

Gillings Innovation Labs

Linking Local, Sustainable Farming and Health

Can eating local address obesity, the environment, and economic viability?

Transitioning from Tobacco: The New Agriculture of North Carolina

Using an innovative array of approaches including case studies, documentary photography, and quantitative data analysis, researchers are exploring the agricultural transition in North Carolina as tobacco becomes less economically important and farms across the country grow larger and more industrialized. The research team will address environmental benefits of smaller scale sustainable farming practices; determine nutrition and health-related benefits; and conduct an economic analysis of opportunities and barriers for developing integrated local and sustainable food systems. Data, accessible in easy to use formats, will be used to help identify market opportunities for farmers and to conduct a policy analysis related to local food systems and sustainable agriculture.

Three Essential Pieces

• The Health Component

Among the most pressing public health problems in the U.S. today is obesity among both adults and children. High-calorie, nutrient-deficient food has become a dietary staple of families who have lost the connection with local, seasonal foods. Also of major concern are apparent health disparities between socio-economic groups, and those affected by the loss of livelihood among farmers in transition.

• The Environmental Component

Our current food system is heavily dependent on fossil fuels—fertilizers, pesticides, and gasoline—for large-scale production as well as long-distance transport.

• The Economic Component

The price of transporting food over long distances and the inflationary result of high energy costs affects the family checkbook. Loss of farmland and livelihood has sounded an alarm among small to mid-scale farmers transitioning away from growing tobacco. Rural communities where these farmers live face manufacturing layoffs and plant closures—another blow to the local economy.

Leadership



Alice Ammerman, DrPH, professor of nutrition and Director of the Center for Health Promotion and Disease Prevention, UNC Gillings School of Global Public Health, leads a large collaborative team gathering health, environmental and economic data within North Carolina that can guide policy related to local,

sustainable food systems and inform future research efforts. Ammerman observes, "Significant research is ongoing in many areas related to local food systems, but rarely has it been coordinated to focus on potential collective solutions."



IMPACT! A Harvest of Data

This unprecedented effort will bridge academia, local farming communities and North Carolina state agencies, and contribute to a broader understanding of food systems, with national and international relevance.



GOAL

To study the public health impact of moving toward a local, sustainable food system.

PARTNERS

Numerous UNC system and NC schools, departments, and centers; NCSU's Center for Environmental Farming Systems, the Renaissance Computing Institute, Center for Sustainable Community Design, Office of Economic and Business Development, N.C. A&T faculty, the Documentary Studies Dept. at Duke, and others.