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PolicyPennings by Daryll E. Ray & Harwood D. Schaffer

The obesity puzzle

Over the years we have received interview requests from reporters concerned about the growing obesity epidemic we have in the US. They call us not because we are health experts, but because someone has suggested to them that farm program payments are, at least in part, responsible for the increase in obesity, particularly childhood obesity.

The logic usually goes something like this. Farm subsidies make commodities such as corn cheap, providing low cost inputs to makers of products like corn chips and high-fructose corn syrup. This allows these companies to companies to sell products like high-fructose-sweetened carbonated beverages and corn chips at a lower price than nutrient dense foods like fruits and vegetables. They then reason that if empty calorie foods like chips and soft drinks were more expensive than nutrient dense foods, people would eat more fruits and vegetables—we could never figure out why the focus was on corn chips when the potatoes that go into potato chips do not receive the same subsidies as corn.

We do have to note that since commodity prices began their ascent in 2008 we have not received any of these calls. And while the time period is relatively short, we have seen no evidence to suggest that the consumption of corn chips and soft drinks has declined in response to higher corn prices though there is evidence that obesity levels continue to climb.

But, even before the corn price began its rise we were skeptical of this argument. To start with, the farmgate value of the corn in a bag of chips is so small that the price of corn could double and it would make little difference in the retail price. The same is true with corn sweeteners and carbonated beverages.

The other day we came across an article, "The Extraordinary Science of Addictive Junk Food," in the New York Times that was adapted from Michael Moss' new book "Salt Sugar Fat: How the Food Giants Hooked Us" (http://www.nytimes.com/2013/02/24/ magazine/the-extraordinary-science-of-junk-food. html?ref=nutrition) that confirms our suspicion that there is more to the obesity epidemic than the farm program and the economics of corn.

In the article, Moss argues that the increased consumption of junk food is all about economics, but his take is that it is the economic impact of the relative market share that each of the major food companies holds in the grocery store aisle. Moss writes, "The public and the food companies have known for decades now...that sugary, salty, fatty foods are not good for us in the quantities that we consume them. So why are the diabetes and obesity and hypertension numbers still spiraling out of control? It's not just a matter of poor willpower on the part of the consumer and a give-the-people-what-they-want attitude on the part of the food manufacturers. What I found, over four years of research and reporting, was a conscious effort—taking place in labs and marketing meetings and grocery-store aisles—to get people hooked on foods that are convenient and inexpensive."

Moss talks about product optimization where "food engineers [using a process developed by Howard Moskowitz] alter a litany of variables with the sole intent of finding the most perfect version (or versions) of a product. Ordinary consumers are paid to spend hours sitting in rooms where they touch, feel, sip, smell, swirl and taste whatever product is in question. Their opinions are dumped into a computer, and the data are sifted and sorted through a statistical method called conjoint analysis, which determines what features will be most attractive to consumers."

What Moskowitz and those after him are looking for is the "bliss point" that allows companies to develop "complex formulas that pique the taste buds enough to be alluring but don't have a distinct, overriding single flavor that tells the brain to stop eating." And because the bliss point actually involves not a single point but a range of values, companies can vary the ingredients to achieve the same amount of "bliss' while minimizing cost, thus increasing profit.

"Sometimes innovations within the food industry happen in the lab, with scientists dialing in specific ingredients to achieve the greatest allure. And sometimes, as in the case of Oscar Mayer's bologna crisis, the innovation involves putting old products in new packages," Moss writes. In this case the new package is something that nearly every kid and mom have seen—Lunchables, the sealed vellow trav that began with a combination of a lunch meat, cheese, and crackers. "Eventually, a line of the trays, appropriately called Maxed Out, was released that had as many as nine grams of saturated fat, or nearly an entire day's recommended maximum for kids, with up to two-thirds of the max for sodium and 13 teaspoons of sugar."

For various companies the issue is often one of supply and demand. "'People could point to these things and say, "They've got too much sugar, they've got too much salt," [a company official] said. 'Well, that's what the consumer wants, and we're not putting a gun to their head to eat it. That's what they want. If we give them less, they'll buy less, and the competitor

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will get our market. So you're sort of trapped.""

One of the most remarkable concepts highlighted in the article was "called vanishing caloric density." The poster food for this vanishing caloric density is Cheetos. It is the "puffs uncanny ability to melt in the mouth.... [Food scientist, Steve] Witherly said. 'If something melts down quickly, your brain thinks that there's no calories in it...you can just keep eating it forever."

Clearly the issue of obesity and our relationship with food involves more than farm policy. And the complexity of the obesity issue no doubt spans well beyond the creation of processed foods that target preidentified bliss points. But the concept has the feel of being an important piece of the obesity puzzle.

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