

## COMMENTARY

# We Can't Just Give Up on Obesity

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"Dr Lilley, I don't understand. It has to be a thyroid problem. She just doesn't eat that much."

I am a pediatric endocrinologist in Mississippi, the epicenter of the childhood obesity epidemic. And it is indeed epidemic here, with the second highest obesity rate in the nation: 37% of children aged 10-17 years are overweight or have obesity.<sup>[1]</sup> Almost 30% of our children live below the federal poverty line.

"Dr Lilley, my neighbor lost 30 lb after a detox cleanse. We've tried everything else, and this is only \$200 for the first month. What do you think?"

I find that my voice as a physician is being drowned out by a cacophony of other voices from the \$66 billion US diet industry.<sup>[2]</sup> Most people who start weight-loss efforts will fail; only 17% of dieters are able to maintain long-term weight loss (defined as 10% loss of initial body weight for more than 1 year).<sup>[3]</sup>

In my specialty, our successes in type 1 diabetes continue to advance beyond my wildest dreams, with insulin delivery systems growing increasingly sophisticated. Meanwhile, type 2 diabetes—previously unheard of in children—now makes up 15% of my practice, carrying with it a decrease in life expectancy of 15 years for my young patients.<sup>[4]</sup>

## **I have been humbled to see nutritional advice I once shared as the gospel discredited years later.**

Modern medicine has turned the tide on smoking, battled infectious diseases with effective vaccines and antimicrobials, and made surgical interventions ever less invasive, but Americans aren't much healthier.<sup>[5]</sup> Obesity-related complications bear the blame.

## **Undoing Our Past Wrongs**

Even to the most casual observer, the past few decades of medical advice have been unhelpful at best. The low-fat craze of the 1990s vilified satiating healthy fats; ushered in convenient sugary processed food; and, worst of all, demonized people struggling with weight.

"Calories in, calories out—it's simple physics!"

"Eat less, exercise more!"

"Obese people must simply lack willpower and discipline!"

Did we see an epidemic of people with poor self-control as obesity rates skyrocketed in the 1990s? Of course not. We made disastrous policy changes that hurt public health while unhealthy foods became cheaper and more plentiful, then more desirable through ubiquitous marketing, driving consumption and increasing our national girth.

I have observed what passes for nutrition counseling as a patient, a family member, and a physician. I have dried the tears of patients who have been blamed and shamed, and who feel helpless to continue trying to pursue a healthy lifestyle. I have been humbled to see nutritional advice I once shared as the gospel discredited years later, and I personally have jumped on every diet bandwagon as I have navigated the intersection of an obesogenic environment, genetics, culture, and an 80-hour work week.

## **Early antibiotic exposure negatively alters the microbiome, but so does a low-fiber, high-fat diet.**

I have experienced what we all know: There is no "magic bullet." Maintaining a healthy weight has been difficult, even for a pediatric endocrinologist with sufficient income and education to make healthy choices. My patients live with food insecurity and in food deserts, so discussing meal planning or securing fresh produce is met with incredulous stares in my clinic. Many families count macaroni and potatoes as vegetable servings on the plates we sketch together in visits.

Nutrition science is frustratingly difficult. Human beings are not robots, nor are we rodents. Observing true macronutrient intake and the metabolic response to it would require sequestering research participants, which is prohibitively expensive and time-consuming while being poorly representative. Free-living people change their caloric expenditure and intake for myriad reasons, and all of these reasons are relevant when we try to understand how to effect positive change.<sup>[6]</sup>

We suspect that genetic polymorphisms influence how different individuals respond to varying macronutrient intake and activity, but attempts to characterize this have been challenging. My patients who have insulin resistance, polycystic ovary syndrome, and type 2 diabetes do not metabolize carbohydrate in the same way that others do, and my patients with pseudohypoparathyroidism, Cushing syndrome, and Prader-Willi syndrome have lower basal metabolic rates than the general population.

Early antibiotic exposure negatively alters the microbiome,<sup>[7]</sup> but so does a low-fiber, high-fat diet.<sup>[8]</sup> Infants who failed to thrive struggle with obesity later in life.<sup>[9]</sup> We struggle to piece together all of this science in a meaningful way for individual patients.

### **Our Part of the Puzzle**

We clinicians clearly haven't figured this out for ourselves, either. Although obesity rates are lower among physicians than the general population, about one half of us are overweight or have obesity.<sup>[10]</sup> We work long hours, are often sedentary, and deny ourselves much in the name of helping others. The offerings at our meetings, hospital cafeterias, and grand rounds reveal the same saturated fat- and sugar-laden menu choices that cause patients to pack our clinics with diet-fueled diseases.

Perhaps we hesitate to propose nutrition counseling because we know we could do better ourselves. Nor do we want to upset our patients, mostly because we're altruistic and caring people, but also because we have patient surveys and online reviews.

### **We tiptoe around the issue that is fraught with emotional baggage and imminent physical harm.**

One particularly memorable patient encounter ended with the mother storming out of the room, vowing never to return after I gently asked her child with severe obesity about sugary beverage consumption. She raged on her way out that they "weren't here to talk about weight," even though the child's weight was the direct cause of the complication that brought them to my office.

Even worse, some people who have obesity avoid medical exams or delay them owing to past negative experiences with clinicians.<sup>[11]</sup>

Scarred by these fears and experiences, we tiptoe around the issue that is fraught with emotional baggage and imminent physical harm. In one study, one third of patients with obesity reported receiving counseling about their weight.<sup>[12]</sup> In another study, almost all primary care physicians said they discussed obesity only when their patient was obviously heavier than themselves.<sup>[13]</sup>

Many physicians feel unprepared to discuss nutrition and weight loss as nutrition education in medical education is spotty. As recently as 2015, just over one quarter of medical schools required the recommended 25 hours of formal nutrition curriculum, with the average school offering 19.7 hours of dedicated instruction.<sup>[14]</sup> Furthermore, it takes time to truly understand a patient's life and environment while providing correct education and undoing misinformation coming from a multitude of sources.

### **Are We Giving Up on Obesity?**

What are we to do, then, as obesity-related complications such as type 2 diabetes are the leading driver of medical costs in our country, and our children face shorter life spans than their parents?

We have 200 cardiologists in our state, but I can count the pediatric endocrinologists on one hand. Because there is little profit in prevention, the clinicians who work to prevent heart disease at the most primordial level earn less than one half that of the cardiologist who treats it, and a fraction that of the cardiothoracic surgeon who intervenes to salvage a life. Not surprisingly, my specialty faces an access crisis with months-long waits for new patients.

### **Why are we seeing earlier and earlier severe obesity?**

Insurance reimbursement for obesity treatments, preventive care services, and allied healthcare consultations (ie, dietitians) is limited. Most patients who need bariatric surgery must pay out of pocket, and this effective intervention is delayed until severe, costly complications develop.

Corporate sponsorships from pharmaceutical companies and major food brands cast suspicion on the guidelines developed by our most respected professional organizations.

How do we balance national nutritional guidelines against agricultural policies that subsidize ingredients utilized in highly processed, sugar- and fat-laden foods? What role do environmental factors play in our food supply, and are we investigating sufficiently? Why are we seeing earlier and earlier severe obesity?

Are we physicians—who swore an oath to first do no harm, who gave up over a decade of our lives for training with an additional commitment to lifelong learning—going to stand idly by as celebrities and self-proclaimed gurus peddle their books and supplements to desperate sick people, who believe that the medical community has provided little benefit to them?

Or do we learn from our past and ongoing battles against other public health foes, roll up our sleeves, and continue to fight?

## References

1. Poverty by state. Talk Poverty. Center for American Progress. [Source](#) Accessed May 2, 2018.
2. The U.S. weight loss & diet control market. 14th ed. ResearchandMarkets.com. May 2017. [Source](#) Accessed May 2, 2018.
3. Kraschnewski JL, Boan J, Esposito J, et al. Long-term weight loss maintenance in the United States. *Int J Obes (Lond)*. 2010;34:1644-1654. [Abstract](#)
4. Rhodes ET, Prosser LA, Hoerger TJ, Lieu T, Ludwig DS, Laffel LM. Estimated morbidity and mortality in adolescents and young adults diagnosed with type 2 diabetes mellitus. *Diabet Med*. 2012;29:453-463. [Abstract](#)
5. Preston SH, Vierboom YC, Stokes A. The role of obesity in exceptionally slow US mortality improvement. *Proc Natl Acad Sci U S A*. 2018;115:957-961. [Abstract](#)
6. Gardner CD, Trepanowski JF, Del Gobbo LC, et al. Effect of low-fat vs low-carbohydrate diet on 12-month weight loss in overweight adults and the association with genotype pattern or insulin secretion: the DIETFITS randomized clinical trial. *JAMA*. 2018;319:667-679. [Abstract](#)
7. Langdon A, Crook N, Dantas G. The effects of antibiotics on the microbiome throughout development and alternative approaches for therapeutic modulation. *Genome Med*. 2016;8:39.
8. Candido FG, Valente FX, Grzeskowiak LM, Moreira AP, Rocha DM, Alfenas RC. Impact of dietary fat on gut microbiota and low-grade systemic inflammation: mechanisms and clinical implications on obesity. *Int J Food Sci Nutr*. 2018;69:125-143. [Abstract](#)
9. Barker DJ, Eriksson JG, Forsen T, Osmond C. Fetal origins of adult disease: strength of effects and biological basis. *Int J Epidemiol*. 2002;31:1235-1239. [Abstract](#)
10. Bleich SN, Gudzone KA, Bennett WL, Jarlenski MP, Cooper LA. How does physician BMI impact patient trust and perceived stigma? *Prev Med*. 2013;57:120-124. [Abstract](#)
11. National Task Force on the Prevention and Treatment of Obesity. Medical care for obese patients: advice for health care professionals. *Am Fam Physician*. 2002;65:81-88. [Abstract](#)
12. Bleich SN, Pickett-Blakely O, Cooper LA. Physician practice patterns of obesity diagnosis and weight-related counseling. *Patient Educ Couns*. 2011;82:123-129. [Abstract](#)
13. Bleich SN, Bennett WL, Gudzone KA, Cooper LA. Impact of physician BMI on obesity care and beliefs. *Obesity (Silver Spring)*. 2012;20:999-1005. [Abstract](#)
14. Eisenberg DM, Burgess JD. Nutrition education in an era of global obesity and diabetes: thinking outside the box. *Acad Med*. 2015;90:854-860. [Abstract](#)

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