



HEALTH CARE

The Obesity Epidemic: How We Got Here (and How We Can Go Back)

PT. 1: WHERE THE U.S. DIETARY GUIDELINES STEERED US WRONG

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A recent study in the *Journal of the American College of Cardiology* found that only 6.8 percent of adults in the U.S. have optimal metabolic health.¹ To put that into perspective, nearly nine out of 10 of us have some metabolic issue, whether high cholesterol or triglycerides, high blood pressure or high blood sugar, or just excess belly fat. *That number is staggering! Why?*

As of 2018, the percentage of the U.S. population either overweight or living with obesity was 73.6 percent. Those just with the disease of obesity was 42.64 percent in 2020,² and if that trend continues along the same trajectory, it's predicted to increase to 50 percent by 2030.³

Post-pandemic, things got even worse according to a new survey by the American Psychological Association, which found that "42 percent of U.S. adults said they gained too much weight. And the amount of gained weight they reported averaged 29 pounds."⁴



Holy smokes! How does that happen? Many will blame an increase of sedentariness from sitting on Zoom all day, eating and drinking to excess due to higher stress levels, and of course, mental health issues such as depression and anxiety.

But while all of the above are contributing factors, it comes down to the quality and quantity of our standard diet. We must stop using a sloth and gluttony stigmatization to those with unwanted weight. That is antiquated and we chiropractors all know now that one cannot outrun the fork. But the truth is, the standard American diet (SAD) was in trouble long before the COVID-19 pandemic.

The Origins of Dietary Guidelines

I venture to take it way back to 1894 when Dr. Wilbur Olin Atwater, a metabolic chemist, penned the first-ever dietary guidelines for the USDA. Dr. Atwater, who is probably more famous for quantifying the caloric values of a gram of protein, fat and carbohydrate, understood a thing or two about the chemical relationships between what he referred to as "energy nutrients" (fats and carbohydrates) and "building nutrients" (proteins).

He addressed this relationship in his guidelines: "*Unless care is exercised in selecting food, a diet may result which is one-sided or badly balanced - that is, one in which either building nutrients (protein) or fuel ingredients (carbohydrate and fat) are provided in excess.*"

Dr. Atwater understood that a careful balance between all three macronutrients was crucial to weight maintenance, and he cautioned Americans about respecting that balance: "*The evils of overeating may not be felt at once, but sooner or later they are sure to appear - perhaps in an excessive amount of fatty tissue, perhaps in general debility, perhaps in actual disease.*"⁵⁻⁶

An Ill-Fated Shift in Thinking

Dr. Atwater was on to something, but it was too short-lived to truly know if we could have averted an obesity epidemic at all. That's because in 1916, about a decade after Dr. Atwater's death, the first-ever dietary food guide was developed for children by nutritionist Caroline Hunt. Contrary to Dr. Atwater's guidelines, Ms. Hunt took the focus off macronutrients and instead focused on micronutrients, and in a fateful move, categorized foods into five groups according to nutritive content.

Fast-forward a century later: The good news is, rickets, scurvy and beriberi are all things of the past. The bad news is, nearly 75 percent of us are overweight or obese, and our health care system is drowning in the associated comorbidities. We should have heeded Dr. Atwater's advice, because if hindsight is 20/20, the epidemic of obesity really began once we took science out of our dietary guidelines.

I posit that we need to bring it back, and here's why. Of the USDA's "Five Food Groups," four are sources of carbohydrates. As we know, carbohydrates drive insulin levels higher and may lead to insulin resistance, diabetes and the myriad of other metabolic disorders.

If we continue to follow these current guidelines as instructed through the *Dietary Guidelines for Americans'* "pyramids," "plates" and "groups," then insulin resistance, overweight, obesity and metabolic syndrome will follow for 75 percent of us! Today's dietary guidelines are only viable for those with optimal metabolic health.

Returning to a Science Approach

So, in a nutshell, that's how we got here. But how do we go back? Is it even possible to get back to a science-based approach? In the past century, massive industries have been created around these five food groups, the politics of which puts government agencies like the USDA and HHS in a precarious situation every five years.

We can't expect the dietary guidelines to save America's collective health. However, bringing science back and returning to a focus on macronutrient balance will definitely begin to move the needle.

Editor's Note: Article #1 of this three-article series appeared in the [August issue](#). Pt. 2 of this article (#2 in the series) appears in the November issue.

References

1. O'Hearn MS, et al. Trends and disparities in cardiometabolic health among U.S. adults, 1999-2018. *J Am Coll Cardiol*, July 2022;80(2): 138-151.
2. *The State of Obesity 2020: Better Policies for a Healthier America*. Trust for America's Health: www.tfah.org/report-details/state-of-obesity-2020/.
3. Hales CM, et al. Prevalence of obesity among adults and youth: United States, 2015-2016. *NCHS Data Brief*, 2017 Oct;(288):1-8.
4. Ward ZJ, et al. Projected U.S. state-level prevalence of adult obesity and severe obesity. *N Engl J Med*, 2019;381:2440-2450.
5. Weir K. "The Extra Weight of COVID-19. American Psychological Association, July 1, 2019.
6. Jahns L, et al. The history and future of dietary guidance in America. *Adv Nutr*, 2018 Mar;9(2):136-147.

OCTOBER 2022