

Time to Revamp Nutrition Education for Physicians

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ABSTRACT

Obesity is a national and global epidemic and is usually the result of a poor diet and lifestyle. Obesity is a strong risk factor for type 2 diabetes and cardiovascular disease, which are leading causes of morbidity and mortality. Ample scientific evidence supports that nutritional interventions involving plant-based diets can be effective in the prevention and treatment of obesity, diabetes, and cardiovascular disease. Many patients are interested in improving their eating habits and frequently look to physicians for dietary advice. However, most physicians are unable to provide meaningful guidance because of a lack of nutrition education. We launched programs to educate our physicians and patients about the benefits of plant-based diets, with an overwhelmingly positive response. Because physicians are at the forefront of fighting the obesity epidemic, it is imperative to emphasize nutrition education for current and future physicians.

INTRODUCTION

It was a typical day in the clinic, and I was seeing a 19-year-old female patient. We had addressed multiple problems, and just as we were wrapping up the visit, she asked if I could recommend a weight loss program. She was morbidly obese and had tried various diets without success. She had read about bariatric surgery online and was wondering if I could refer her to a bariatric surgeon. She was frustrated and despondent, and bariatric surgery was her last hope. I wanted to help her, but we were out of time. As an internal medicine physician with a particular interest in nutrition and lifestyle, I wanted to educate her about the benefits of a whole-food, plant-based diet. However, it is nearly impossible to offer meaningful dietary guidance in a short office visit. Sadly, it would have been easier for me to refer her for a major surgery than to properly discuss a low-cost, low-risk lifestyle intervention. I gave her the best dietary advice I could in the brief time we

had, knowing that it may not be enough to set her on the right path. A 19-year-old turning to bariatric surgery—how did we get to this point?

I have seen innumerable patients in the same situation, struggling with obesity and related complications and feeling increasingly hopeless about their health. Despite our best intentions and state-of-the-art medical care, their chronic conditions often progress because we are not addressing the underlying root of the problem: An unhealthy diet and lifestyle. Ample research has shown that a whole-food, plant-based diet can prevent and possibly reverse many of the chronic conditions commonly encountered in clinical practice. Such a diet is composed primarily of whole grains, legumes, fruits, and vegetables; limits the intake of fat to less than 10% of calories; and restricts the intake of any animal-based foods (including dairy, poultry, seafood, and red meat). Despite the well-known benefits of plant-based foods, the average American diet is deficient in fruits, vegetables, legumes, whole grains, and fiber, while high in saturated fat, added sugars, and sodium.¹ In 2012, an estimated 318,356 American deaths owing to heart disease, stroke, and diabetes were associated with a *suboptimal diet*—defined as a diet low in fruits, vegetables, whole grains, nuts, and seeds, and high in processed meats, sugar-sweetened beverages, and sodium.²

After caring for patients with lifestyle-related diseases for more than 15 years, I realized that we were losing the battle against obesity and obesity-related conditions. A change was needed in how we approach the prevention and treatment of some of our most common chronic diseases.

A DIFFERENT KIND OF WEIGHT-LOSS PROGRAM

I wanted to launch a whole-food, plant-based, weight loss program for our patients, and I was fortunate enough to work with an organization that had the resources

and vision to support me in this endeavor. We established a 12-week program that involved a weekly 60-minute session led by a physician and a nutritionist. The session included weigh-ins, education, recipe exchange, and support. We taught our patients about the expected benefits of changing their diet and gave them weekly guidance to help them gradually transition from their current diet to a whole-food, plant-based diet. Each week, the participants were advised to replace an unhealthy food with a healthier option, for example, replacing sugar-sweetened beverages with fresh fruits. Although changing lifelong eating habits can seem overwhelming, the support from their peers and the teaching staff motivated our patients to persist.

EDUCATING THE PHYSICIAN EDUCATORS

At the same time, we implemented a regionwide program to educate our physicians about nutrition. We hosted a weekly lunchtime seminar at each of our medical centers that reviewed the research regarding nutrition and chronic disease and that was accredited for continuing medical education (CME) credit. The seminar also included a specially catered, plant-based lunch for the medical staff. Taking nutrition education to busy clinicians at their place of practice while providing a warm and nutritious lunch facilitated attendance and interest in the program.

The response was overwhelmingly positive from both patients and health care practitioners. Time-constrained physicians were happy to refer patients to a program that was based on solid scientific evidence. Patients were thrilled to learn that there

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was a lifestyle that would not only help them lose weight but also keep it off long term while improving their health. They reported that they felt empowered and emboldened in a way they hadn't before. The fact that they did not have to count calories and carbohydrates—an onerous and impractical task—was an added bonus. Soon, patients who had not previously eaten tofu or legumes were happily exchanging their favorite healthy recipes. Additionally, they were excited because they felt better; even before the weight loss was evident on the scale, their joint aches and blood glucose and blood pressure levels started to improve. The patients felt that they were regaining control of their health. They wished that their physicians had shared this knowledge earlier with them. But, the reason they had not was simple—their physicians did not discuss the benefits of plant-based diets because they did not know about them.

THE EVIDENCE

Obesity is a national and global epidemic that is almost always caused by lifestyle and diet. According to the Centers for Disease Control and Prevention, more than 93 million Americans adults are obese, or nearly 40% of the US population.³ Obesity costs the US an estimated \$147 billion annually in medical costs.³ Clinicians are at the forefront of this epidemic but are poorly trained to tackle it because medical education includes very little training in nutrition. Most medical schools offer 19.6 hours of education in the field of nutrition, or less than 1% of total lecture time.⁴ Furthermore, most of this education is in the form of biochemistry rather than practical aspects of food selection and consumption. Nutrition education is similarly insufficient in postgraduate education programs. As Devries and colleagues⁵ noted in their recent article, most residency training programs incorporate little if any nutrition education.

Obesity is a strong risk factor for type 2 diabetes. The Centers for Disease Control and Prevention estimates that more than 30 million and 84 million Americans have diabetes and prediabetes, respectively.⁶ Diabetes costs Americans \$327 billion per year.⁷ Although randomized clinical trials have shown that a whole-food,

plant-based diet can improve glycemic control in patients with type 2 diabetes more than standard treatment does, very few physicians in training are taught this information.^{8,9}

Obesity and diabetes are leading risk factors for cardiovascular disease, the number 1 killer in the US. Almost 800,000 Americans die of cardiovascular disease each year, which costs the US nearly \$1 billion daily.¹⁰ Most physicians are well versed with these statistics, but many are unaware that multiple research studies have shown that healthy lifestyle and dietary changes can *reverse* cardiovascular disease.¹¹⁻¹⁵ Most of these studies used a low-fat vegetarian diet limiting fat to 10% of daily calories. Adopting such a diet can seem challenging, but we and others have noted that with the correct guidance and education, patients are motivated and able to make meaningful changes.^{8,9,11-15} It is important to note that the DASH and Mediterranean diets, which are associated with a lower risk of cardiovascular disease, are also rich in plant-based foods, such as fruits, vegetables, and legumes, with limited intake of fat and animal products. It is likely that the benefits of such diets are because of an increased emphasis on plant-based foods.

THE NEED TO ADD NUTRITION TO MEDICAL EDUCATION

Clearly, we need to bridge the gap in our medical training, and an increasing number of physicians and health care organizations recognize this need. The American Medical Association's public health policy statement prioritizes nutrition and physical activity.¹⁶

Most patients consider physicians the utmost experts in health and nutrition and frequently turn to them for dietary advice. Our patients are entrusting us with their most valuable commodity: Their health. Do we not owe it to them to educate current and future physicians adequately? For future physicians, this means incorporating meaningful nutrition education into medical school and residency curricula. Just as students and residents are required to rotate through primary care wards, they should be required to rotate through clinic- or hospital-based programs that incorporate nutrition into disease management.

Many programs around the country use nutrition as an integral part of disease prevention and treatment. By spending time in such programs and learning first-hand how nutrition can prevent and treat chronic disease, future physicians will be more adept at guiding their own patients. For practicing physicians, ongoing CME requirements by state licensing boards should incorporate a certain number of hours in nutrition, just as they do for HIV care or pain management. The CME requirements can be easily satisfied through online courses, national conferences, or on-site seminars similar to ours.

Busy clinicians need not provide in-depth nutrition counseling to their patients. Clinicians may guide their patients to various online resources, such as Kaiser Permanente's "Plant-Based Diet" booklet and the "Plant-Based Healthy Plate." They may also refer patients to other health care professionals who specialize in nutrition-based prevention and treatment. However, physicians do need to have a basic working knowledge of nutrition in order to refer their patients to the appropriate resources and clinicians, just as they do with other specialty care.

A team-based approach to nutrition counseling is highly effective and economical. Such teams—composed of physicians, nutritionists, and nurses—can provide ongoing support, education, guidance, and cooking demonstrations. For patients with limited financial means, who often have limited access to healthy foods and bear a disproportionate burden of chronic disease, it may be helpful to include social workers on the team. Because there is a common concern that plant-based diets will cost more, it is important to educate patients that the converse is true. For example, legumes are a substantial source of protein and fiber and are much cheaper than a comparable quantity of red meat, poultry, or seafood. In addition to providing comprehensive nutrition counseling, a multidisciplinary team can monitor meaningful patient outcomes and provide feedback to all clinicians involved in the patient's health.

Our medical education system must change because the current system that emphasizes medication and procedures over diet and lifestyle is simply not

sustainable. We are getting fatter, sicker, and poorer treating diseases that could have been prevented with sensible and low-risk lifestyle and dietary changes. The time for change is now. ❖

Disclosure Statement

Dr Rahman has served as a paid consultant for the Physicians Committee for Responsible Medicine, a nonprofit organization in Washington, DC, providing education, research, and medical care related to nutrition. She has also written several published books on plant-based nutrition.

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