

FOCUS: OBESITY

Obesity: From Public Health to Public Policy

An Interview with Marlene Schwartz, PhD

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Marlene Schwartz, PhD, is a senior research scientist in Psychology and the School of Public Health as well as Director of the Rudd Center for Food Policy & Obesity at Yale University. Dr. Schwartz received her PhD in Clinical Psychology from Yale, where she studied under renowned obesity expert Kelly Brownell. Prior to her current academic appointments, she served as the Co-Director of the Yale Center for Eating and Weight Disorders as well as Deputy Director of the Rudd Center.

Over the course of her career, Dr. Schwartz's research has affected local Connecticut neighborhood food environments and has had a broader impact on food policy at the national level. Her research fo-

cuses on the effect of factors such as environment and media on influencing feeding behavior in children. Such studies are critical to help provide evidence in support of public policy changes necessary to mitigate the burgeoning rates of childhood obesity in America.

In this interview, Dr. Schwartz discusses her background and interest in obesity-related public health and policy, specifically pertaining to children. She reviews current and future initiatives of the Yale Rudd Center and tells us about research at the center that has contributed greatly to policy changes regarding soda tax, school food environments, and food marketing.

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†Abbreviations: WIC, Women, Infants and Children.

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Dr. Schwartz, you were the Co-Director for the Yale Center for Eating and Weight Disorders prior to becoming the Director of the Rudd Center for Food Policy & Obesity here at Yale, and your research looking at the impact of food marketing on eating behaviors and lifestyle habits, specifically in children, has furthered our understanding of how influential the media can be on our health. What inspired you to pursue this line of research?

I spent about 10 years seeing clients at the Yale Center for Eating and Weight Disorders, and in some ways it was a lot easier to treat bulimia nervosa, in particular, compared to childhood obesity. What I learned is that with my patients with bulimia, it felt that if you could help them normalize their eating, their body was sort of on your side. What I mean by that is, it was more comfortable for them to not binge and purge and to resume normal eating because it seemed like biology, social pressure, etc. were all working together.

With obesity, particularly with the children I saw, it felt like they certainly wanted to be healthier, but unlike the situation with eating disorders, it seemed everything was working against them. It's very hard to lose weight and keep it off; it's uncomfortable restricting your caloric intake and challenging for a lot of the kids to get the amount of physical activity that they needed. The environment around them was always working against them — marketing of unhealthy foods, availability of unhealthy foods in their schools, and difficulty finding healthy options. Sometimes it was hard to keep their parents from bringing unhealthy foods into the house. Because the environment was working against the treatment instead of helping it, I was inspired to start looking specifically at changing the environment.

Could you tell us a little more about the Yale Rudd Center in general? What are some of its main projects at the moment, and what would you say are a few of its greatest achievements thus far?

First, the Rudd Center was designed to be multidisciplinary, so yes, it is different

than many of the other labs in the School of Arts and Sciences at Yale. We have hired an attorney, a registered dietician, a number of people who have degrees in public health and public policy, and we have an economist as well. What we have been trying to do over the years is bring people in from different backgrounds and disciplines because we see changing the environment as a very complicated task that is going to require different expertise.

We have a number of initiatives, which have been fairly consistent over time. We currently have a very large food marketing initiative that is run by Jennifer Harris. She is a social psychologist who graduated from the PhD program at Yale. We have an initiative that focuses on weight stigma and discrimination that is headed by Rebecca Puhl, who is also a clinical psychologist from Yale. We also have people leading work in economics, public policy, and the law. Finally, I am in charge of our research on schools and child care, which we have been doing for quite a number of years.

In terms of achievements, I am proud of the role the Rudd Center has played in changing the environment in schools. School cafeterias are very different now than they were 15 years ago, and they are going to be even more different next year. In 2000, when I started first really paying attention, almost all U.S. high schools had pouring-rights contracts with soda companies and had vending machines throughout the schools that sold potato chips, ice cream, and candy. It was really an unhealthy environment. Starting next year, for the first time ever, the federal government will regulate not just what is in the cafeteria, but what is in the rest of the school as well. All the sugary drinks will be out, and there will be much stronger regulations for the food that can be sold. There will also be much stronger regulations about the nutritional quality of the school lunch.

I think that some of our research helped move the field forward. For example, we were able to show that if you take unhealthy snacks out of schools, kids will not go home and compensate by eating more unhealthy

food. They are not going to go home and eat twice as many potato chips because they could not get potato chips at school. That was a study we did in Connecticut. We did another study showing that when you have these policies, they make a difference in the environment. We have also done studies looking at the economic impact of making these changes and demonstrated that when you take the unhealthy food out of the school, more students will participate in the National School Lunch Program. This helps to make up for the loss of revenue.

In our legal initiative, we just this year started an internship program with the Yale Law School. Over the years, we have written amicus briefs for major court decisions in our domain. When the menu labeling in New York City was getting banged around in the courts, we wrote an amicus brief explaining the science supporting the idea of menu labeling. We also wrote an amicus brief on the sugar-sweetened beverage portion limits that were introduced in New York. When the science is there and there is a legal reason to justify what policymakers are trying to do, we will write amicus briefs so we can help support their efforts.

Tatiana Andreyeva, who is our economist, has done a lot of important research. One significant contribution of her work was looking at the impact of soda taxes, specifically studying the price elasticity of soft drinks and developing a calculator on our website that shows states and cities how much revenue they could bring in if they were to adopt a soda tax. That has been a useful tool in the field.

Another project of Tatiana's was a study of the impact of changing the WIC (Women, Infants and Children) program, one of the government food assistance programs for low-income mothers and young kids. They had very significant changes in 2009 in terms of the nutritional quality of the food that mothers could buy with their government-issued coupons. For example, they had to switch to low-fat dairy; they had to switch to whole-grain breads, pasta, and rice; and they had to increase their fruits and vegetables. Because they could only buy those

things with the money they were getting from the government, we were able to look at how it affected both the environment in low-income neighborhoods (in Connecticut) and the purchasing patterns of the women. Tatiana has published a number of papers showing that this policy change had a very positive impact. It improved the level of nutrition available in the stores in the low-income neighborhoods. So, not only the women participating in WIC benefitted, but everybody who shopped in that store now had access to whole-grain bread and low-fat milk for the first time. Also, we obtained supermarket scanner data and were able to see that women changed their purchasing patterns overall. They didn't compensate by using their own money to buy more of the higher fat products.

I think these studies have been really helpful to the field. We were able to go back to the USDA and say, "Look, your policy change made a difference. It worked the way it was supposed to." That made them very happy. It's interesting because we think a lot about doing research to create the policy, but I think it is just as important to do the research afterward to make sure the policy did what you thought it was going to do.

You mentioned the soda tax as one of your initiatives at the Yale Rudd Center, and there has been some talk about initiating a so-called fat tax, in which foods and drinks that are fattening would be taxed at a higher rate in an attempt to discourage unhealthy diets and curb the growing economic burden of obesity and its related diseases. Additionally, New Haven Mayor Toni Harp is advocating for a soda tax as well. Do you think this is the right direction to go in or are there better options?

If you start with the science, there is no other individual food category that is so uniquely damaging as sugary drinks. Part of the reason is that when people consume drinks that have a lot of sugar in them, their bodies don't recognize the number of calories they are consuming, so they do not com-

pensate fully by eating less. Therefore, people who consume sugary drinks end up consuming more calories overall. Another reason we focus on sugary drinks is because they are consumed in remarkable quantities, particularly among teenagers. When you see where empty calories are coming from, soda and other sugary drinks are the number one culprit.

People in the soft drink industry ask us, “Why are you picking on us?” “Why are you giving us such a hard time?” and “What about candy, what about fast food?” Sometimes I’ll respond, “We are picking on everybody, it’s not just you.” The truth is, we do take a close look at other segments of the food industry in our marketing work, including sugary cereals and fast food. But I feel that the soft drink companies have been incredibly irresponsible — especially the way they have exploited schools to sell their products and develop brand loyalty as early as possible.

If you look at a graph of the costs of foods across time in the United States and then you graph the cost of soft drinks over time, you can see that these drinks have actually gotten relatively less expensive instead of more expensive. Sugary drinks are really inexpensive, heavily marketed, and provide absolutely no nutrition. The idea of the tax is to attempt to balance the playing field, to increase the cost of the product so it reflects the true cost of selling these products to people. In economics, the concept of externalities applies when the cost of the product does not reflect the true cost in society. The health consequences associated with these beverages are paid by the taxpayer, who is paying for the health coverage for people who get sick from these products.

The idea of the tax is you are giving government a chance to recoup some of the money it is losing because these products are being consumed in our society. The idea of a tax gets people very upset. They will argue about whether or not the products are that bad, or they will argue about whether taxing is really the right decision. This response is not unexpected. When cigarette taxes were first being introduced, nobody liked that idea either, and now it has been shown to be

one of the most effective ways of cutting down on tobacco use. Further, unlike most of the policies that we recommend, this one actually brings money into the government instead of costing the government money. That is another positive thing.

In a perfect world, you would tax these unhealthy products and use that tax to subsidize the healthy products because right now the pricing in our food system is backward. Things that you want people to buy more of are expensive and things you want people to buy less of are inexpensive. It is really hard to get people to spend more money when they are trying to feed their family.

It seems that in recent years, more attention is being paid to specific foods in an addictive sense, similar to substance abuse. Could you talk a bit about high-fat food or high-sugar food as potentially addictive?

This is a really interesting area of research, and one of our graduate students, Ashley Gearhardt, who is now at the University of Michigan, did her dissertation on this topic while she was at Yale. It depends on your perspective. As a psychologist who has treated both eating disorders and substance abuse, I think that there are similarities. I think that the experience of the individual who is suffering is quite similar. There are people who feel like there are substances that they have a really hard time resisting. They tell themselves that they do not want to eat these products, and then they find themselves eating them because of intense craving. I think that the American public will probably find it pretty easy to believe that just like some individuals are vulnerable to alcohol abuse, there are individuals who are vulnerable to using food in a similar way.

Where I think the field is going, though, is not just looking at this as a clinical problem, but asking if there are particular characteristics of some food products that are addictive. We are focusing on the food instead of on the person. Some of the animal research being done suggests that sugar triggers behavior that looks like addiction.

Again, going back to our favorite target, a lot of sugary drinks contain caffeine, and no one is going to argue that caffeine isn't addictive. I think most people would have a problem with companies marketing these products to children.

To conclude, where do you think the Rudd Center's efforts will be focused in the coming years to curb the rising rates of obesity in the United States?

I think people know there is an obesity problem, and they realize that we need to change some of our consumption behaviors. There is evidence that Americans as a whole are decreasing consumption of sugary drinks; specifically, soda consumption has gone down continuously for the last few years. I am optimistic about that. However, we are also starting to see more disparities.

Educated, more affluent Americans are making changes more quickly than low-income Americans. Some marketing of unhealthy products is specifically targeting African Americans and Latinos. I would like to see the Rudd Center start really focusing on the people who are not changing as

quickly and try to understand what can be done. I think we are going to need different strategies. While having articles in the *New York Times* is really important, I don't think the messages are reaching everybody who needs to be reached.

I worry especially about people who struggle with food insecurity. People who do not have enough money to buy food are extremely vulnerable. I have been on the board of the Connecticut Food Bank for several years, and it has really influenced my thinking about how public health advocates can work more with the hunger and food insecurity advocates. There are actually quite a number of non-profits around the country that are focused on food insecurity.

There is reason to worry about disparities, because that is exactly what happened with cigarette smoking. What you see now is a real disparity by socioeconomic status in who is still smoking and who has stopped. I don't want us to do the same thing with childhood obesity. If childhood obesity rates go down only among the middle and upper classes, that does not mean that the problem is solved.