

# Just Like a Peach

## Visions of Nature in U.S. NutraSweet Marketing

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### Überblick

Zwischen 1975 und 1984 erhöhten die Amerikaner ihren Verbrauch von künstlichen Süßstoffen um 150%. Ein Teil dieses enormen Anstiegs kann der allgemeinen Steigerung des Nahrungsmittelkonsums in den USA und der Verbreitung von mit Sacharin gesüßten Produkten in der Mitte der 1970er Jahre zugeschrieben werden. Vor allem aber ist dies auf NutraSweet zurückzuführen, ein Produkt, das 1965 in den USA entdeckt worden war und Mitte der 1980er Jahre auf den Markt kam. Mit diesem Produkt änderten sich sowohl die Vermarktungsformen als auch die Art und Weise des Verbrauchs von Süßstoff in den USA. Dieser Aufsatz untersucht, wie NutraSweet, eine populäre Marke von Aspartame (kalorienloser künstlicher Süßstoff), dazu beitrug, dass ein „natürlicher“ und uneingeschränkter Konsum in den frühen 1980er Jahren zum anerkannten Lebensstil avancierte. Mit Hilfe einer ausgezeichneten und zielgerichteten Marketingkampagne verwandelte NutraSweet im Verlauf der 1980er Jahre künstlichen Süßstoff von einer unsicheren Chemikalie, die von Verbrauchern mit Gewichtsproblemen konsumiert wurde, zu einer gesunden Option für Konsumenten, die Kalorien genießen wollten. Süßstoffe waren nun nicht länger eine zeitweilige Diätoption für Leute, die abnehmen wollten, sondern sie wurden zu einer dauerhaften Alternative bei der Wahl von Süßungsmitteln und zu einem Werkzeug für gesunden Genuss, wie ihn „die Natur intendiert“. Das beförderte schließlich eine Moral des folgenlosen Konsums. Diese rhetorische Strategie bewirkte den Kauf und Konsum von immer größeren Mengen an Lebensmitteln und Getränken und sie war entscheidend für den durchschlagenden Erfolg der künstlichen Süßstoffindustrie auf dem US-amerikanischen Markt.

### Abstract

Between 1975 and 1984, Americans increased their consumption of artificial sweetener by 150%. Some of this dramatic growth can be attributed to the general rise in dieting in the U.S. and the proliferation of saccharin-sweetened products in the mid-1970s. Most of it, however, is because of NutraSweet, a product discovered in the U.S. in 1965 and marketed in the mid-1980s, that fundamentally changed the ways in which artificial sweeteners were marketed by businesses and regarded by consumers in the United States.

This essay explores the connection between NutraSweet, a popular brand of aspartame (calorie-less artificial sweetener), and an ethos of “natural” limitless consumption that emerged in the early 1980s in the U.S. Over the course of the 1980s, NutraSweet (and Equal), through highly sophisticated and targeted marketing campaigns, transformed artificial sweeteners from uncertain chemicals used by those who had to lose weight to healthful options for people who wanted to indulge in calories. No longer a temporary “diet” option for people who needed to shed pounds, artificial sweetener became a permanent alternative sweetening choice and a tool for healthy indulgence – “what nature intended”. This ultimately promoted an ethos of consumption without consequence, a rhetorical strategy that has encouraged the purchase and consumption of ever-increasing amounts of food and beverage products and is foundational to the artificial sweetener industry’s striking success in the U.S. marketplace.

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Between 1975 and 1984, Americans increased their consumption of artificial sweetener by 150%. Some of this dramatic growth can be attributed to the general rise in dieting in the U.S. and the proliferation of saccharin-sweetened products in the mid-1970s. Most of it, however, is because of aspartame, a no-calorie sweetener discovered in the U.S. in 1965. Under the brand name NutraSweet, this substance entered the U.S. marketplace in the early 1980s and fundamentally changed the ways in which artificial sweeteners were marketed by businesses and regarded by consumers in the United States.

The phenomenal success of this artificial sweetener cannot be explained exclusively by examining the substance itself: a compound approximately 200 times sweeter than table sugar, calorie free, and formed from the methyl ester of two natural amino acids, aspartic acid and phenylalanine.<sup>1</sup> While superior in taste and flexibility to saccharin, which had preceded it, this alone might explain why saccharin users switched to NutraSweet, but not why droves of new consumers came to it. Nor can one explain its success by mere ubiquity, though aggressive co-branding campaigns with consumer favorites like Jell-o and Coke gave NutraSweet extraordinary shelf space exposure and name recognition. By 1993, only a decade after it appeared on the market, NutraSweet had captured roughly 95% of what is called the “non-nutritive sweetener market”; in the U.S. consumers were consuming 19 billion pounds of it a year.<sup>2</sup> This phenomenal growth depended upon a new vision for artificial sweeteners, generally. NutraSweet’s marketers rejected the century-old ap-

1 <http://en.wikipedia.org/wiki/Aspartame> accessed February 26, 2011, last modified June 9, 2011.

2 Damian McNamara, “Sweeteners Plateau”, *Chemical Marketing Reporter* 247 (no. 22 March 29, 1995): 16–17 and Michael Lindley, “Non-Nutritive Sweeteners; Markets and Marketing”, *International Food Ingredients* 6 (1993): 13.

proach to promoting sweeteners as substitutes and diet aids. The message consumers received was, like the substance, new. NutraSweet had unlocked nature's secret – through science – and had made possible sweet, indulgent foods that could be eaten without consequence to produce health.

The emphasis on nature was critical to overcoming the patina of “substitute” and “chemical” that had haunted artificial sweeteners since consumers had first discovered (to their dismay) that they had been added to carbonated beverages during the Progressive Era as a cheap substitute for sugar. Consumers had turned to them, increasingly, in the 1940s as wartime sugar was rationed, and again, in the 1950s as concerns among middle-class white women about weight control intensified calorie counting and sugar avoidance. Cyclamates emerged as a competitor in the 1950s, only to be removed in 1969 when the FDA invoked the Delaney Clause, citing cyclamates in massive quantities as contributors to cancer, and therefore ineligible for sale in the U.S. marketplace. The 1960s and 1970s saw the emergence of “diet foods” and dietetic aisles in grocery stores, as well as the founding of organizations dedicated to weight loss wherein saccharin-sweetened products were promoted as mainstays of weight loss, and low-weight maintenance. By the early 1980s, diet products had gone mainstream. Hundreds of thousands of letters written by consumers protesting yet another ban on artificial sweetener – this time on saccharin in 1977 – provide ample evidence that Americans who used saccharin understood it was a chemical that could pose health risks. They wanted it anyway, many argued, because without it they'd have to turn to sugar and gain weight.<sup>3</sup>

In 1982 few Americans would have argued that artificial sweetener was superior to sugar. Even fewer would have claimed it was “natural” or “from nature”. This is what NutraSweet changed. Its executive team and their advertising partner, Ogilvy and Mather, created a campaign that effectively removed the patina of “weight-loss tool” and “substitute” from artificial sweetener. In its place they emphasized illustrations of rich, indulgent desserts juxtaposed to gardens growing tomatoes, and comparative charts illuminating the common protein components in NutraSweet and spinach. In the midst of a cacophony of testimonials from happy consumers and details on NutraSweet's superior invention and its potential to de-calorize favorite desserts, repeated assertions that NutraSweet came from nature and implicit suggestions that it was then “natural” to have all the sweets one wanted could not be missed. By describing NutraSweet as not another in a line of *artificial* sweeteners, but instead as something brand new and closely allied with nature, NutraSweet's team effectively created a product that had not previously existed: a chemical substitute that was regarded, by many, as more healthful than sugar. This is

3 Carolyn de la Peña, *Empty Pleasures: The Story of Artificial Sweetener from Saccharin to Splenda* (University of North Carolina, 2010), especially chapters one and five.

important, especially, because it validated excessive food indulgence, by affiliation, as a “natural” (and therefore desirable) phenomena.

This paper explores the connection between NutraSweet (aspartame) and an ethos of “natural” limitless consumption in the United States. It relies upon the one detailed assessment of NutraSweet’s business practices and marketing techniques (McCann’s *Sweet Success*) as well as additional research into media coverage, advertising campaigns, and business records available since book’s publication in 1990.<sup>4</sup> These sources suggest that over the course of the 1980s, NutraSweet (and Equal, aspartame’s table-top version), through highly sophisticated and targeted marketing campaigns, transformed artificial sweeteners from uncertain chemicals used by those who had to lose weight to healthful alternatives for everyone through three techniques: 1) affiliating the chemical with nature, 2) unfavorably contrasting the chemical with saccharin, its predecessor, and 3) refusing to sell it directly to consumers, instead requiring them to know it, desire it, and seek it using the brand symbol: a red swirl against a white backdrop placed on the front of the package. Today recent studies suggest that individuals who consume aspartame – and all artificial sweeteners – are, in fact, more likely to gain than lose weight. Further, the claim that aspartame is natural, while similar to one made by the latest sweetener, sucralose (Splenda), has been proven false. The essay, then, also assesses what the actual impact of NutraSweet’s messages of limitless, natural indulgence may have been.

### Just like Nature

Artificial sweetener had never been considered “like nature” or “natural” before NutraSweet. Quite the opposite, in fact, saccharin had appeared unbeknownst to Americans in their carbonated beverages, selected expressly because the chemical was cheaper per part than sugar. When the substitution was revealed as part of the Food and Drug Administration’s industry indictments leading to the Pure Food and Drug Acts of the Progressive Era, Americans rejected the substance en masse. Newspaper advertisements pitching sodas that did not use saccharin explained, in bold letters, that saccharin was a “coal tar derivative” and an “impurity”. One radio announcer told listeners that saccharin was like the “false scarlet of a bard” (a performer). This changed a bit in the early 1950s with the first wave of saccharin and cyclamate-sweetened products. Lines of “diet” dressings, jellies, and canned fruits with names like Diet Delight and Tasti Diet greeted consumers on supermarket shelves and in aggressive advertising campaigns. On labels

4 My efforts to access the Searle company archives were unsuccessful in 2006 and 2007. Part of the difficulty is that the NutraSweet Company was created as a separate entity during the years of aspartame’s market growth, and the company sold NutraSweet, in turn, to Monsanto. The result is a complex paper trail. This is compounded by Searle and Monsanto’s stated inability to locate records on NutraSweet’s development and promotion.

offering them as “dietetic options” or “weight loss tools”, these substitutes built markets of consumers who had grown suspicious of the calories in sugar and increasingly concerned about weight loss and its reported attendant ill health effects. Yet they were clearly substitutes, something created in a laboratory and quite different from sugar. Sweetness was the beginning and the end of what the substances had in common.<sup>5</sup>

This changed with NutraSweet. Ogilvy and Mather, along with G.D. Searle and Company’s executive team, created a campaign that emphasized the similarities between Nutrasweet and nature and made this a chief selling point.<sup>6</sup> This was one of the core messages in the earliest advertising campaign designed to introduce prospective consumers to a substance they had never heard of nor realized they desired. It was communicated through three emphases: 1) that NutraSweet was comprised of what were called “building blocks of protein”, 2) that these building blocks were exactly like what was in other foods, and 3) that the taste of NutraSweet was indistinguishable from sugar. The first appeared in two early informational advertisements aimed at readers of mainstream magazines and newspapers who had never before heard of the product. “It’s made from two building blocks of protein (amino acids in more scientific lingo)”, it explained. The building blocks here were phenylalanine and aspartic acid which, when combined into a methyl ester produced NutraSweet’s sweet, non-caloric taste. The words phenylalanine and aspartic acid did not appear in promotional material. Had they, it might have drawn attention to unfamiliar substances or accentuated the product’s chemical origins. Some might have recognized phenylalanine as deadly for a small percentage of individuals who have a genetic condition called PKU syndrome. The advertisements invite readers to think little about the specifics of what is in NutraSweet and more about how these ingredients, somehow, add up to something familiar – protein in this case. Just what kind of protein this was, or what the component ingredients were or might do the body, was not explained.

This relationship to nature, or natural foods, was further strengthened by explicit comparisons. “If you eat, you’ve eaten what’s in NutraSweet brand sweetener”, explained the same advertisement from 1983. Readers who continued with the text found out that the ingredients found in NutraSweet were “just like those found in fruits, vegetables, grains, meats and dairy prod-

5 de la Peña, *Empty Pleasures*, especially chapters three and four.

6 NutraSweet is the brand name for aspartame, a substance discovered by James Schlatter in 1965 while working on amino acids for ulcer treatments at G.D. Searle and Company, a pharmaceutical firm. The company invested substantial resources to bring the product to market in the form of aspartame. Prior to their work on this artificial sweetener, Searle had been a family-owned operation. The push to produce, gain approval for, and promote NutraSweet brand sweetener transformed the company fundamentally and expanded profits dramatically.

ucts.” It went on to explain that this similarity was not only in the substance but in its impact on the consumer. Because these proteins were so similar, “your body treats them no differently than if they came from a peach or tomato.”<sup>7</sup> The claim was based upon the fact that aspartame was absorbed by the body when digested, as were these other familiar foods. Yet just what was meant by “treats” was left unexplained. It was possible to assume that this meant that the impact on the body was precisely the same. This was not in fact a claim for which there was evidence. Peaches had calories that could be used to expend energy. Peaches had a taste significantly less sweet than aspartame which was roughly 200 times sweeter per part than table sugar. In spite of the heavy text used in these advertisements, little effort was expended illuminating, in any detail, how fruits and vegetables and this new pharmaceutical from Searle were similar, and different. Readers heard repeatedly that it was like nature, or just what was in nature, or behaved like natural foods on the body. Were one not to read the text, in fact, the message still emerged. A quick look at the largest illustration on one advertisement – a garden with signs for vegetables – drew one’s glance to the caption below a head of lettuce. Just what the lettuce was in relation to aspartame was not explained. Instead, readers learned, lettuce was “another good place to find what’s in NutraSweet”.

At the same time, the advertisements make it clear that aspartame did not “grow” in the garden. “What’s special in NutraSweet is common in nature. Over half the food you eat today will contain the two protein components used to make NutraSweet ... science can’t explain why some things are sweet and some aren’t.” The claim positions NutraSweet in between nature and science. Many things are similar to NutraSweet in nature, it implies. But these things are not NutraSweet “sweet”. The story establishes that scientists indeed do create NutraSweet, since they are the ones that cannot explain its sweetness. At the same time, the presentation of scientists as flummoxed by just why NutraSweet should be very sweet when similar building blocks of protein in nature are not (such as, tomatoes) suggests that there is something magical about its creation. Scientists may make it, but they do not control it. The secrets, perhaps, emerge from nature itself.

The trope of the “surprised” scientist indeed pre-dated NutraSweet. Saccharin was discovered by accident, in a laboratory experiment on food preservatives at Johns Hopkins University. Cyclamates were also an accidental discovery – Michael Sveda came upon them while doing non-food research at the University of Illinois. In each case there is an unintentional taste: a cigarette is smoked, a finger licked – and the scientist considers whether in this sweet taste there might be a product to develop. Thus, NutraSweet’s assertion that “science can’t explain why” was, in a sense, true of history.

7 *Newsweek*, November 18, 1985, 76–77.



Initially, scientists could not explain why these artificial sweeteners were sweet. In all cases, however, the initial shock led to innovation, and not only was the secret to sweetness discovered, but it was replicated in order to create a stable food additive that could achieve a predictable sweet.

It was, then, incorrect to assert that scientists did not know why Nutra-Sweet was sweet. Yet this nod to a perhaps unknowable “nature” in Nutra-Sweet may have been a counterbalance to the very artificiality embedded in the category of “artificial sweetener” itself. NutraSweet cleverly presented its product as scientific in all the right ways, as evidenced by the image of the scientist with the thought bubble in one early ad: clearly it is his innovation that unlocks the power of non-caloric sweet. It is also the power of the scientist who has ensured consumer safety. “It’s been said that a head of lettuce couldn’t pass all the tests NutraSweet has ... no food ingredient has had to withstand such scrutiny before approval.” The scientist’s scrutiny, then, is what invents the product and ensures it is safe. Yet the element of magic in just what makes it sweet, draws the attention to nature, and out of the lab.<sup>8</sup>

Most consumers were not moved to believe that NutraSweet was “just like nature” in spite of the clever commercials from Ogilvy. This was, after all, decades after the introduction of saccharin and cyclamates into the mainstream American diet: people had had ample opportunity to know these substances as artificial, and remarkably different, in fact, from the natural (caloric) sweet of sugar. More likely, this approach preemptively neutralized any fears that could emerge from the actual names of these “building blocks of protein” – aspartic acid and phenylalanine. It also capitalized on an increasingly complicated food landscape, when consumers typically found 30–40 ingredients on a box of crackers and were simply unable to easily answer the question, as Michael Pollan has recently phrased it, “what should I eat?” It was a moment in which popular nutritional information had emphasized the importance of individual ingredients for eating healthy (more fiber, less fat, lower cholesterol, omega-3) at the same time that industrial food production was requiring an increasing number of illegible flavor enhancers, preservatives, and binding agents to keep packaged products edible across vast distances of time and space. The messages produced an impossible imperative: know your food by knowing ingredients you cannot pronounce, let alone identify. Within this climate, NutraSweet’s assurance that its chemical com-

8 These tropes of NutraSweet being just like what’s in nature continued through television advertising in the mid-1980s. Two, from 1985 and 1986 claimed, “Bananas, milk and NutraSweet all contain phenylalanine, one of 21 amino acids that form the ‘building blocks’ of protein. Nature doesn’t make NutraSweet. But NutraSweet could not be made without it.” and “Banana plants don’t make NutraSweet, neither do cows, but they might as well. If you’ve had bananas and milk, you’ve eaten what’s in NutraSweet.” Gregory Gordon, “Putting on the Blitz: The Selling of a Sweetener”, *United Press International, Washington News*, October 14, 1987, n.p., online; and Fran Brock, “NutraSweet Ads Sweet on Nature”, *Adweek*, February 3, 1986, n.p., online.

position was just like peaches, if not entirely satisfying, was at least more than people knew about most food ingredients.

### Saccharin as the “Bad Stuff”

If television campaigns brought NutraSweet close to nature, simultaneous anti-saccharin print campaigns undertaken by the NutraSweet team helped make sure consumers would associate saccharin with all that was bad about artificial sweetener science. In 1984 Pepsi and Coke embarked on what would be called a “war” over whose diet product was superior. Comfortable in its superior market share, Diet Coke had resisted shifting from saccharin to the more expensive NutraSweet until August 1984 when they introduced a blend with part NutraSweet and part saccharin. Diet Pepsi’s marketing team saw an opportunity to distinguish itself by making the switch to 100% NutraSweet first, that November, and publicizing its competitor’s continued reliance upon the tainted, old model sweetener. The result was a multi-month battle that came to a head in December 1984 in the popular press. “Diet Coke advertising says it contains no saccharin. But this label says it does”, claimed Diet Pepsi in its “Check the Facts” campaign that ran in major dailies (Fig. 1). By Christmas Diet Coke had a response, famously delivered in “An Open Letter to Santa Claus”, a full page ad that ran on Christmas Eve. “Dear Santa, please be sure that the people at Pepsi-Cola headquarters each get a bottle of diet Coke with 100% NutraSweet so they can see how great it tastes and why it is the fastest growing soft drink in the world.”<sup>9</sup>

As the battle between Coke and Pepsi suggests, NutraSweet’s successful affiliation with nature and pleasure depended on saccharin’s affiliation with dangerous technology and risk. In 1977 the Food and Drug Administration announced its intention to ban saccharin from the U.S. food supply after studies revealed an elevated risk of cancer in laboratory animals that had ingested it in large doses. It was a decision similar to the one the agency had arrived at in 1969 after finding the same increased incidence of cancer among animals that had ingested cyclamates. Yet in 1977 a very different consumer reaction took place. “The saccharin rebellion”, as I have referred to it elsewhere, saw nearly a million Americans protest the proposed ban. In letters to congressional representatives, the FDA chairman, and President Carter, Americans declared their right to make their own choices and demanded that saccharin – by then the only artificial sweetener available – stay available for non-diabetics, without a prescription. They were ultimately successful; the ban was stayed repeatedly throughout the 1980s before finally being dropped completely. Saccharin-sweetened foods remained on the shelves. Yet the controversy had indelibly rendered saccharin “risky”. This was clear from consumer letters

9 “Label says it does”, *New York Times*, December 14, 1984, B11; “Check the facts”, *New York Times*, December 9, 1984, B9; “An open letter”, *New York Times*, December 24, 1984, 20.



Fig. 1: Diet Pepsi Advertising campaign “Check the Facts”. Source: *Ladies Home Journal*, February 1985, 173.

where they frequently acknowledged that there could be some increased risk of cancer, were one to ingest vast quantities of the sweetener. Yet, most reasoned, the risks were far greater from second-hand smoke, alcohol, guns, and polluted air and water. “My life is one big cancer risk, which I am powerless to control”, wrote Josephine Novak of Buffalo. “Surely, then”, she continued, “if I decide to take one further, very minor, risk of developing cancer, it must be my decision”.<sup>10</sup>

The Diet Coke can was, in fact, a visible reminder of the saccharin cancer controversy. On its side was the warning printed on all foods and beverages that used saccharin: “Use of this product may be hazardous to your health. This product contains saccharin which has been determined to cause cancer in laboratory animals”.<sup>11</sup> It was not a coincidence that this was

10 Novak to FDA, March 10, 1977 (#3122, cd1, v35), Food and Drug Administration Records.  
 11 <http://www.google.com/images?hl=en&source=imghp&biw=1235&bih=725&q=saccharin+warning+label&gbv=2&aq=f&aqi=&aql=&oq>, accessed January 18, 2011, last modified June 5, 2011.

the angle prospective consumers were shown in the “Check the Facts” campaign of 1985. Instead of comparing saccharin to aspartame – a comparison that would have revealed far more similarities than differences – the swirling NutraSweet symbol was juxtaposed to the words “hazardous”, “health”, and “cancer”. NutraSweet did not need to distinguish its chemical composition from that of saccharin. Nor did it need to confront the lingering concerns of cancer head-on. It left the words to saccharin – words that thanks to government regulation could be read on the cans of products containing it – and invited buyers to make a choice for a symbol and the word “*NutraSweet*” instead.

NutraSweet was, at first, only sold as an embedded ingredient. This had the advantage of creating clear comparisons between it and the possibly cancer causing saccharin because of product labeling. It also enabled NutraSweet never to be seen as a chemical. There are no advertisements in NutraSweet’s campaign that feature it in pill or powder. Nor are there renderings of laboratory environments. Science does come into view, but only insofar as scientists are shown pulling plants out of the garden. Precisely how they create this calorie-less sweet taste from nature is left to the viewer’s imagination. This was quite different than early promotions for saccharin and cyclamates, where the white powders and pills were commonly featured. In the 1950s, in fact, saccharin pills were even displayed in decorative containers for social occasions. With NutraSweet, consumers were not invited to buy NutraSweet at all.<sup>12</sup> This strategy of embedding NutraSweet in products that were trusted – and not considered “chemical” – enabled its promoters to distance the sweetener from its artificial past even further. Puddings, shakes, jellies, and Cokes – these were arguably treats at the very heart of “American” eating. The technique of co-branding, then, not only enabled NutraSweet to benefit from the free advertising waged by its commodity buyers. It also allowed it to become a taste *within a “natural” food or beverage* rather than an artificial material in and of itself.

By fueling the soda wars with high prices (it was cost, more than anything, that kept Pepsi sticking with saccharin so long), NutraSweet’s sales and marketing team cleverly played the soda giants against each other, ensuring that they would produce (and pay for) advertising campaigns that poached customers by disparaging saccharin. Both companies ultimately helped instruct consumers to distinguish between saccharin and NutraSweet: the former was unsafe and closely associated with the word cancer, the latter was a product so pleasant one would want to write to Santa about it. The approach enabled consumers so inclined to continue to hold on to their unease about artificial sweetener. This was, after all, a commodity that only seven

<sup>12</sup> Aspartame did appear in tabletop form, with the brand name Equal, but the two did not share a name or branded product identity.

years earlier had faced a ban at the request of the federal government. Yet by amplifying that risk and associating it with saccharin, NutraSweet was able to make the old technology the dangerous technology. Simply by not being saccharin, NutraSweet was good. “A taste just like sugar, without all the calories, not artificial like saccharin”, was one of the first assertions in the original ad campaign from 1983; it remained a trope throughout NutraSweet’s market growth. For consumers grown reliant on low-calorie substitutions and tired of two decades of chemical controversy, a pleasant story about proteins may have been a welcome respite.

### **Knowing What’s Best: Direct to Consumer Marketing**

In 1984 my house was one of the five million reached by Searle Pharmaceuticals in their direct gumball mailing campaign designed to introduce NutraSweet, or aspartame, to American consumers. They found us in Riverside, California. They also found Bonnie Garde in Freehold, New Jersey, Janet Saksa, in Mountain Home, Arkansas, and Pam Ernst in Leader, Texas.<sup>13</sup> I remember my mother coming in with the stack of bills and a small package of five different and brightly colored balls. They popped out of a see-through candy wrapper printed with the single word “NutraSweet”. It was telling that it came in the form of a gumball, a material symbol of fun and playfulness, more closely associated with childhood indulgence than adult “diet” restraint. For Karen McLean, who found NutraSweet in her Baytown, Texas mailbox, it was simply “the best thing since the invention of food.”<sup>14</sup>

Never before had artificial sweetener been advertised as a fun food. Saccharin had shown up in the food supply as a cheap substitute for sugar, only later to be offered as a “dietetic” substitute and “diet” product. The same was true for cyclamates. In each case artificial sweeteners had been offered as an alternative to full-calorie foods and beverages for those who needed to lose weight. The gumballs, on the other hand, came in a package without the words “diet”, “substitute” or “low-calorie”. Instead of an explanation, in fact, viewers found only cellophane. The gumballs – in bright colors, looking exactly like ones dispensed from machines for loose change – spoke for themselves. “Send us your name and we’ll send you some free gumballs”, read one of the first ads in mainstream magazines, “And not just any gumballs, mind you. But ones sweetened with NutraSweet brand sweetener, perhaps the most amazing food ingredient you’ll ever taste.”

The message of fun transferred from gumball to product marketing in print ads. One of the earliest featured the gumballs prominently above the NutraSweet brand symbol. The pleasurable feeling of nostalgia one might have had looking upon gumballs – a child’s treat – emerged in the text that

13 NutraSweet advertisements frequently featured comments from individuals who had tried the gumballs. See *McCall’s*, July 1984, 2–3 and *Newsweek*, January 9, 1984, 60–61.

14 *Newsweek*, January 9, 1984, 61.

invited prospective consumers to imagine a life more pleasurable with NutraSweet. “The fact that NutraSweet tastes as good as it does means there’s every likelihood that it could become an important way to satisfy your family’s sweet tooth”, it explained. The pleasure here was not only in its good taste, and fun products, but also in the new pleasure it promised people could take in simply enjoying food. “Food products sweetened with NutraSweet let you watch calories without watching and weighing every morsel you eat”, explained the same advertisement. These messages would have had power with consumers, especially women, who had by the early 1980s already experienced decades of emphasis on diet and low-calorie eating. Here was an opportunity, the text suggested, to stop worrying so much about how much one ate, merely by switching from eating one kind of a thing to another. The culprit, it seemed, was actually sugar. “The average American family of four people eats 400 pounds of sugar a year ... much of it is ‘hidden’ as an ingredient.”

By combining the gumballs – a symbol of sugary goodness – with messages of pleasure in the taste and pleasure in the process of not worrying – NutraSweet created an inviting landscape of low-calorie that bore little resemblance to diet. Previous artificial sweeteners had been marketed as pleasurable, but primarily because they helped people lose weight and thinness itself was pleasurable (consider Tab). This innovative product, according to marketing materials, had managed to capture the sweet pleasure of sugar without exposing people to the risk of overweight that – it implied – was somehow caused by the over ingestion of sugar (400 pounds a year!). Now all consumers had to do, to have this pleasure, was to find NutraSweet.

“There are very few who are good at technology and marketing”, explained Robert Shapiro, the former entertainment lawyer who became NutraSweet’s first Chairman and CEO, when asked about the company’s success in the late 1980s. Essential in this marketing was NutraSweet’s ability to communicate the promise of food pleasure in the form of a tiny red and white swirling symbol. The real innovation was not only in connecting NutraSweet to nature and framing it as not artificial. It was involving consumers in a promotional strategy that required them to *know* NutraSweet and to demand it on their own. NutraSweet did not pitch products to consumers, it pitched visions of pleasure and possibility, and let them take it from there.

According to business writer Joseph McCann, from the vantage point of the late 1980s, the NutraSweet team had been comprised of “some of the most unusually creative and aggressive managers for any firm I have witnessed”. They were lawyers, ad guys, and salesmen. They were not pharmaceutical representatives or food executives. They did not have backgrounds in chemistry that would enable them to understand what aspartame was or what it did, on its own or when added to food. Nor did they come from agricultural roots or possess direct experiences with food manufacturing and

sales. According to McCann, this was precisely the training Searle did not want in its NutraSweet staff. They looked for aggressive, creative, driven employees who would see opportunities where others saw limits. This meant looking past the food and drug industries for talent. One can assume that the combination of skills in their leadership was no accident; in order to compensate these people, and launch a nation-wide campaign, Searle had shed much of its pharmaceutical line in order to concentrate its resources on this one product and its perceived potential.<sup>15</sup>

Robert Shapiro, the CEO of NutraSweet, had previously worked for G.D. Searle as general counsel. He was joined by Donald Rumsfeld who was hired by Searle as CEO prior to the Food and Drug Administration granting approval for the use of aspartame as a food additive. The duo, who were also joined by the former CFO of Firestone Tires, were a significant departure from the profile of previous company leaders. A family-owned operation, Searle had not previously hired expertise from the outside. The arrival of Rumsfeld in 1977, just after he had completed his term as Secretary of Defense for Gerald Ford, was a major departure for a company that previously relied upon inside knowledge and low profile leadership. Rumsfeld and Shapiro shifted, fundamentally, the way the pharmaceutical company approached regulatory approval and product positioning. Rumsfeld was instrumental in Ronald Reagan's selection of the new FDA head who made the quick decision, after appointment, to approve aspartame in spite of criticism that long-term studies on human health had not yet yielded sufficient data. The significance, however, extends beyond the push for approval that Searle was able to exert. It stretches to the very way that the manufacturer approached market building. These were executives with no experience in the food or pharmaceutical business. Therefore they did not perceive boundaries as their predecessors in cyclamates and saccharin had. The politician/diplomat and lawyer, joined by adroit advertisers, could see a market and hone a message for a methyl ester of aspartic acid and phenylalanine with a boldness that distinguished their approach, and influenced their success.<sup>16</sup>

The most outrageous thing they did was certainly to invest vast sums of money in gaining product approval and launching a nation wide campaign for a new way of eating, while actually putting nothing up for sale. "You can't buy the gumballs but we'll send you some free", read an advertisement that appeared in popular media in 1983. "Actually, you can't buy NutraSweet either," it continued, "there's only one way to buy it, and that's in foods and beverages that have been sweetened with it."<sup>17</sup>

15 Joseph McCann, *Sweet Success: How NutraSweet Created A Billion Dollar Business* (Homewood, Ill: Business One Irwin, 1990): 55–56.

16 de la Peña, *Empty Pleasures*, chapter six.

17 "What's better than reading what people say about NutraSweet", *Newsweek*, January 9, 1984, 60–61. Also appeared in *McCall's*, July 1984, 2–3.

The technique, known as “supplier initiated ingredient branding,” relied upon consumer education as a means to increase product consumption.<sup>18</sup> It was part of a two-pronged approach by Searle: get a handful of food and beverage companies to use the ingredient so that it is on the shelves, but insist that they clearly label the food as using “100% NutraSweet”. At the same time, direct to consumers, their marketing encouraged them to desire the product and, to satisfy that desire, go into stores themselves to find those products that could deliver the same sweet, calorie-free taste of the original gumballs. For consumers this made the product precious: unlike saccharin which was ubiquitous, NutraSweet could only be found in a few places, by those smart enough to know how to find it. For Searle, it gave them leverage with food and beverage manufacturers who resisted switching from saccharin to the more expensive aspartame.

This was an adroit move given the history of artificial sweeteners. Originally consumed in pill form, often by those who purchased them directly from pharmacies, saccharin and cyclamates acquired an air of preciousness and discovery in the 1940s and 1950s. This continued with the earliest mass-marketing of diet fruits, dressings, desserts and sodas by linking creative individuals – particularly women – to the process of making the purchasable products consumers found in grocery aisles. It largely disappeared from view with the mass-marketing of sodas and low-calorie products in the late 1960s and early 1970s, but again resurfaced in the massive grass-roots rebellion against the FDA’s ban when consumers demanded their right to “know” artificial sweetener and be taken seriously as bodies and citizens.<sup>19</sup> Searle’s campaign re-centered artificial sweetener consumption on knowledge, thereby making the consumer an active participant in the product’s success.

That knowledge depended on the swirl. Red and white, bearing no small resemblance to a lollipop without the stick, the swirl appeared directly in front of the brand name in all product promotion. Early advertisements were heavy on words, with ample space dedicated to stories of James Schlatter and his scientific studies on proteins that yielded an unexpected sweet taste, the origins in “building blocks of proteins”, the process of approval. “Twelve interesting tidbits”, read one early ad that went through, one by one, the facts that Searle wanted consumers to know about the substance. But most prominent on the ad, at a quick glance, was the swirl. Further, when consumers finished reading the ad, it was not the taste or the science or even the gumballs that they needed to go find – it was instead the swirl.

“If you want 100% NutraSweet, you don’t have to read the fine print. Just look for a red and white swirl on the label,” read one early ad. “Search for the Great Taste of 100% NutraSweet,” explained another – again, featuring

18 Donald Norris, “Ingredient branding: a strategy option with multiple beneficiaries”, *Journal of Consumer Marketing* 9 (issue 3, 1992): 20.

19 de la Peña, *Empty Pleasures*, see chapters four and five.



the swirl.<sup>20</sup> According to company president Robert Shapiro, the primary goal of the NutraSweet swirl campaign and the text that accompanied it was “simplifying the informational task for consumers.”<sup>21</sup> It is significant that he referred to this as “an informational task”. Entering the vexed artificial sweetener market with a brand new product, NutraSweet needed to predict the consumer’s questions and provide information that would assuage concerns. This was, in fact, a common tact taken by pharmaceutical companies in sweetener development; cyclamate’s producer, Abbott Laboratories, had sent detailed question and answer guides to its food and beverage buyers. What is different here is that the information moves directly to the consumer rather than going through the middle-man: the diet soda company, the grocer, the diet club president. The burden of knowing NutraSweet was uniquely born by the layperson through this direct-to-consumer marketing. Because of this, however, the consumers’ thoughts were important, at least in marketing materials. Typical of early advertisements was this ending, “Any questions? If there’s ever anything about NutraSweet brand sweetener you’d like to know, just write us.” Almost as if the advertisement had been a test, consumers were invited to think through the material, make sure they had understood it, and act if they still had questions.

Yet, as Shapiro explained, the goal was to *simplify* an informational task. Arguably this was done primarily through the red and white swirl. It was this symbol that connected readers from the advertising material to actual products on the store shelves. The swirl enabled shopping to become an act of transference: consumers had to take what they had learned in advertisements and apply it to the products on the store shelves. One could not merely go to the sugar aisle and look for the replacement sugar. Initially, very few companies were willing to carry NutraSweet because its cost was higher than saccharin. Looking for the swirl at the store, then, required a lot of looking – and probably asking, and perhaps ultimately requesting from the store manager that more products with the swirl be carried. The swirl was then not only a simplification – literally a memory stick that reminded consumers of the marketing promises when they encountered it – but an active one. It transformed readers into hunters, before they could become buyers.

### **Techno-Fears: NutraSweet Syndrome**

By 1985 the production, distribution, and sale of NutraSweet had become a “billion-dollar business”.<sup>22</sup> In 1988 NutraSweet sales reached \$736 million worldwide. By 1989 that number climbed to \$869. In 1990 it was approved

20 *Los Angeles Times*, May 1985.

21 Fran Brock, “Midwest Marketer of the Year: G.D. Searle”, *Adweek*, May 6, 1985, n.p., online index.

22 Philip Lawler, *Sweet Talk: Media Coverage of Artificial Sweeteners* (Washington, D.C.: The Media Institute, 1986), 17.

for distribution in 79 countries and used in over 2000 products. Coke's "Diet Coke" Super Bowl commercials were national obsessions. 200 million Americans opened their mailboxes in 1988 and 1989 to find coupons for free cans.<sup>23</sup> By 1990 three quarters of Americans had tried NutraSweet in one form or another. It had reaped massive rewards for the American food companies who got in on the ground floor with NutraSweet products. General Foods, Coca-Cola, and PepsiCo had created massive new markets in low-calorie foods and beverages. Kool-Aid alone saw their sales increase by 40% within three years of switching to NutraSweet. According to Joseph McCann, NutraSweet generated "over 300 million dollars a year in new sales" for users in the late 1980s and replaced "about a billion pounds of sugar" in American diets.<sup>24</sup>

Fundamental to this success was the message that NutraSweet empowered consumers by enabling them to pursue dietary pleasure without gaining unattractive weight. "I believe in Crystal Light 'cause I believe in me!" was the most famous of the many NutraSweet product promotions that spoke directly to American women's desire for control and indulgence. One famous campaign, from *Good Housekeeping* in 1984, but oft-repeated over the decade, featured an leotard-clad white woman (in this case Linda Evans from *Dallas* fame) featured in a close up against a back drop of Crystal Light. The copy described the Caribbean Cooler, Luscious Grape, and Citrus Blend drink mixes, all with only "4 calories a glass" thanks to NutraSweet. It was, as Evans explained, how "I enjoy looking and feeling my best."<sup>25</sup> Crystal Light was the first fully Nutra-Sweet created product: unlike Diet Coke and Diet Pepsi, or low-calorie puddings and coffee mixes, it came into existence as a NutraSweet product. With only 4 calories per serving and coming in powder packs that made no less than a gallon at a time, Crystal Light was made to be consumed in bulk. By wedding its lemonade, ice teas, and fruit-like drinks to thin women in leotards (in some cases going so far as to offer coupons for both the drink mix and the leotard featured in the ad), Crystal Light promised that more could be less. Consuming a sweet beverage could produce a thin body. The same approach was used in chocolate substitute products, such as Famous Amos-NutraSweet chocolate soda and the more popular Suisse Mocha instant coffee beverages, pitched in the 1985 "Lucky Me" campaign as "rich, creamy, delicious", filled with "chocolaty goodness" and perfectly suited to "celebrate the moments of your life".<sup>26</sup> In a 1987 interview Robert Shapiro summarized this message for a *Wall Street Journal* reporter as, "We're inherently saying you can have pleasure without paying the price".<sup>27</sup>

23 Michael McCarthy, *Wall Street Journal* (January 24, 1989): 1.

24 McCann, *Sweet Success*, 3.

25 *Good Housekeeping* (May 1985): 64.

26 *Good Housekeeping* (May 1985): 213.

27 Wendy Wall, "Marketing NutraSweet in Leaner Times", *The Wall Street Journal* (May 7, 1987), 32. Originally quoted in McCann, *Sweet Success*, 59.

Yet even as NutraSweet's consumers and products continued to multiply, new fears emerged about NutraSweet's naturalness, safety, and long-term impact on the body. In *Sweet Poison: How the World's Most Popular Artificial Sweetener is Killing Us*, published in 1999, Janet Starr Hull documented her own path from aspartame illness to anti-aspartame advocacy. In the early 1990s she found herself plagued by intense headaches, gaining weight, losing her patience with her husband and children. The transformation was particularly troubling since Hull herself had a PhD in nutrition, exercised frequently, and generally pursued a "healthy" diet in line with nutritional guidelines. Not until she gave up her daily diet soda consumption did the symptoms subside. According to *Sweet Poison*, it was Hull's frustration with doctors who failed to diagnose her and scientific research that produced no information on what she was sure was a widespread problem that motivated her to write. Hull has spent the last decade writing and speaking on behalf of aspartame victims. She is one of perhaps ten main anti-aspartame crusaders including Mary Jo Stoddard, Corey Brackett, and H.J. Roberts' (among the products they produce are websites, documentaries, and anti-aspartame books).

Only after looking at several of these stories does one begin to notice the massive amounts of aspartame ingested by these individuals. H. J. Roberts' book *Aspartame* provides several case studies: a twenty-nine year old man who had seizures drank eighteen twelve-ounce aspartame-sweetened colas a day, a thirty-five year old woman had ten to fifteen cups of soda and about fifteen pre-sweetened teas each day, a thirty-five year old pilot has convulsions and slurred speech that ends when he gives up his two to four sixteen-ounce cans and two one-liter bottles of diet soda, two to four cups of hot chocolate, puddings, gelatins, and gum – all sweetened with aspartame – that he previously consumed *each day*.<sup>28</sup> A UPI story in 1987 featured several aspartame users who had recovered from seizures after giving up diet beverages and desserts. One was drinking a liter and a half to two liters of diet soda a day; another was drinking sixty-four ounces of diet coke a day and a few glasses of diet lemonade.<sup>29</sup> Among the crusading women (Roth, Hull, and Brackett) such consumption was not uncommon. Ruth believed her partial blindness was due to her daily consumption of four to eight aspartame-sweetened coffees and iced teas a day. Hull drank diet sodas throughout the day. Brackett revealed a six to eight Diet Coke a day habit that lasted over a decade.

28 H.J. Roberts noted that among the individuals he saw in his practice suffering from this syndrome, "some ... consume extraordinary quantities of aspartame products." One explanation for this, he believed, was that such products could induce "intense thirst" that was not easily satisfied. See H. J. Roberts, *Aspartame (NutraSweet): Is It Safe?* (Philadelphia: Charles Press, 1990), 21.

29 Gregor Gordin, "Seizure, blindness victims point to NutraSweet", *United Press International, Washington News*, October 12, 1987, n.p.

These amounts may seem astonishing. Yet they fell squarely within the guidelines established by the American Diabetes Association: by their calculations, a one hundred pound individual could safely consume twelve cans of diet soda per day.<sup>30</sup> In the late 1990s, in fact, Coke had a term for those consumers who regularly drank six to eight diet sodas a day: loyalists. And there were enough of them to fill focus groups across the country to test new products and product messaging. This was in many ways a logical outcome of artificial sweetener marketing since the 1950s. Because it removed what was “bad” from sweets (i.e. calories), consumers were finally free to indulge in pleasure without worrying about restraint. As marketing grew more sophisticated, soda drinking became normalized, and soda prices dropped to the levels where consuming more than a six-pack a day could be accommodated in an average American budget, “without restraint” went from meaning a couple of sodas a day to a couple of gallons a day for many consumers.

NutraSweet’s promises that sweets without calories and consequence are just what nature intended, in retrospect, likely contributed to such consumer practices. It is impossible, given current data, to determine if these people actually got sick from consuming too much aspartame. Perhaps. But it also seems clear that there is both a physical and cultural rejection of NutraSweet’s claims in these stories. When one looks closely at those who decry it, arguments are built on its inherent danger in food and drink products, its toxicity as a chemical, and the conspiracy that brought it to market without sufficient scientific study. These are all technological associations.

Looking at the testimonies from the main anti-aspartame documentary, “Sweet Misery”, a key moment, at least in how sufferers recount their experiences, is when they identify the culprit as NutraSweet and move from shock to action to protect themselves. Repeatedly, they share their epiphany moment – when they discovered that the flavorful diet soda or the Crystal Light or the aspartame sweetened ice tea is the cause of their suffering. From this point the recovery is frequently swift. Victims find their blurred vision gone, vertigo subsided, and headaches cleared in a matter of hours after consuming their last aspartame-sweetened product. Here knowledge appears to be a key factor in restoring health. The typical reaction is one of abolition – they remove aspartame completely from their diets, replacement – they shift to sugar sweetened products or water, and proselytizing – they work to convince others that they too should give up the chemical. Here they often stress giving up this chemical, and replacing it with a non-chemical. Theirs seems in many ways an equal act of knowledge claiming as was the initial NutraSweet marketing. Here, instead of NutraSweet teaching them that this healthful

30 Cynthia Alli and Phylis Crapo, “Sweetener safety: the bitter debate”, *Diabetes Forecast*, September-October 1985, 37.

pleasure, like nature, they are convincing themselves, others, and NutraSweet (if it will listen) that this is toxic, and so unnatural it is literally killing them.<sup>31</sup>

### Conclusion

By 1994 the market for what were termed “non-nutritive sweeteners” in the United States was almost \$1 billion, and the majority of those sales were of aspartame. Figures from 1993 reveal close to nineteen million pounds of the substance consumed within the U.S. and over 2000 aspartame-sweetened products in circulation worldwide.<sup>32</sup> The NutraSweet Company continued to dominate the market, even after their exclusive patent on aspartame expired in 1992. Its market share continued to hover between 90 and 95%. Two decades later, there is little doubt that NutraSweet has been a phenomenal success.<sup>33</sup> Its makers and promoters took a product no one had heard of, in a category plagued by consumer doubt and safety questions, and earned hundreds of millions of dollars for themselves and their corporate customers by selling it to consumers as a health food.<sup>34</sup> At the same time, research was beginning to emerge suggesting that in spite of all of this low-calorie sweet consumption Americans were finding themselves increasingly unable to satisfy their cravings. One 1988 study found that sugar eaten before a meal made people significantly less hungry when they sat down than did artificial sweeteners – especially aspartame. “Aspartame”, it found, “produced large and statistically significant increases in hunger and desire to eat.”<sup>35</sup> What they found particularly intriguing was that this was not merely a matter of calories ingested. While one expected sugar to satiate given its caloric content, aspartame produced notably more hunger in its consumers than did water.

31 According to media critic Philip Lawler, the “bewildering phenomenon” of people who claimed to have been plagued by vision problems, sluggishness, seizures, even menstrual irregularities after using aspartame simply does not bear out under actual research. In spite of this, six hundred letters had been sent to the Center for Disease Control by 1986. One logical conclusion as to why these letters arrived, in spite of clinical evidence, is biased media coverage. Television and newspaper coverage, by repeatedly stressing that NutraSweet might be harmful, and characterizing Searle as a dishonest corporation, had put consumers on a witch hunt in their own bodies. This does not explain, however, why they arrived at specific disease etiologies based on toxicity and chemical poisoning. Lawler, *Sweet Talk*, 35.

32 McNamara and Michael Lindley, “Non-nutritive sweeteners; markets and marketing”, *International Food Ingredients* 6 (1993): 13.

33 In March of 2000 Monsanto sold NutraSweet to the private equity firm J.W. Childs who continues to own the brand today. It has lost market share to sucralose (Splenda) but continues to have strong sales. <http://en.wikipedia.org/wiki/NutraSweet> accessed 2009, last modified June 5, 2011.

34 Damian McNamara, “Sweeteners Plateau”, *Chemical Marketing Reporter* 247 (n. 22, May 29, 1995): 16–17.

35 Peter Rogers et al., “Uncoupling sweet taste and calories”, *Physiology and Behavior* 43 (1988): 549.

Aspartame built an empire – now occupied by sucralose/Splenda – where promises of Natural Indulgence continue: by decoupling sweetness from restraint and promoting it so that consumers *know this is the way things should be*. By the 1990s artificial consumption had reached the point, for its mega consumers, that it exceeded the bounds of what their bodies could hold. And it appears for us now that it is, swirl or no swirl, *not* “what nature intended” but rather a massive technological fix. The question remains whether we can reconnect with a nature, neither hundreds of times sweeter than sucrose – or limitless – in our current era of “sustainable” pleasures.

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