



Master of Public Health Program plans local nutrition, disease prevention projects

🐾 Thursday, September 20, 2018 - 9:11am



Students in the Master of Public Health Program brainstorm a project. Photo by the College of Veterinary Medicine.

Students in the newly-launched Master of Public Health (MPH) program at Cornell are working to put their public health education into action in the local community, with three projects focused on addressing food accessibility and vector-borne disease in Tompkins County.

These projects are part of the program's Engaged Cornell-supported course, Public Health Planning, in which students apply and extend their classroom learning in tangible ways by working on real needs with community partners. "The MPH program promotes equitable and sustainable advancements in health and wellbeing for the people of New York and around the world," said associate director Gen Meredith. "This course gives our students a chance to put that mission into practice."

Prescriptions bear fruit

Working with Cornell Cooperative Extension of Tompkins County, Healthy Food For All, and the Cayuga Center for Healthy Living, a team of two students identified and adapted a vegetable prescription program designed to increase access for low-income people with pre-diabetic individuals in Tompkins County. In New York, 1.6 million people have type II diabetes, and another 4.5 million are pre-diabetic. This program attempts to slow and prevent the growing diabetes epidemic through access to nutrient-rich food.

“Prediabetes is reversible through an improved diet and increased exercise,” said Miquela Hanselman, one of the students leading the project. Low-income residents often face barriers like transportation and cost when attempting to access fresh fruits and vegetables, says Hanselman. “The barriers get larger and larger as an individual’s income decreases.”

“The program gives people weekly access to fresh fruits and vegetables in hopes of mitigating the effects that food access has on their health outcomes, in particular diabetes,” said Cecelia Madsen, another student leader on the project.

Clinicians at the Cayuga Center for Healthy Living identified patients who fit the target population, and the Cooperative Extension’s Healthy Food For All program connected the participants with one of many participating community-supported agriculture farms or pick-up spots. The share is fully subsidized, and there are multiple convenient locations to pick up the fruits and vegetables each week. The team hoped to serve 10 patients starting this summer and has already met their enrollment goals. The program will be evaluated in the fall, in the Engaged Cornell-supported Public Health Monitoring, Evaluation and Quality Improvement course, to inform another offering next year.



The administration team for the Cornell Master of Public Health Program. Photo by the College of Veterinary Medicine.

Using breakfast to bridge learning gaps

Another project with local impact seeks to address the intersection of food access, income insecurity and low academic achievement rates for elementary-aged children. This project was developed by Andreína Thielen Martin and Hirokazu Togo in partnership with the Cornell Cooperative Extension of Tompkins County, the Ithaca City School District and the Childhood Nutrition Collaborative of Tompkins County. The “Healthy Breakfasts for All Tompkins County” uses state educational assessments and a federal breakfast program as its foundation.

In 2017, the state assessed students in English language arts and math. It found a significant difference in proficiency between students who are and are not economically disadvantaged. The difference between the two groups was nearly 40 percent in English language arts and over 30 percent in math.

“We believe that breakfast is one factor that could help close this achievement gap,” says Martin. “Breakfast has been shown to have a significant impact on student cognitive and academic performance as well as general wellness at school.”

The School Breakfast Program, administered by the U.S. Department of Agriculture, provides breakfast to school-age children for free or at reduced costs to students from households with an annual income of \$44,000 or less for a family of four. In Tompkins County, where about 40 percent of students in grades K-12 are eligible for free or reduced-price meals, only 40 percent of those eligible actually access breakfast through the program. Martin and Togo intend to find ways to mitigate barriers that prevent students from participating.

“Barriers to participation include the perception that the food is not healthy, doesn’t taste good and that there is not enough time to eat given the bus schedule and food serving lines,” says Togo.

Two elementary schools in the Ithaca City School District will launch the program in the 2018-2019 school year. Working as an intern for the Cooperative Extension this summer, Martin held stakeholder meetings to inform program roll-out and will follow up with the development and distribution of educational materials for students on the importance of eating healthfully. The pilot itself will be based on the results of the stakeholder meetings and may include options such as breakfast in the classroom, a grab-and-go breakfast, second chance breakfast, breakfast vending or any combination of these ideas, which have worked in other jurisdictions. They expect initial data in late 2018.



Members of MPH meet in the atrium. Photo by the College of Veterinary Medicine.

Tick-borne disease response

The third project, led by Stephanie Morse, aims to improve tick-borne disease response in Tompkins County by increasing awareness and using existing resources.

Left untreated, tick-borne illnesses like Lyme disease can cause devastating health consequences for humans and animals. Morse intends to facilitate closer collaboration between the Northeast Regional Center for Excellence in Vector-Borne Diseases, the MPH Program and the Animal Health Diagnostic Center (AHDC) at the College of Veterinary Medicine. This three-pronged partnership will increase data sources and improve data availability to key stakeholders like veterinarians, physicians, healthcare providers and public health professionals.

“The data will be also be used to generate vital statistics concerning trends of tick-borne disease in Tompkins County,” says Morse. “We hope this will result in more targeted prevention and early intervention for those subjected to tick-bite exposure, thus reducing cost and morbidity.”

The AHDC currently offers a tick evaluation program that tests ticks for diseases. Morse is hopeful that data like this can be analyzed for trends and shared through community and professional presentations, public education and a webpage devoted to the subject. The project will launch this fall.

[Learn more about the Master of Public Health Program at their website.](#)

By Melanie Greaver Cordova
