FAT LAND

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How Americans Became the Fattest People in the World

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gency gastroplasty repair, and it did not look good. As I came to learn, first through bits and pieces exchanged by the ward nurses, then through comments by the patient's parents, it was not the first emergency for this man. As his mother, a modestly dressed woman in her forties, moaned at one point, "Second time in three months . . . his stomach keeps coming unstapled" (not all forms of gastroplasty actually involve stapling, as did older forms of obesity surgery, but many still refer to it that way). The woman then leaned on the shoulder of her weary husband. "My . . . boy." Her boy was dying from his own fat.

Yes, he was dying, and yes, the more I looked, the more I could see: Here was someone's boy, one plagued, I imagined, by years of bad health, discomfort, self-loathing, and, of course, countless insults and snickers by passersby and friends alike. But someone's little boy nonetheless. Watching him as he gasped for air — respiratory function is one of the first things that can go when one gets so big — I could not help think: There but for the grace of God go I. And, to hear Jim Hill and Dr. Satcher tell it, a large number of other decent Americans.

Driving home that night, through the barrio of East L.A., then up the chilly black Pasadena Freeway to the town where I live, I wondered just how a boy becomes so disabled. Genes certainly played a role, but as Jim Hill had lucidly pointed out, genes have always played a role in obesity. The question was, why are we seeing so many more people like the one I just saw? How — exactly — had they been made? And if it is true that, in America, every man is his own author, that every man, as Ivan Illich once wrote, "is responsible for what has been made of him," then what, as a nation, is being made of us by the obese?

I decided to find out: How is it that we better-off Americans, perhaps the most health-conscious of any generation in the history of the world, have come to preside over the deadly fattening of our youth and their future? That is the story you will read on the following pages, and that is why we must now turn to the strange career of one Earl L. Butz . . .

1

UP UP UP!

(*Or, Where the Calories Came From*)

EARL BUTZ, nominated by Richard Nixon in 1971 to be the eighteenth secretary of agriculture, conjured the airs of a courtly midwestern grandfather, the kind who liked to show up at Sunday dinner, give the blessing, lecture the grandchildren about patriotism, free trade, the goodness of farm life, and the evils that threatened such a life — and then go out to the backyard and tell off-color jokes to the assembled adults.

In Washington, Butz was an optimist, chanting "Up up up!" whenever he got good news about farm prices. And he was telegenic, his hawk-nosed profile and slicked-back white hair a staple on the nightly news, where he would spin his own "up up up" version of America and its endless agricultural cornucopia. Indeed, if most Nixon appointees avoided the light and the heat, Butz bathed in it. There were his endless battles with Henry Kissinger, whom Butz liked to accuse of "putting your dirty fingers into my farm policy." There was his constant — and very public — denigration of welfare spending, of people who "sit on their duff waiting for a nice handout." And there was his persona in his office, where Butz would regale visitors with his grand visions for agriculture — better crops! tastier tomatoes! corn and wheat and rice to feed a hungry world! — and then, grinning like a Rockwellian Puck, jerk his thumb backward at the sculpture sitting behind his desk — one of two wooden elephants, copulating. "That's what it was like trying to multiply the farm vote for Nixon!" he'd say with an infectious belly laugh. It was hard not to conclude that Earl "Rusty" Butz was, among many other things, a true piece of work.

Like most presidents, Richard Nixon had nominated his new agriculture secretary for largely political reasons. By the early 1970s the once solid "farm vote" was wobbling. The problem was the economy; farm income had plummeted. The immediate causes were short term in nature. Cautious growers simply had not planted enough grain crops. At the same time, the costs of farming — from agrochemicals to labor to transportation — had soared, so much so that by 1972 poultry farmers were forced to kill a million baby chicks because they could not afford the price of feed. Urbanization drove the long-term forces behind the farm problem. Cropland was getting more and more expensive to hold on to. So was labor. Old-timers were seeing their grandchildren go off to college — and not return. Anyone with political antennae could see that the overall mood was one of gloom — not a particularly promising mood for what many believed would be a hotly contested election. When profits hit an all-time low in 1971, farm leaders began openly talking about defecting to the Democrats. Nixon, preoccupied with the Vietnam War and dogged by the press, despaired: A bunch of angry farmers was all he needed.

But the president did know one thing: To fix the farm, he needed someone from the farm. And in 1971, Butz — conservative, energetic, with an already lengthy vita ranging from his Ph.D. in agricultural economics to his service to the United Nation's Food and Agricultural Organization — was a perfect farm fixer.

Not long after Butz arrived in Washington, though, another crisis exploded, this one involving a character as truculent as Butz

himself: the American consumer. Around the nation, homemakers were fuming at the soaring prices of such basic items as hamburger, cheese, sugar — even margarine. By early 1973, with food price inflation at an all-time high, the anger had turned into a full-blown middle-class protest. Across the country, consumer groups comprising self-described activist homemakers organized a widespread meat boycott, replete with big-city marches and signs that read HELP US HELP YOU! DON'T EAT MEAT! The movement even had its own graphics — a big T-bone steak with BOYCOTT MEAT emblazoned across it in giant red letters. In San Francisco, the Consumer Action Group called for a 15 percent price rollback for all meat. (Nixon responded with a poorly received "price ceiling.") In Houston, Housewives for Collective Action led their entire families on loud demonstrations at supermarkets. The July 16 issue of *U.S. News & World Report* summed up the national discontent perfectly: "Why a food scare in a land of plenty?"

The answer was meteorological and global. The weather in 1972 had been abnormally bad for farmers worldwide, resulting in smaller crops across the board. Worse, a basic source of protein feed meal for the world, the anchovy fisheries off the coast of Peru, failed to produce even minimal requirements. Add to this the impact of the devalued dollar, which made American food cheaper abroad just as supplies were dropping worldwide. The result was that there wasn't enough food — or at least not enough food to keep prices stable. Around the country, the situation provoked rampant malaise-speak, even among typically cool-headed observers. "Like it or not," declared the economist Lester R. Brown of the Overseas Development Council, "Americans are sharing food scarcity with Russia." Suddenly, there were signs of shortage fear everywhere. Stores selling horse meat opened in Portland and Chicago. In Minnesota, a black market in meat was reported.

To Nixon, the political face of food had warped. If farmers wanted more money for their products, consumers wanted products for less money. With notions of entitlement growing and memories of the Depression fading, the folks "wanted what they wanted when they wanted it," as Butz liked to put it. And Butz, disinclined to equivocation — "The only one thing in the middle of the road is a dead skunk!" — was inclined to please the farmers first.

To do so he launched an aggressive campaign to "liberate" growers from the clutch of government regulation. To enlarge the farmer's marketplace, he spiked USDA rules requiring government approval for large export sales. In late 1973 he went abroad to beat down trade barriers to American products, later striking the nation's largest grain sale ever to a foreign power, the Soviet Union. And to give the farmer more pricing flexibility, he ended the longtime program of mandated national grain siloing, instead letting farmers store and sell excess grain where and when they desired. His message caught on. Corn and soybean growers planted their fields exactly as the Sage of Purdue advised: "from fencerow to fencerow." By the mid-1970s corn production soared to an all-time high. So did farm income.

For makers of convenience foods, the corn surpluses would eventually become a boon to new product development and sales. For years, sugar prices had been tied to a worldwide price structure that, in essence, served as a form of foreign aid to developing nations. That had kept prices for U.S. consumers — manufacturers and families alike — unnaturally high. But in 1971 food scientists in Japan found a way to economically produce a cheaper sweetener. They called it high-fructose corn syrup, or HFCS. It was six times sweeter than cane sugar and, as its name implied, it could be made from corn. That meant that the cost of producing any high-sugar product could be slashed. HFCS had other chemical attributes as well. Using it in frozen foods protected the product against freezer burn. Using it in long-shelf-life products — like those in vending machines — kept the product fresh-tasting. Using it in bakery products (even in rolls and biscuits that normally contained no sugar) made those products look "more natural" — as if they had just been browned in the oven. Although it would not be until the late 1970s that mass production techniques would make its use widespread, HFCS stood as a testimony to Butz's free-planting theology.

HFCS also had one attribute that posed a potentially troubling question to those in the food industry. Fructose, unlike sucrose or dextrose, took a decidedly different route into the human metabolism. Where the latter would go through a complex breakdown process before arriving in the human liver, the former, for some reason, bypassed that breakdown and arrived almost completely intact in the liver, whereupon the organ set upon it as it would anything else. This unique feature of fructose, which was intensified by the high concentrations of it in HFCS, would come to be called "metabolic shunting." In food science circles, it raised eyebrows but, as several scientists present at the time note, not warning flags. Stanley Segall, now a leading expert in the science of fat and sugar replacements at Drexel University in Philadelphia, recalls a committee he served on at the time that was looking at the fructose shunting issue. "I remember being told, as a sort of junior on the committee, 'Don't be silly — everyone knows that it's the same as sugar.' But no one really answered the question: whether, if you use fructose as your main source of sweetener, you *do* get more fructose in the metabolic process," he says today. "It was decided fructose was no different — that it was only a question of quantity. But no one really looked at it in depth."

Certainly not the USDA. There the concern was pure farm economics. To stimulate demand for his farmers' goods, Butz took to the stump to "re-educate" the caterwauling American consumer. Striding up onto a makeshift platform in a supermarket parking lot, Butz would pull a loaf of Wonder Bread from a paper bag and wave it about for all to see. "You all know what this is," he'd say, opening the bag and pulling out a single slice. "Well, guess how much is the farmer's share of this. You'd be right if you said this one darned slice!"

Consumers had the problem all wrong, Butz would go on.

Why, it was the labor unions — particularly the transport, manufacturing, and retail sectors — that caused the greatest price increases. Their average wage increases had gone up while the farmer's typical wages had stayed flat. Labor leaders like George Meany were the problem. The supermarket barons were the problem. Even consumers bore some of the responsibility. Convenience foods and TV dinners (still costly then) were really nothing but a "built-in maid service." The meat boycott wasn't the answer. Everyone needed simply to buck up.

But the straight talk that had worked with farmers wasn't enough for American consumers. Many of them were union members themselves, struggling just to make ends meet. Others were members of a new kind of American family, one consisting of not one but two wage earners. To them TV dinners might be pricey, but they were also practical. And wanting meat every day was not a bad thing. A cartoon in the *New York Times Magazine* depicting a man and his wife sitting down to table with two bowls of dog food caught the mood. Holding back Rover with one hand and holding out a newspaper with the other, the man reads: "Secretary Butz says the price of steak is just right!"

Of course it wasn't. And the consumer message to Washington — a veritable generational temper tantrum — was clear: We want what we want when we want it. We don't care why food is expensive, we just want it to be less so. You're the government — fix it, or we'll turn you out in October. Richard Nixon, of course, was gone long before then.

Gerald Ford, the reluctant new president, was a quiet, deliberate man with the impossible task of reassuring "the folks" that a post-Nixon government of Republicans could be trusted. He was, like the nation, obsessed with inflation, and in his office and on the stump he liked to refer to the problem as "public enemy number one." To squash the enemy he turned to Butz. His only instructions were to get food prices down without resorting to the kind of price controls that Nixon had implemented in 1973.

One day, pondering this new charge, Butz got a phone call

from a Texas congressman named William Poage. The assistant chair of the influential House Committee on Agriculture, Poage was often on the horn to Butz, usually complaining about this import subsidy or that export restriction — anything that might damage his powerful constituency of soybean growers. He certainly never called to praise the secretary, who had alone championed the opening of overseas markets for Poage's bean growers — markets that, almost overnight, had made them the single richest agricultural producers in the world.

"Mr. Secretary — it's rat oil," Poage said in his dry Texas drawl.

"What?"

"It's rat oil, sir. This palm oil thing has gotten completely out of hand. We've got to do something. We can't just sit here and let the Malays take our markets away from . . ."

Butz had been getting updates about a congressional debate over the issue of palm oil imports and its impact on soybean growers. As usual with Poage, the soybean growers faced "a national crisis." They were at "a dangerous turning point." The secretary, Poage complained, had told the nation's farmers to plant fencerow to fencerow. Now where were they going to sell all those soybeans if we were going to allow this "rat oil" — Poage was convinced, albeit without any evidence, that it was "infested" — to take away our own home markets?

The congressman went on and on, but to Butz his plaint — and the message from much of his own constituency — had grown predictable and confounding, especially in light of the president's new mandate. Poage wanted the administration to back new quotas and tariffs on Malaysian palm oil. Butz was chagrined. As he recalled in a recent interview, "It was back to square one with the education campaign. The hardest thing to sell — and get the American farmer to understand — was that to expand exports we had to expand imports. We had to get farmers to think differently. They had been used to being protected. Yet the president wanted the government out of the farming business.

"So what was I to do?" Butz continued. "I finally came to the conclusion that I would have to take some heat to get the point across — even if it was from our own constituency." The new official line, Butz explained, was "to stand up for free trade on both sides — it was the only way I was going to keep some legitimacy bringing down other barriers abroad. President Ford gave me a lot more freedom than President Nixon, so I was able to go ahead on something that should have been done a long time ago."

Freed from Kissinger's "dirty little fingers" in international matters, Butz moved his new agenda quickly. To delay any new tariff or import legislation, he deployed his closest political staff to testify in front of a House Agriculture Committee meeting, where Poage was in high boil. Butz instructed his staff to tell the representatives that he would have to prepare a special report before considering their demands, and that the report would not be ready until May. The stall thus lodged, Butz assembled a group of his most ardent free trade advisers and planned what they came to call "the round the world free trade mission." Palm oil would be one of its first subjects, and Malaysia, where the bulk of it was grown and processed, would be one of his mission's first stops.

Palm oil had been around as a commercial fat for many years. The British had introduced *Elaeis guineensis* as a plantation crop in the late nineteenth century. Later on, the Malaysian government had subsidized the palm's widespread planting as a way to resettle thousands of poor Malays onto the new nation's rugged frontier. But palm oil, which is more chemically similar to beef tallow than traditional vegetable oil, was difficult to process. Some of its original American importers referred to it as axle grease. Its competitors called it tree lard.

In the mid-1970s, however, new technologies transformed tree lard into a viable commercial fat, one fit for everything from frying french fries to making margarine to baking cookies and bread and pies and no end of convenience ("built-in maid service") foods. It was, in a sense, the fat world's compatriot to the sugar

world's HFCS. Because it was a stable fat, products made with it lasted forever on supermarket shelves. True, a manufacturer might have to use more of it to achieve a good "mouthfeel," and that meant an increased caloric count in the resultant food product, but that, at least at the time, was a secondary issue. Price was key. And palm oil prices were unbelievably good — all the time. The trees produced heavily all year round. Palm oil was also tastier than many vegetable oils, mainly because of its molecular similarities to lard. There was one other thing: Palm oil was such a highly saturated fat that its proponents secretly touted it as "cow fat disguised as vegetable oil."

American health and medical experts already knew that saturated fats were bad for the cardiovascular system, plugging up arteries, sending blood pressure spiraling, and raising the chances that a consumer of such fats might die a premature death. In the Agriculture Committee's hearings on palm oil, Poage himself tried to marshal the health argument. "Palm oil is more highly saturated than hog lard," he testified. "I do not think that the American housewife should be put to the proposition of buying this palm oil without any notice whatever that it is not what she thinks it is. She thinks when she buys vegetable oil that that's all there is to it, and that she has got something good for her family. When she buys this type of vegetable oil, she ought to have a warning." Hence, in his bill, Poage proposed that all food containing palm oil come with a label stating that it "contains or was prepared or processed with palm oil, a highly saturated imported vegetable product."

Although Poage was more interested in the economic damage that palm oil was wreaking upon his soybean constituency than in its health impacts, he also happened to be on target. Hog lard, even then rarely used, was 38 percent saturated; palm oil was 45 percent saturated. His idea to label palm oil as a saturated fat was ten years ahead of its time. Yet in Congress, not a single medical authority testified against palm oil. As much as the medical establishment was concerned about saturated fats, palm oil seemed an unlikely candidate to be singled out for censure. The small body of science on the fat was mixed. It had been linked to gallstones in hamsters and hypertension in rats. But it also had been assessed positively because of its ability to prevent vitamin A deficiency in such nutritionally underdeveloped nations as Indonesia. Public health advocates were hardly prepared for a battle. The U.S. regulatory system for foods, split between the boosterish USDA and the overburdened FDA, was hardly the place to initiate and fund speculative food science. Then, as now, foods were lightly regulated; their long-term medical consequences were less important than their immediate safety, purity, and usefulness.

And then, as now, food was an increasingly globalized political issue. In Malaysia, palm oil could make or break a career, and Butz's counterpart, Musa bin Hitam, had ridden it to the crest of power. Tough-minded and pragmatic, Hitam ran the country's powerful Ministry of Primary Industries, which among other things was responsible for palm oil production and sales. He operated the ministry like a business, setting goals for his staff and making quick response to trade queries a priority. Americans doing business in Kuala Lumpur knew Hitam as a progressive bureaucrat and a worthy negotiator.

On April 23, 1976, Hitam met Butz at Kuala Lumpur International airport and swept him off to a series of stopovers. The stops were meant to impress one message upon Butz: If Malaysia were to remain a strong ally in a still volatile Southeast Asia, the country needed enhanced trade with the United States and other developed nations. As Hitam later wrote, the palm oil trade was a "fuel for democracy."

"You must realize that 85 to 90 percent of our national budget comes from what I look after," Hitam told Butz. "In rubber alone, each 1 percent increase means $25 million in export earning for us." The same was true with palm oil. Hitam went on. Palm oil wasn't like soybean oil, which was merely a by-product of soy meal production. "It's a big bit of our entire earnings, sir."

As the two men strode through a palm plantation in Selangor, Butz began to warm to Hitam, recalls John DeCourcy, a senior agricultural attaché in the U.S. embassy in Kuala Lumpur at the time. Soon the secretary was telling funny stories from his own repertoire that illustrated the American version of Hitam's concerns.

"And he managed to get Hitam talking about something that no other American ever did: What could America sell to Malaysia?" DeCourcy recalls. "Traditionally all of Malaysia's imports — chicken parts, canned goods, even orange juice — had come from Europe, usually via some U.K. group that had longtime colonial ties. But Mr. Butz — he connected with this guy like no other I'd ever seen. Why, he even sat down and ate durian [one of the most foul-smelling fruits in the world] with him — and without betraying even a hint of discomfort or surprise."

Only two days after the visit, DeCourcy and Hitam both received messages from Butz. To Hitam he wrote: "May I assure you again that we intend to remain competitive in the edible oil field . . . and that means access to our markets. . . . We are delighted with your plans for product diversification, market development, and market diversification. We feel your interest and our interest in this area are identical." To DeCourcy he wrote that "we are going to stand foursquare for the principles of freer trade."

In other words, Poage be damned. Palm oil would be welcomed in America.

Reading his letter and breathing a sigh of relief, DeCourcy couldn't help but chuckle. He had just witnessed a deal that could alter the course of a nation — one that had been pulled off by a quirky man from Purdue who could eat a smelly durian with the relish of a farm boy chomping down on the season's first ripe watermelon.

Earl "Rusty" Butz, of course, would be remembered by most Americans not for his accomplishments in bringing down the cost of food, but rather for his one great vice: joke-telling. His most infamous — and last — official transgression took place in September 1976, when Butz was flying from the GOP convention in Kansas City to Los Angeles with a group of friends. It was late. The secretary was tired. Bored, he began telling jokes. Asked by John Dean why Republicans couldn't get more African Americans into their tent, Butz replied with an anecdote he'd heard from an old ward politician, something to the effect that all blacks really wanted was sex, loose shoes, and indoor plumbing. Dean published the remarks in an article he was writing for *Rolling Stone*. Gerald Ford, in a tight election campaign, castigated Butz. His own party stalwarts urged him to fire Butz. The president refused. The press picked up on the infighting and within a week, Earl Butz had resigned and returned to Purdue.

By the early 1980s, however, Butz's true legacy was everywhere evident. There were no more shortages of meat or butter or sugar or coffee. Prices on just about every single commodity were down, as were the prices of foods made with such commodities. In what would prove to be one of the single most important changes to the nation's food supply, both Coke and Pepsi switched from a fifty-fifty blend of sugar and corn syrup to 100 percent high-fructose corn syrup. The move saved both companies 20 percent in sweetener costs, allowing them to boost portion sizes and still make substantial profits.

Meat production worldwide soared as feed costs of soy meal and corn fell. That, in turn, spurred huge increases in the supply of soybean oil, a by-product, leading to even lower prices for that industrial fat. At the supermarket, calorie-dense convenience foods were thus becoming more and more affordable. High-fructose corn syrup made from the growing surpluses of U.S. corn had made it easier and less expensive to make frozen foods. TV dinners and boxed macaroni and cheese were downright cheap. At fast-food stands, portions were getting bigger. Fries were tasting better and better and getting cheaper and cheaper. (McDonald's, which at that time fried its potatoes in palm oil, had built its first Malaysian oil processing plant just months after Butz's

visit.) And the very presence of such alternatives as palm oil forced traditional fat suppliers like the soybean growers to lower their prices as well.

In short, Butz had delivered everything the modern American consumer had wanted. A new plenitude of cheap, abundant, and tasty calories had arrived.

It was time to eat.

2

SUPERSIZE ME

(*Who Got the Calories into Our Bellies*)

If the wobbly economy of the 1970s had left consumers fulminating over high food prices and the forces that caused them, the same economy had driven David Wallerstein, a peripatetic director of the McDonald's Corporation, to rage against a force even more primal: cultural mores against gluttony. He hated the fifth deadly sin because it kept people from buying more hamburgers.

Wallerstein had first waged war on the injunction against gluttony as a young executive in the theater business. At the staid Balaban Theaters chain in the early 1960s, Wallerstein had realized that the movie business was really a margin business; it wasn't the sale of low-markup movie tickets that generated profits but rather the sale of high-markup snacks like popcorn and Coke. To sell more of such items, he had, by the mid-1960s, tried about every trick in the conventional retailer's book: two-for-one specials, combo deals, matinee specials, etc. But at the end of any given day, as he tallied up his receipts, Wallerstein inevitably came up with about the same amount of profit.

Thinking about it one night, he had a realization: People did not want to buy two boxes of popcorn *no matter what*. They

didn't want to be seen eating two boxes of popcorn. It looked . . . piggish. So Wallerstein flipped the equation around: Perhaps he could get more people to spend just a little more on popcorn if he made the boxes bigger and increased the price only a little. The popcorn cost a pittance anyway, and he'd already paid for the salt and the seasoning and the counter help and the popping machine. So he put up signs advertising jumbo-size popcorn.

The results after the first week were astounding. Not only were individual sales of popcorn increasing; with them rose individual sales of that other high-profit item, Coca-Cola.

Later, at McDonald's in the mid-1970s, Wallerstein faced a similar problem: With consumers watching their pennies, restaurant customers were coming to the Golden Arches less and less frequently. Worse, when they did, they were "cherry-picking," buying only, say, a small Coke and a burger, or, worse, just a burger, which yielded razor-thin profit margins. How could he get people back to buying more fries? His popcorn experience certainly suggested one solution — sell them a jumbo-size bag of the crispy treats.

Yet try as he may, Wallerstein could not convince Ray Kroc, McDonald's founder, to sign on to the idea. As recounted in interviews with his associates and in John F. Love's 1985 book, *McDonald's: Behind the Arches*, the exchange between the two men could be quite contentious on the issue. "If people want more fries," Kroc would say, "they can buy two bags."

"But Ray," Wallerstein would say, "they don't want to eat two bags — they don't want to look like a glutton."

To convince Kroc, Wallerstein decided to do his own survey of customer behavior, and began observing various Chicago-area McDonald's. Sitting in one store after another, sipping his drink and watching hundreds of Chicagoans chomp their way through their little bag of fries, Wallerstein could see: People *wanted* more fries.

"How do you know that?" Kroc asked the next morning when Wallerstein presented his findings.

"Because they're eating the entire bagful, Ray," Wallerstein said. "They even scrape and pinch around at the bottom of the bag for more and eat the salt!"

Kroc gave in. Within months receipts were up, customer counts were up, and franchisees — the often truculent heart and soul of the McDonald's success — were happier than ever.

Many franchisees wanted to take the concept even further, offering large-size versions of other menu items. At this sudden burst of entrepreneurism, however, McDonald's mid-level managers hesitated. Many of them viewed large-sizing as a form of "discounting," with all the negative connotations such a word evoked. In a business where "wholesome" and "dependable" were the primary PR watchwords, large-sizing could become a major image problem. Who knew what the franchisees, with their primal desires and shortcutting ways, would do next? No, large-sizing was something to be controlled tightly from Chicago, if it were to be considered at all.

Yet as McDonald's headquarters would soon find out, large-sizing was a new kind of marketing magic — a magic that could not so easily be put back into those crinkly little-size bags.

Max Cooper, a Birmingham franchisee, was not unfamiliar with marketing and magic: for most of his adult life he had been paid to conjure sales from little more than hot air and smoke. Brash, blunt-spoken, and witty, Cooper had acquired his talents while working as an old-fashioned public relations agent — the kind, as he liked to say, who "got you into the newspaper columns instead of trying to keep you out." In the 1950s with his partner, Al Golin, he had formed what later became Golin Harris, one of the world's more influential public relations firms. In the mid-1960s, first as a consultant and later as an executive, he had helped create many of McDonald's most successful early campaigns. He had been the prime mover in the launch of Ronald McDonald.

By the 1970s Cooper, tired of "selling for someone else," bought a couple of McDonald's franchises in Birmingham, moved his split-off ad agency there, and set up shop as an independent businessman. As he began expanding, he noticed what many other McDonald's operators were noticing: declining customer counts. Sitting around a table and kibitzing with a few like-minded associates one day in 1975, "we started talking about how we could build sales — how we could do it and be profitable," Cooper recalled in a recent interview. "And we realized we could do one of three things. We could cut costs, but there's a limit to that. We could cut prices, but that too has its limits. Then we could raise sales profitably — sales, after all, could be limitless when you think about it. We realized we could do that by taking the high-profit drink and fry and then packaging it with the low-profit burger. We realized that if you could get them to buy three items for what they perceived as less, you could substantially drive up the number of walk-ins. Sales would follow."

But trying to sell that to corporate headquarters was next to impossible. "We were maligned! Oh were we maligned," he recalls. "A 99-cent anything was heresy to them. They would come and say 'You're just cutting prices! What are we gonna look like to everybody else?'"

"No no no," Cooper would shoot back. "You have to think of the analogy to a fine French restaurant. You always pay less for a *table d'hôte* meal than you pay for *à la carte*, don't you?"

"Yes, but —"

"Well, this is a *table d'hôte*, dammit! You're getting more people to the table spending as much as they would before — and coming more often!"

Finally headquarters relented, although by now it hardly mattered. Cooper had by then begun his own rogue campaign. He was selling what the industry would later call "value meals" — the origin of what we now call supersizing. Using local radio, he advertised a "Big Mac and Company," a "Fish, Fry, Drink and Pie," a "4th of July Value Combo."

Sales, Cooper says, "went through the roof. Just like I told them they would."

* * *

Selling more for less, of course, was hardly a revolutionary notion, yet in one sense it was, at least to the purveyors of restaurant food in post-Butzian America. Where their prewar counterparts sold individual meals, the profitability of which depended on such things as commodity prices and finicky leisure-time spending, the fast-food vendors of the early 1980s sold a product that obtained its profitability from a consumer who increasingly viewed their product as a necessity. Profitability came by maintaining the total average tab.

The problem with maintaining spending levels was inflation. By the early Reagan years, inflation — mainly through rising labor costs — had driven up the average fast-food tab, causing a decline in the average head count. To bring up the customer count by cutting prices was thus viewed as a grand and — despite the anecdotal successes of people like Wallerstein and Cooper — largely risky strategy. But one thing was different: Thanks to Butz, the baseline costs of meat, bread, sugar, and cheese were rising much more slowly. There was some "give" in the equation if you could somehow combine that slight advantage with increased customer traffic. But how to get them in the door?

In 1983 the Pepsi Corporation was looking for such a solution when it hired John Martin to run its ailing Taco Bell fast-food operation. A Harley-riding, Hawaiian shirt–wearing former Burger King executive, Martin arrived with few attachments to fast-food tradition. "Labor, schmabor!" he liked to say whenever someone sat across from him explaining why, for the millionth time, you couldn't get average restaurant payroll costs down.

But Martin quickly found out that, as Max Cooper had divined a decade before, traditional cost-cutting had its limits. If you focused on it too much, you were essentially playing a zero-sum game, cutting up the same pie over and over again. You weren't creating anything new. And all the while there were those customers — just waiting to chomp away if you could give them just a nudge to do so.

But did Americans really want to eat more tacos? "We had always viewed ourselves as a kind of 'one-off' brand," Martin recalled in a recent interview. Tacos — or, for that matter, pizza — would always be the second choice to buying a burger. "That caused us to view ourselves as in a small pond — that the competition was other Mexican outlets."

Then Martin met a young marketing genius named Elliot Bloom. A student of the so-called "smart research" trend in Europe, which emphasized the placing of relative "weights" on consumer responses so as to understand what really mattered to a customer, Bloom had completely different ideas about the market for Mexican food. Almost immediately he began running studies on Taco Bell customers. What he found startled: Fast-food consumers were much more sophisticated and open to innovation than previously thought. In fact, they were bored with burgers. Martin loved the idea of competing with McDonald's, and immediately launched a $200 million national ad campaign, the centerpiece of which was a commercial depicting a man threatening to jump off a ledge if he had to eat another hamburger. The results of the campaign were mixed. Sales of some new products, most notably the taco salad, blossomed, but overall customer counts remained vexingly low.

Meantime, Bloom was still playing with consumer surveys, which now revealed something even more surprising: While almost 90 percent of fast-food buyers had already tried Taco Bell, the repeat visit rate of the average consumer was flat. "Reach" wasn't the problem. Frequency was. And when you started studying the customers who *were* coming back — the "heavy users" — price and value — not taste and presentation — were the key. "That was shocking," Martin recalls. "Value was the number-one issue for these guys — and there were a lot of them — 30 percent of our customers accounted for 70 percent of sales. For a lot of us, that was disturbing. Our whole culture was sort of 'out of the kitchen,' you know, the notion that taste, cleanliness, and presentation was the key. But that's not what this new kind of customer was about. His message was loud and clear: more for less. So the business question became — how do you create *more* of these guys?"

One way, of course, was to give them what they wanted. But that was discounting, Martin's financial people warned. "I argued with them. I said, 'Look, this isn't stupid discounting, this is a way to right-price the business after a decade of inflation.'"

Bloom suggested an unscientific test of the idea. Let's not make a lot of national noise about this, he said. Let's go someplace where we might get some clean data. There was, in fact, an ideal place to do so. It was Texas, which in the mid-1980s was suffering from one of the worst recessions the oil patch had seen for decades. "We went in and really cut prices and got a dramatic increase in business," Martin says. "We did not make money but it showed us the potential for upping the number of visits per store."

After Martin widened the test, Bloom reported something even better. "Everyone had thought that if we cut 25 percent off the average price of, say, a taco, that the average check size would drop," Martin says. "I never believed that — that satiety was satiety — and, in fact, I was right. Within seven days of initiating the test, the average check was right back to where it was before — it was just four instead of three items." In other words, the mere presence of more for less induced people to eat more.

To get the profit margins back up, Martin turned to what he knew best: cost-cutting. He fired whole swaths of middle managers, then looked at the stores themselves. In them he found what he called a "just plain weird thing, when you thought about it: 30 percent of the typical Taco Bell store was dining area, 70 percent was kitchen. What was that about?" Martin reversed the ratio, ripping out old-fashioned kitchens and sending the bulk of the cooking to off-site preparation centers.

With his margins back up enough to quell upper management fears, Martin took the value meal concept nationwide in 1988. The response was rapid, dramatic, and, ultimately for Taco Bell, transformative. Between 1988 and 1996 sales grew from $1.6 billion to $3.4 billion.

And the value meal was spreading — to Burger King, to Wendy's, to Pizza Hut and Domino's and just about every player worth its salt except . . . David Wallerstein's McDonald's Corporation.

Not that McDonald's was hurting. Its aggressive advertising and marketing had by the late 1980s turned it into a global force unparalleled in the history of the restaurant business. It could, in a sense, afford to call its own tune. (Or at least deal with PR disasters, as was the case in the late 1980s, when the firm was under attack by nutritionists and public health advocates for its use of saturated fats.) But by 1990, Martin's Taco Bell value meals were taking their toll on McDonald's sales. Worse, McDonald's lack of a value meal had become a hot topic on Wall Street, where its stock was slumping. Analysts were restless. On December 17, 1990, one of them, a sharp-eyed fast-food specialist at Shearson Lehman named Carolyn Levy, gave an uncharacteristically frank interview to a reporter at *Nation's Restaurant News*. "McDonald's must bite the bullet," she said. "Some people I know in Texas told me it's cheaper to take their kids for a burger and fries at Chili's than to take them to McDonald's." In McDonald's board meetings, Wallerstein and his supporters used the bad press to good effect. Two weeks later the front page of the same newspaper read: "MCDONALD'S KICKS OFF VALUE MENU BLITZ!"

Though it is difficult to gauge the exact impact of supersizing upon the appetite of the average consumer, there are clues about it in the now growing field of satiety — the science of understanding human satisfaction. A 2001 study by nutritional researchers at Penn State University, for example, sought to find out whether the presence of larger portions *in themselves* induced people to eat more. Men and women volunteers, all reporting the same level of hunger, were served lunch on four separate occasions. In each session, the size of the main entree was increased, from 500 to 625 to 750 and finally to 1000 grams. After four weeks, the pattern became clear: As portions increased, all participants ate increasingly larger amounts, despite their stable hunger levels. As the scholars wrote: "Subjects consumed approximately 30 percent more energy when served the largest as opposed to the smallest portion." They had documented exactly what John Martin had realized fifteen years earlier: that satiety is not satiety. Human hunger could be expanded by merely offering more and bigger options.

Certainly the best nutritional data suggest so as well. Between 1970 and 1994, the USDA reports, the amount of food available in the American food supply increased 15 percent — from 3300 to 3800 calories or by about 500 calories per person per day. During about the same period (1977–1995), average individual caloric intake increased by almost 200 calories, from 1876 calories a day to 2043 calories a day. One could argue which came first, the appetite or the bigger burger, but the calories — they were on the plate and in our mouths.

By the end of the century, supersizing — the ultimate expression of the value meal revolution — reigned. As of 1996 some 25 percent of the $97 billion spent on fast food came from items promoted on the basis of either larger size or extra portions. A serving of McDonald's french fries had ballooned from 200 calories (1960) to 320 calories (late 1970s) to 450 calories (mid-1990s) to 540 calories (late 1990s) to the present 610 calories. In fact, everything on the menu had exploded in size. What was once a 590-calorie McDonald's meal was now 1550 calories. By 1999 heavy users — people who eat fast food more than twenty times a month and Martin's holy grail — accounted for $66 billion of the $110 billion spent on fast food. Twenty times a month is now McDonald's marketing goal for every fast-food eater. The average Joe or Jane thought nothing of buying Little Caesar's pizza "by the foot," of supersizing that lunchtime burger or supersupersizing an afternoon snack. Kids had come to see bigger everything — bigger sodas, bigger snacks, bigger candy, and even bigger doughnuts — as the norm; there was no such thing as a fixed, immutable size for anything, because anything could be made a lot bigger for just a tad more.

There was more to all of this than just eating more. Bigness: The concept seemed to fuel the marketing of just about everything, from cars (SUVs) to homes (mini-manses) to clothes (super-baggy) and then back again to food (as in the Del Taco Macho Meal, which weighed four pounds). The social scientists and the marketing gurus were going crazy trying to keep up with the trend. "Bigness is addictive because it is about power," commented Irma Zall, a teen marketing consultant, in a page-one story in *USA Today*. While few teenage boys can actually finish a 64-ounce Double Gulp, she added, "it's empowering to hold one in your hand."

The pioneers of supersize had achieved David Wallerstein's dream. They had banished the shame of gluttony and opened the maw of the American eater wider than even they had ever imagined.