to tell you that you should never ever agree with an argument just because you cannot argue against it yourself. If you began questioning your stance on high fructose corn syrup because you could not explain the scientific and nutritional argument against the processed and overabundant substance, you should know that you are being misled. In the following essay you will learn just how the Corn Refiner’s Association is distracting you from the real problems behind high fructose corn syrup. Through strategies of visual persuasion and logical fallacies, the commercial seeks to improve the ethos of high fructose corn syrup. It feeds on America’s limited public knowledge of nutrition and aims to instill a sense of humiliation in those who criticize the ingredient without a full understanding of the issue. So, if you are one of viewers who questioned their view on high fructose corn syrup after viewing this commercial, then take a second look, read the essay, and think. Do not agree with an argument when you haven’t seen the other side of things. Get the facts and educate yourself. After all, it’s your health we’re talking about.

—ALYSSA O’BRIEN
Sweet Surprise
Visual Rhetoric and the Flawed Message of the Corn Refiners Association’s Sweet Surprise Campaign

Katherine Disenhof

“There are so many myths, inaccuracies and untruths associated with [high fructose corn syrup] that we felt it was necessary to set the record straight.”
– Audrae Erickson, President of the Corn Refiners Association

The Corn Refiners Association is fighting back. In an attempt to combat the negative press and improve the reputation of high fructose corn syrup, the Corn Refiners Association announced its plans to launch the Sweet Surprise campaign in June of 2008. As detailed in the project’s “Campaign at a Glance” news release, the association created the multi-media movement to “change the conversation about high fructose corn syrup” (“Campaign at a Glance”). Faced with an increasing amount of criticism, the sweetener is widely misunderstood. Flagged as the new trans-fat by the general public, it is often wrongly accused of being the sole villain behind the nation’s growing obesity and type II diabetes problems (McLaughlin 1). Recognizing that the majority of consumers do not comprehend the similarities between sugar and high fructose corn syrup, the campaign specifically targets consumers over the age of 25, especially mothers. To accomplish this, it aims to share scientific facts, communicate in a responsible way, and provide credible sources of information (“Campaign at a Glance”). Currently, the campaign is comprised of three television advertisements, three web banners, three magazine advertisements, and two newspaper advertisements, all of which refer the viewer or reader to HFCSFacts.com, the official campaign website.

This campaign is extremely pertinent to our lives today because high fructose corn
syrup makes up an increasingly large portion of the American daily diet. In a *TIME Magazine* article written in response to the Sweet Surprise campaign’s September launch, journalist Lisa McLaughlin reported that the United States’ food system manufactures approximately 56 pounds of the sweetener per person per year. Consequently, each of us ate nearly 60 pounds of high fructose corn syrup in 2006 in addition to a slightly smaller amount of sugar (McLaughlin 1). Currently, almost 10% of the calories that American adults eat is derived from corn sweeteners, and that figure is 20% for most American children (Pollan, “Becomes King” 1). In this way, the campaign addresses and influences a crucial ingredient in our diet.

The message of the campaign’s advertisements is simple: high fructose corn syrup is made from corn, contains no artificial ingredients, is nutritionally the same as sugar, has the same amount of calories as sugar, and is fine in moderation. However, this evidence is a little too simplistic. While the campaign cleverly uses rhetorical strategies to convince viewers of its cause, its message relies heavily on logical fallacies and neglects to acknowledge its possible implications. Instead of an in-depth scientific explanation, the advertisements provide generalized, one-sided, oversimplified argument. Furthermore, the campaign recognizes that the stigma attached to high fructose corn syrup is a product of a more complex food culture flaw, but then proceeds to take advantage of that flaw to persuade its audience. With possible significant cultural and environmental ramifications, it is imperative that this campaign be carefully analyzed and thoroughly discussed.

**A Sweet Message: Examining the Rhetorical Strategies of the Advertisements**

At first glance, the campaign’s advertisements are very unassuming. The print advertisements do not contain any unique eye-catching graphics and the Internet banners simply depict an ear of corn and a tractor. Similarly, the foundations of the television commercials are nothing out of the ordinary; each contains two people who fit into the stereotypical cultural images of Middle America. In the “Party” commercial, two middle class, middle-aged mothers are seen at a well-furnished children’s birthday party. “Two Bites” depicts a young couple enjoying a springtime picnic in the park. Meanwhile, the “Brothers” commercial portrays a classic brother relationship – a lazy and rude brother mocking his more intelligent younger brother. Thus, text and dialogue aside, the message of the campaign is rather inconspicuous to the audience within the visual aspects of the advertisements. Instead, the visuals provide a construction of normalcy. The Sweet Surprise television advertisements begin like most other commercials: average, middle class people doing ordinary things. The soccer moms organize the birthday party, the boys bicker over breakfast, and the cute couple has a romantic date.

However, once the dialogue between the television commercials’ characters begins, the campaign moves from portraying a clichéd Middle America to exposing a significant cultural flaw. Each of the conversations is set up the same way: the first character comments on the unhealthy nature of high fructose corn syrup in the food or beverage of the second character. When the second character questions the opinion of the first, the first character is speechless, baffled, and cannot explain why high fructose corn syrup is
bad. The best justification they can give is, “well you know what they say about it.” In this fashion, the campaign responds to the instability of our easily-influenced diet. As characters in the commercials condemn high fructose corn syrup but cannot justify their criticism, the Sweet Surprise campaign provides a social commentary about our lack of nutritional education and our acceptance of the dietary information that we hear without questioning it or fully understand it.

In a *New York Times Magazine* article from October 2004 titled "Our National Eating Disorder," acclaimed author and environmentalist Michael Pollan commented on this unstable, diet-crazed American food culture. From what he calls the “carbophobia” of 2004 to the soy craze and the more recent organic fad, he believes that we base our diets on the latest food gossip. As many Americans lack a proper nutritional education, what we put in our mouths is dangerously dependent on the latest news, whether heard from the media or from a friend. According to Pollan, it takes very little to catalyze a new national food fashion. Even “a lone crackpot with a medical degree can alter this nation’s diet overnight,” he wrote in his article. Furthermore, food marketers tend to exploit the shifting trends which inevitably leads to more dietary instability. Consequently, this creates the great paradox of the American diet: unhealthy citizens obsessed with the idea of eating healthily (Pollan, “Eating Disorder” 1). The more the people of this country worry about their weight, the more they destabilize their diets by following food trends and the bigger they get. In this way, the campaign can be praised for drawing awareness to such an important and influential cultural problem though its television commercials.

The Sweet Surprise magazine advertisements also feature the same social commentary. In the “Hairdresser” print ad, one character says, “My hairdresser says that sugar is healthier than high fructose corn syrup,” while the second character remarks, “Wow! You get your hair done by a doctor?” Likewise, in the campaign’s “Dry Cleaner” advertisement (Fig. 2) one character tells the other one, “My dry cleaner says high fructose corn syrup is loaded with calories.” In response, the other character asks, “A registered dietitian presses your shirts?” In both cases, the Sweet Surprise campaign brings our lack of nutritional knowledge to light and expresses its disapproval of the unquestioning, trend-following nature of Americans.

Assuming that a large portion of its audience is unable to explain the negative aspects of high fructose corn syrup themselves, the Sweet Surprise campaign cleverly persuades its viewers through an emotional appeal. The advertisements portray the
misinformed characters that condemn high fructose corn syrup as idiots who base their opinions on the inaccurate opinions of others. The magazine advertisements employ this tactic through sarcasm and mockery (“Wow! You get your hair done by a doctor?”) while the television commercials combine visual and audio elements to highlight the lack of intelligence of the characters. For example, in the “Party” commercial, as one of the mothers tries to explain the negative things that people say about high fructose corn syrup, the camera focuses in on her face as she fumbles for an explanation (Fig. 3). In addition, the background music pauses. These effects make her stuttering even more awkward and her humiliation even more painful. This amplification of the character’s humiliation triggers an emotional response in the viewers. Identifying with her misinformed opinion, they too feel embarrassed. In this way, the advertisements utilize pathos to make the audience self-conscious of its nutritional stupidity and instill a feeling of humiliation.

Through this emotional appeal, the Sweet Surprise campaign establishes its ethos with the audience as well. Commenting on the misinformed American with a condescending tone, the campaign portrays itself as an educational, informative source which is courageously confronting public opinion. As viewers begin to question their own views of high fructose corn syrup when the characters who criticize the sweetener cannot provide evidence to support their opinions, the campaign takes advantage of the situation to establish itself as an authoritative power and communicate its message. For instance, at the bottom of each magazine advertisement is the following statement:

There’s a lot of misinformation out there about sugars made from corn. Truth is, high fructose corn syrup is nutritionally the same as table sugar. The same number of calories, too. As registered dietitians recommend, keep enjoying the foods you love, just do it in moderation. We welcome a healthy discussion. Get the facts. You’re in for a sweet surprise. (Sweet Surprise)

The campaign offers the information its audience lacks – the information to alleviate their embarrassment. Its message cites scientific information (“nutritionally the same as sugar” and “same number of calories”) and references registered dietitians as opposed to hairdressers and dry cleaners. The truth, it argues, is that high fructose corn syrup is basically the same as sugar (an accepted ingredient) and perfectly healthy in moderation. Additionally, in other advertisements the campaign mentions that high fructose corn syrup is made from corn (a healthy vegetable) and contains no artificial ingredients.

As a result, the Sweet Surprise campaign effectively uses rhetorical strategies to persuade its audience. Though the campaign’s advertisements may seem quite unassuming...
at first, the dialogue between characters draws attention to a significant flaw in our food culture. Commendably, it exposes our lack of nutritional education, easily-influenced diets, and habit of basing our food-related opinions on those of others. By doing this the advertisements cleverly cause their viewers to identify with the humiliation of the characters who are portrayed as fools. Then, using the emotions of the audience to its advantage, the campaign steps in as the credible source with the dependable facts. Consequently, the Sweet Surprise campaign works to improve the reputation of high fructose corn syrup by combating the inaccurate public opinion with facts as a responsible, educational resource.

Here’s the Skinny: 
Revealing the Not-So-Sweet Logical Fallacies

The Sweet Surprise campaign may skillfully utilize rhetorical strategies to persuade its audience and work hard to establish itself as a trustworthy informant, but its argument is misleading as it relies heavily on logical fallacies. Most obviously, the campaign’s advertisements stack the evidence heavily in support of high fructose corn syrup. Neglecting to address any of the arguments against high fructose corn syrup, the characters in the advertisements who criticize high fructose corn syrup are ridiculed and portrayed as unintelligent. In reality, not everyone who believes that high fructose corn syrup is bad is ignorant and yet the campaign does not even give the other side a chance to justify its opinion. Instead, the characters who represent the anti-high fructose corn syrup claim are depicted as having no valid reasoning for condemning the sweetener. Their stupidity is emphasized and they are quickly shot down by their pro-high fructose corn syrup counterparts. Had the characters provided reasons for disliking high fructose corn syrup that were then disproved by the other characters, the campaign would have avoided this fallacy. However, only one side of the argument is communicated.

In addition to stacking the evidence, the campaign’s message is even more misleading because it makes hasty generalizations about the issue at hand. There is very little evidence provided in the commercials; the “facts” that are presented are very general and lack complete explanations. For example, the campaign argues that high fructose corn syrup is nutritionally the same as sugar and has the same amount of calories but then does not explain how the two sweeteners are different from one another. In fact, even after it is apparent that the advertisement’s characters lack a complete understanding of high fructose corn syrup, a suitable definition of high fructose corn syrup is not provided for clarification.

In her article “The Facts about Corn Syrup” for the San Francisco Chronicle, prominent nutritionist Marion Nestle describes the similarities and differences between sugar (sucrose) and high fructose corn syrup. Unlike the Sweet Surprise campaign’s message, Nestle states that high fructose corn syrup is not the “same as sugar,” but is still relatively equivalent. Sucrose, also known as sugar, is a double sugar composed of two types of single sugars – glucose and fructose – in an equal 50/50 ratio. Similarly, high fructose corn syrup is made up of glucose and fructose but in a slightly different ration; it is approximately 55% fructose and 45% glucose. The chemical difference between the two is minor.
The fundamental distinction lies instead in the process of getting the substance. With sucrose, on the one hand, it is a process of obtaining the sugar whereas with high fructose corn syrup, it is a matter of creating the sweetener. Sucrose is boiled down from sugarcane (or beets) and then processed through a system of washing, clarification, filtering, and drying. On the other hand, the process for producing high fructose corn syrup is much more complex. First, starch is extracted from corn and broken down by enzymes to produce glucose. More enzymes are then used to convert some of the glucose into fructose. The final steps include a refining, separating, and evaporating of the products (Nestle, “The Facts” F-1). Consequently, while the campaign is almost correct in arguing that high fructose corn syrup is nutritionally equivalent to sugar, it fails to recognize the major difference between the two: sugar occurs in nature while high fructose corn syrup is man-made. Furthermore, it may state that the sweetener does not contain artificial ingredients, but that does not mean that it is not processed. Even though there might not be anything artificial used to produce high fructose corn syrup, there is still something very artificial about its creation.

Through this definition of high fructose corn syrup, it is also evident that the campaign leaves out key details in its argument that the sweetener is made from corn. Yes, high fructose corn syrup is derived from corn, but the starch that is extracted from corn subsequently undergoes a chemical procedure. Despite what the campaign logo – an ear of corn – implies, very little of the vegetable is utilized. Corn is just the foundation of a complex production process.

Even so, the fact that corn is involved at all is controversial. In a 2002 New York Times article titled “When a Crop Becomes King,” Michael Pollan discusses what he calls “cornification,” or the domination of the corn industry over America’s food supply. Every aspect, he argues, of the United States’ food supply today is linked to corn in some way, shape, or form. Pollan believes high fructose corn syrup is by far the industry’s best tactic for staying in business. Pushing sugar aside, high fructose corn syrup provides the food industry with a cheap substitute that can be found in a wide range of foods and beverages. Now factor in the corn-fed animal protein and food which is made from actual corn: the species has fully converted the unwitting human race into a fully dependent population of corn eaters (Pollan, “Becomes King” 1).

Another part of the campaign’s argument that is not discussed in full is the concept of moderation. The characters of the Sweet Surprise television commercials declare high fructose corn syrup “fine in moderation” while the magazine advertisements tell readers that “as registered dietitians recommend, keep enjoying the foods you love, just do it in moderation.” However, these days moderation seems nearly impossible to define because high fructose corn syrup is an ingredient in nearly every food and beverage product. Treasured by the food industry for being cheap and long-lasting, it took the food industry by storm in the 1980s and replaced sugar as the leading sweetener. The list of what it is now included in is extraordinary. According to The 2007 Corn Annual published by the Corn Refiners Association itself, not only is high fructose corn syrup included in foods (crackers, fruit juices, catsup, candy, beer, salad dressings, chicken products), but other kinds of products as well, including baby food, animal feed, lecithin, antibiotics, and shampoo (Corn Refiners Association 29, 30). The sweetener, in short, is being produced in massive amounts. For example, the association’s publication reports that the corn industry distributed a total of 23 billion pounds of high fructose corn syrup in 2006.
(9). As a result, the Sweet Surprise campaign may argue that high fructose corn syrup is fine in moderation, but it neither defines moderation nor does it address how unrealistic moderation is because of the sweetener’s overproduction.

Not only is the credibility of the campaign weakened by its reliance on logical fallacies, but its commendable act of exposing the flaws of our food culture is discredited as it simultaneously takes advantage of those flaws. In the second half of the television commercials the non-criticizing character justifies the safety of high fructose corn syrup after the other character cannot explain its negative effects. Upon hearing the campaign’s argument, the character immediately changes its opinion about the sweetener. For example, in the “Party” commercial, after the mother who criticizes high fructose corn syrup is “proved wrong” by the other mother, the critical mother looks embarrassed and compliments the other mother to make up for her mistake and redeem herself. Similarly, when the younger brother proves his high fructose corn syrup-questioning older brother wrong, the older brother mumbles “whatever” and begins to eat the younger brother’s bowl of cereal. Within a matter of seconds, both disproved characters are chastised for avoiding high fructose corn syrup based on the opinions of others and then proceed to accept the opinion of the other character in the scene. This is a direct contradiction to the campaign’s criticism of the unquestioning American who bases his or her opinion on those of others.

Additionally, the oversimplification of the Sweet Surprise “facts” can be seen as an insult to our intelligence. The campaign appears to believe that a couple of very general and very simplified facts that utilize keywords such as “calories” and “artificial ingredient” are enough to persuade its audience. Health contributors such as Marion Nestle have even found the campaign’s strategies offensive. Although she agrees that high fructose corn syrup has a large public relations problem, Nestle wrote the following in a blog entry posted after viewing the campaign’s website:

“It’s hard to know what on the website is most offensive: the videos of the dumb people being condescended to by friends who think they know better (and what’s up with the race and gender combinations?), the slogans (“HFCS has no artificial ingredients and is the same as table sugar”), the quiz questions (“which of the following sweeteners is considered a natural food ingredient: HFCS, honey, sugar, or all of the above”), or just the take home message: “As registered dieticians recommend, keep enjoying the foods you love, just do it in moderation.” (Nestle, Blog Entry)

As Nestle notes, the campaign oversimplifies the information it provides and expects us to accept its diluted message without question. Consequently, the Sweet Surprise advertisements criticize our cultural food flaw, but then turn around and take advantage of that flaw. They assume our nutritional unintelligence and presume that we will be easily persuaded by a small amount of evidence.

Nestle also makes an interesting observation regarding race and gender as portrayed by the campaign. In both the television commercials and magazine advertisements, there are noteworthy patterns about which gender and which race is the smart, sweetener-promoting character and which is the misinformed one. With the exception of the “Brothers” commercial in which the discussion is between two boys, all of the advertisements depict a female as the high fructose corn syrup advocate. The “Party” com-
mercial and the “Hairdresser” advertisement illustrate conversations between women, but in the “One Bite,” “Dry Cleaner,” and “Thirds” advertisements it is the female who chastises the male for believing high fructose corn syrup to be unhealthy.

As the campaign is particularly targeting mothers, the campaign’s choice of a dominant gender may be an unethical tactic for winning the trust and confidence of the female audience. Although times are changing, women tend to be generalized as the more nutritionally educated of the sexes because they have historically and stereotypically been the ones who do the grocery shopping and cooking. Furthermore, a man discussing a woman’s weight (especially if commenting on her being overweight) is culturally viewed as being more offensive than if a woman comments on a man’s weight. For example, the man in the “Thirds” advertisement (Fig. 4) says, “High fructose corn syrup made me fat.” To this the woman replies, “No, going back for thirds made you fat.” While the woman does appear to be mocking the man, her comment is not entirely offensive. However, if the roles are switched, the advertisement would take on a whole new tone. In this fashion, the campaign inadvertently comments on our food culture as it pertains to gender.

The representation of race provides another inadvertent social commentary. Of the twelve characters in the six advertisements under examination, all are Caucasian except for two African Americans. Both African American characters are women, and both are in support of high fructose corn syrup. This could be interpreted as the campaign’s attempt to connect with and persuade that racial demographic, especially African American mothers. The Corn Refiner’s Association might be assuming that their audience members are most likely to listen to, respond to, and agree with messages coming from their own particular demographic. But on another note, the choice to portray the African American characters as more informed and, therefore, more intelligent than the Caucasians might have been made to avoid the culturally sensitive subject of race-related superiority. As in the “Thirds” advertisement, if the characters’ roles in the “Party” and “Dry Cleaner” advertisements had been reversed, they might take on an entirely different tone. By choosing the race and gender combinations that it did, the Sweet Surprise campaign targeted its intended audience, provided an interesting social commentary, and avoided sensitive cultural issues of race and gender.
We Are What We Eat: The Health Implications of Overconsumption

While we might be tempted simply to disregard the advertisements as being a part of just another campaign, the possible repercussions if people actually listen to the Sweet Surprise campaign’s message are too great to ignore. Unlike a commercial for, say, a car or even a specific food product, the Sweet Surprise commercials have the power to alter our food culture. Corn Refiners Association might have initiated the campaign to merely improve the reputation of high fructose corn syrup, but convincing us to consciously accept high fructose corn syrup into our diets also entails convincing us to consume more high fructose corn syrup. While the campaign’s visual media works hard to establish it as a healthy substance, increased consumption of the sweetener leads to detrimental effects of our physical health. Although it has yet to be proven that the chemical itself is leading to problems such as obesity and diabetes, there is substantial evidence that the effects of high fructose corn syrup are catalysts of such major health epidemics. The quotes and “scientific” facts provided by the campaign often exclude key pieces of information. The association portrays high fructose corn syrup as a natural substance with no connection to diabetes, when it is actually an addictive chemical that can cause overeating and mental instability.

The slideshow of quotes on the homepage of the campaign’s website features the following statement from the American Medical Association (AMA) taken from an AMA press release dated June 17, 2008: “After studying current research, the American Medical Association (AMA) today concluded that high fructose syrup does not appear to contribute more to obesity than other caloric sweeteners” (Sweet Surprise). While this quote (Fig. 5) seems to disassociate high fructose corn syrup from our nation’s quickly growing obesity levels, there is more to the AMA’s view of the sweetener than the campaign would like to share. Yes, the AMA has stated that high fructose corn syrup does not contribute to rising obesity and type II diabetes rates any more than sucrose, because studies have suggested that it is not a unique contributor to the health problems. That said, this does not mean that high fructose corn syrup has no contribution, it just does not stand out as a leading contributor. Nonetheless, while there is currently no evidence that points to high fructose corn syrup as a key culprit, the AMA
makes it very clear that this does not completely vindicate the sweetener. Presently there are very few studies that have been conducted on the health impacts of high fructose corn syrup and any long-term effects have yet to emerge.

Released in June 2008, the AMA summarized the situation in its Report 3 of the Council on Science and Public Health (A-08) with the following statement:

Because the composition of high fructose corn syrup and sucrose are so similar, particularly on absorption by the body, it appears unlikely that high fructose corn syrup contributes more to obesity or other conditions than sucrose. Nevertheless, few studies have evaluated the potentially differential effect of various sweeteners, particularly as they relate to health conditions such as obesity, which develop over relatively long periods of time. Improved nutrient databases are needed to analyze food consumption in epidemiological studies, as are more strongly designed experimental studies. At the present time, there is insufficient evidence to restrict use of high fructose corn syrup or other fructose-containing sweeteners in the food supply or to require the use of warning labels on products containing high fructose corn syrup. (AMA 1)

The AMA is not taking a proactive stance on the issue – even though high fructose corn syrup might have harmful side effects, the association will not act until concrete proof has been provided. It does, however, recognize the lack of data and need for more studies, especially those that examine long-term effects.

There currently might not be sufficient evidence to connect the increase in high fructose corn syrup consumption to rising rates of obesity and type II diabetes, but there is evidence that it is tampering with our brain chemistry. In her book Death by Supermarket: the Fattening, Dumbing Down, and Poisoning of America, real-food activist Nancy Deville argues that, like sugar, high fructose corn syrup is a powerfully addictive stimulant. Furthermore, Deville claims that the sweetener is even more dangerous than sugar: “The closing of that sugar plant was like the closing down of a marijuana farm (American Sugar Refining) because of an increased demand for heroin (high fructose corn syrup). In other words we went from a bad habit to an out-and-out lethal addiction,” she writes of our nation’s transition from sugar to high fructose corn syrup in the 1980s (Deville 24).

What Deville is hinting at in her allusions to bad habits and drug addiction is a neurological explanation of the “sugar high” phenomenon. Such an explanation is complicated. In brief, the consistent consumption of high fructose corn syrup (or sugar) leads to imbalanced neurotransmitters. Eating sugars activates the pancreas, which begins secreting insulin. The production of insulin then catalyzes an excessive rush of stored neurotransmitters in the brain. As a result, our brains beg for more sugar, but consuming more of it only worsens the situation as the body will continue to crave increased amounts. This leads to irrational and hysterical hunger and further destabilizes our American diet. We become addicted, lose our self control, and not only want high fructose corn syrup, but need high fructose corn syrup.

The strength of such an addiction is exemplified by a recent study conducted at the University of Bordeaux in France. Analyzing the addictive nature of sugar in comparison to addictive drugs, the study came to the startling conclusion that sugar and sweeteners
may be even more addictive than cocaine. Given a choice between highly sweetened water and intravenous cocaine, the experiment’s laboratory rats overwhelmingly preferred the water. Various sweeteners were tested, all of which procured the same conclusion. Additionally, the study found that the rats that were already “experienced cocaine users” (meaning they had previously learned to self-administer the drug) even favored the sweetened water. A separate experiment has also shown the rats can become dependent on sugar and exhibit symptoms of addiction such as cravings and multiple symptoms of withdrawal (Dvoskin 16). Though similar studies have yet to be conducted on human subjects, all of this research has raised serious concerns about the safety of high fructose corn syrup as it has demonstrated the addictive strength and power of sweeteners.

As if this study does not raise enough concern about our addictions to sugar, some believe that this addiction has generational ramifications. In *Death by Supermarket: the Fattening, Dumbing Down, and Poisoning of America*, Deville continues her discussion of sugar addictions with the argument that the effects of a diet high in high fructose corn syrup extend beyond our own brain chemistry to that of our children. Pregnant women who consume a diet of processed foods high in sugar run the risk of preventing their baby’s brain from fully developing in the womb. Furthermore, the mother’s sugar-heavy diet can result in her child being born with unbalanced neurotransmitters and prone to sugar addiction. Factor in the fact that an increasing amount of mothers are choosing to feed their newborns sugary factory formula and we literally have a recipe for disaster (Deville 19).

The connection between the sugar-induced neurotransmitter imbalance of mother and that of her child is also very significant because the Sweet Surprise campaign is targeting mothers. While the Corn Refiner’s Association provides no explanation of their choice of target audience, it can be assumed that the association has chosen to target mothers for their familial role. The Sweet Surprise advertisements’ construction of normalcy conforms to the stereotype that mothers are the ones who do the grocery shopping, who cook for their family, and therefore who tend to control their family’s diet. In this way, convincing mothers that high fructose corn syrup is a safe and healthy ingredient not only affects her diet, but also has the power to change the diets of her family. This increases the chances of a mother giving birth to a mentally unstable child, fuels her child’s imbalance, and can cause the rest of her family to become imbalanced.

Accordingly, a socially-accepted addiction to high fructose corn syrup produces an emotionally unstable population. We crave the sweetener and experience symptoms of withdrawal when we do not consume enough of it. This craving is what then contributes to the growing obesity epidemic, an exponentially growing national problem that shows no signs of slowing down or even leveling off. A need to consume more of the sweetener means an increase in the consumption of products containing it and, therefore, an increase in overall caloric consumption. As a result, high fructose corn syrup may or may not be directly worsening our health itself, but the effects of its consumption are detrimental as the chemical furthers our habit of overeating, which consequently plays a critical role in the exponential growth of obesity.

Obesity itself has extreme health effects and societal implications. In a lecture in Stanford University’s “The Ethics of Food and the Environment” series, Dr. Thomas Robinson of the Lucille Packard Children’s Hospital and Stanford Prevention Research Center presented staggering statistics about our national obesity epidemic. For example,
in 2007 a survey indicated there are currently four American states in which over 30% of the local population is obese. While this is a problem which affects the entire population, one of the most visibly influenced demographics is children. After remaining at a natural 5% from the 1960s to 1980, the level of childhood obesity in the United States doubled during the 80s. By the late 1990s, childhood obesity had climbed to 15%, tripling from the 1960 statistic. Today, a worrisome amount of children are overweight and show signs of pre-diabetes (high fasting insulin levels). These statistics not only represent larger people and higher blood-glucose levels, but also foreshadow an array of serious health complications. Obesity means cardiovascular, endocrine, gastrointestinal, orthopedic, and even reproductive problems. It complicates basic surgeries and increases rates of premature death. Thus, the word obesity does not stand for a single health issue, but a slew of deadly problems.

Food for Thought: Possible Cultural Ramifications of the Campaign’s Message

Unfortunately, the negative effects of high fructose corn syrup extends beyond a slew of deadly health problems. Overconsumption and overproduction of the sweetener prompts national and even global crises larger than our individual physical issues. A socially accepted addiction to high fructose corn syrup creates an unstable society and the growth of obesity rates builds cultural challenges. Furthermore, the mass production of high fructose corn syrup that is needed to fulfill our addiction has serious environmental impacts worldwide. For this reason, the possible repercussions of the cleverly persuasive Sweet Surprise campaign extend far beyond the obvious health and safety issues of high fructose corn syrup.

Obesity does not just imply problems about our physical health, but also raises concerns about the health of American culture. As Dr. Robinson discussed in his lecture, obesity is accompanied by severe societal costs. Not only does it significantly increase the amount of money the country annually spends on medical costs (which is already in the billions), but it also reduces productivity as the disabled population grows. Furthermore, the mere fact that obesity makes Americans physically larger would eventually require a complete restructuring of the nation’s infrastructure. From schools, to business, to homes, our lives would need to be widened. Doorways would need to be broader, movie theater seats would need to be enlarged, and even road lanes may need to be expanded if car seats need to be altered. This may seem like an unrealistic future, but listen to Dr. Robinson’s statistics, think about the long term effects, and then decide if this is really that improbable.

A current and visible societal impact of high fructose corn syrup is due to the sweetener’s addictive qualities. In Death by Supermarket, Deville goes so far as to connect the country’s rise in crime rates with the growth of high fructose corn syrup. Those who develop an addiction become emotionally unstable while an increasing amount of Americans are neurologically imbalanced from the time of birth. While many equate the 150% increase from 1985 to 1993 in homicides committed by boys fifteen to nineteen years of age to the increased amount of violence on television and in movies, Deville points to neurotransmitter imbalances (Deville 29). She writes, “if you think about it, those brutal
ideas [in the media] don’t just spring out of the air. There’s a reason Americans don’t feel well and that many feel the rage that permeates our society” (30). Some may respond to their imbalance by eating sweets, but others may be driven to project outwards. She believes that the addiction and imbalance triggers a rage so influential that it is often manifested in major crime and violence. Thus, Deville argues that avoiding factory food (which contains high fructose corn syrup) would significantly reduce our prison population (29). In this way, she believes high fructose corn syrup leads to monumental societal implications.

While the connection between rising crime and increased consumption of high fructose corn syrup might sound outlandish, it is not impossible. Of course correlation does not imply causation as other external factors could also contribute to rising crime through that period of time, but there is something to be said for Deville’s logic. The fact that a national increase of the sweetener’s consumption leads to addictions and neurotransmitter imbalances is probable cause for a more violent culture. If an addiction to high fructose corn syrup is comparable to that of cocaine, it does not seem so improbable that our overconsumption of the sweetener would produce a more aggressive society.

The overconsumption of high fructose corn syrup also brings about serious environmental problems. As previously mentioned, Michael Pollan discusses the connection between high fructose corn syrup and corn in his article “When a Crop Becomes King.” Not only does high fructose corn syrup challenge the diversity of our diets by benefiting the domination of the corn industry, but it also threatens the planet’s natural diversity. The world’s most widely planted cereal crop, we have devoted over twice the area of New York State to corn - more of our land than any other plant (Pollan, “Becomes King” 1). In addition, corn is increasingly comprised of genetically modified organisms (“GMOs”) – a controversial scientific technology criticized for tampering with DNA and having unknown future effects.

In addition to challenging nature’s diversity, the domination of corn also creates many other negative environmental consequences. As Pollan details in his New York Times Magazine article, a plethora of corn crops demands large amounts of fertilizers and pesticides – 80 million acres worth. One of the primary issues here is that runoff from these inorganic chemicals contaminates groundwater and, subsequently, larger bodies of water. For example, runoff from the Midwestern Corn Belt had already flowed from the Mississippi River into the Gulf of Mexico where it has eradicated a twelve thousand square miles area of marine life. The other major issue associated with fertilizers and pesticides relates to their chemical manufacturing. As if it doesn’t take enough energy to manufacture high fructose corn syrup itself, the growing of each bushel of corn consumes half a gallon of fossil fuels (oil and natural gases) (Pollan, “Becomes King” 1). Accordingly, the corn industry may feed millions of mouths, but at the expense of the environment. And while it may be hard to visualize the larger future effects, we need to recognize that how we treat our nation’s soil will certainly have long-lasting consequences over time.

Not only will these consequences be long-lasting, but they could be nearly irreversible, if not permanent, much like the physical harm that the effects of overconsumbing high fructose corn syrup may inflict on our bodies. Because of this, it is imperative to the health of mankind, our culture, and Mother Earth that the truth be unveiled. The Corn Refiner’s Association is right, there is a lot of misinformation out there. Though cleverly
persuasive and well-strategized, the Sweet Surprise campaign might not be the appropriate remedy for the misinformed American population. As noted in the campaign's social commentary, we are a nation susceptible to fad diets and easily persuaded by the latest public opinions of nutrition.

So let us decide that it is time to change. Let's listen to the Sweet Surprise message, but take it with a grain of salt or, in this case, sugar. Through strategies of race and gender, hasty generalization, and stacked evidence the campaign is persuasive but misleading in itself. However, if there is one message we can take away from it, it is to get the facts. So let's get the facts. Let's learn truth. Besides, who knows? We might be in for a sweeter surprise.

Works Cited


