

STUDENT ROUNDS

Food as Medicine

A NEW ELECTIVE AIMS TO HELP MEDICAL STUDENTS PROVIDE BETTER NUTRITION ADVICE TO PATIENTS.

As a third-year medical student in her clinical rotations, Natalie Antosh '20 encountered a common theme in caring for primary care patients. Many of them suffered from chronic diseases that can be improved or reversed through behavior modification. But other than telling them to “lose weight,” she didn’t have the formal education to counsel patients.

“We learn that lifestyle, including diet modification, is a first-line treatment for diabetes, obesity, and hypertension,” she says. “But what is diet modification? What do you tell a patient in order for them to change their behavior and actually succeed at it?”

Antosh had assumed she’d learn that information in medical school. But across the country, fewer than 20 percent of medical schools have a required course in nutrition. On the other end of the spectrum, new programs are cropping up in culinary medicine, a growing evidence-based field that blends the art of food and cooking with the science of medicine. Antosh made that discovery while researching family medicine residency programs and an idea started to take hold to bring something similar to Upstate.

Although the third-year of medical school entails long clinical hours and studying for numerous shelf exams, Antosh was not deterred. She surveyed her fellow Upstate medical students on Facebook about their interest in nutrition and received a tremendous response from across all class years. She met with the curriculum office and found faculty advisors in Barbara Feuerstein, MD '84, an endocrinologist and integrative medicine doctor, Elizabeth Nelsen, MD '06, a pediatrician with a nutrition degree, and Susan Levinsohn, MD, who practices family and integrative medicine.

SUSAN KAHN PHOTOGRAPHY



Neesha Desai '22 and Shiyu Chen '22 with Food as Medicine course director Barbara Feuerstein, MD '84

Through endless, tireless emails and phone calls, Antosh interviewed the director of the culinary medicine program at Tulane University School of Medicine, and connected with Kay Stearns Bruening, director of the Nutrition Assessment, Consultation, and Education Center at Syracuse University’s Falk College of Sport and Human Dynamics, which has a teaching kitchen. She secured \$900 in funding from Upstate’s Wholistic Education Fund, administered by Kaushal Nanavati, MD, to fund a teaching kitchen component to the course, and with her advisors, recruited faculty experts to participate as lecturers, then had them recorded and posted to Blackboard.

Thanks to Antosh’s efforts, the College of Medicine’s Food as Medicine elective was offered for the first time this

fall. The course combines online lectures with hands-on learning activities, and an experiential component shadowing a dietitian, or volunteering at the Upstate Community Garden, Food Bank, Brady Faith Center Farm, or the Samaritan Center Soup Kitchen. When course registration opened, the 20 spots were filled within 24 hours.

Dr. Feuerstein, who serves as course director, was delighted by the level of student interest. “Medical students are pulled in so many directions. The fact that they chose to add this elective to their busy schedules really shows me how much they value learning about nutrition,” she says.

Antosh was not entirely surprised, as she thinks many of her fellow students have an inherent interest in health and

wellness. “Nutrition is an important component to good health and medical students want to feel more comfortable talking with our patients about diet modification,” she says. “My hope is that this course will provide students with the knowledge and skills to talk with their patients about nutrition as a means to improve their health as well as to make healthy choices for themselves.”

It’s midway through the course and the 20 medical students enrolled have gathered at Syracuse University’s Falk College of Sport and Human Dynamics. This afternoon, the students are participating in a “teaching kitchen,” led by SU Professor Bruening, and Joseph F. Wetterhahn, MD ’87, a primary care doctor in Adams, New York.

“Patients know they need to eat better, but often don’t know how,” says Dr. Wetterhahn. “Focusing on cooking gives patients more control over the food they take in, how it is prepared, and how much of their budget it will take.”

He knows what he’s talking about. As part of his practice, Wetterhahn and his wife Regina, a physician assistant, teach cooking and nutrition classes aimed at improving patient health through diet at the Samaritan Family Health Center in Adams, one of the only medical practices in Central and Northern New York to offer an on-site teaching kitchen for patients. Wetterhahn received CME training through Healthy Kitchens, Healthy Lives, a unique collaboration between the Harvard T.H. Chan School of Public Health and the Culinary Institute of America. The program provides training for healthcare professionals on nutritional science and cooking methods, teaching them about food selection,

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and preparation techniques for creating healthy meals.

Two months earlier, Wetterhahn presented the opening lecture for the Food as Medicine elective, an overview of what he learned through the Healthy Kitchens, Healthy Lives course. Today, with the assistance of Chef Bill Collins, he is demonstrating a menu of 10 dishes that include vegetables, nuts, berries, root vegetables, three whole grains, fruits, chicken, legumes, and two desserts with fiber and/or antioxidants. Students are organized into five groups of four, and each group will prepare two of the recipes.

“Americans are growing increasingly conscious of their health, but many people do not know what healthy food looks like or how to prepare it,” says Feuerstein.

One of those is second-year medical student Kyle Plante. “I’ll be the first to admit that I do not know my way around a kitchen,” says Plante, who plans

to shadow a dietician for the course. “Preparing meals can be daunting to those who aren’t very experienced and I’m hoping I can use this opportunity to learn how to prepare healthy foods so that I can pass my own experiences on to my patients.”

This “cooking class” is just one tool to help students help their patients. Other sessions included instruction on taking a nutrition history, led by Dr. Nelsen, and another on motivational interviewing led by psychiatrist Zsuzsa Meszaros, MD. For their final project, students are tasked with making a healthy dish to feed 10 people small portions with fewer than 10 ingredients for under \$10. The students will come together for a potluck meal, where Upstate dietician Terry Podolak will lead a mindful eating exercise.

Antosh hopes the course—or some type of nutrition course—will become a required part of the Upstate curriculum. In the meantime, those involved are working to ensure the efficacy of the elective. Second-year student Brandon Zaffuto is working with Nelsen on a course evaluation. Zaffuto designed a survey, which he administered to course participants at the start to assess their background in nutrition, and will survey them again at the end to determine how much knowledge they gained from the course as a tool for future improvements. “Since the elective is a novel idea and medical nutrition is a hot topic, we will ideally publish the results and hopefully inspire other schools to create similar courses,” he says.

Feuerstein says she’s wanted to be involved in this kind of education her entire career, but it took Antosh’s efforts to make it happen. “She’s a superstar,” says Feuerstein. ■