

Rural Food Security & Nutrition as Medicine

2023 Rural Health Symposium, September 14

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PROMOTING NUTRITION SECURITY

THROUGH COMMUNITY-CENTERED ACTION

FIG Lab



THE PROBLEM: HEALTH INEQUITIES

OUR COMMUNITIES ARE NOT THRIVING. WE HAVE THE MEANS TO ELIMINATE DIET-RELATED HEALTH INEQUITIES BY INCREASING ACCESS TO AFFORDABLE, NUTRITIOUS, & SUSTAINABLE FOODS



ECONOMIC INEQUALITY



NUTRITION INSECURITY



CLIMATE CRISIS

FIG LAB

WE ARE AN INTERDISCIPLINARY RESEARCH PROGRAM

FIG LAB AIMS TO BE A BRIDGE BETWEEN EVIDENCE & ACTION

WE WORK WITH COMMUNITIES TO REMOVE BARRIERS TO NUTRITIOUS FOODS

COMMUNITY



WE EMPOWER COMMUNITIES

AMPLIFYING THE VOICES OF THOSE WITH LIVED EXPERIENCE

HOW WE BRIDGE THE GAP

APPLIED RESEARCH TO INFORM EFFECTIVE ADOPTION BY COMMUNITIES & INSTITUTIONS



MIXED-METHOD RESEARCH



EVALUATION & ASSESSMENT

WE ADVOCATE FOR CHANGE

POLICY ACTIONS

EVIDENCE-BASED RECOMMENDATIONS



EDUCATION & MENTORSHIP

ACADEMIC & COMMUNITY PARTNERSHIPS

OUR PARTNERS & COMMUNITIES DRIVE OUR RESEARCH PRIORITIES



Food and Nutrition Security Definitions

Food access: when food is affordable and households can grow or raise it, find it, obtain it, transport it, prepare it, and eat it. - *Healthy Food Policy Project*

Food security: A household is [food secure](#) if all members, at all times, can access enough food for an active, [healthy life](#). At a minimum, food security includes: 1. Readily available nutritionally adequate and safe foods, and 2. The ability to acquire those foods in socially acceptable ways (without resorting to emergency food supplies, scavenging, stealing, or other coping strategies). - *USDA Econ Research Service*

Low food security: 1. *Reduced quantity/variety of foods* 2. *Worry about foods running out*

Very low food security: 1. *Reduced quantity/variety of foods* 2. *Multiple signs of disrupted eating / reducing intake* 3. *Sometimes or often food insufficiency (not having enough to eat)* - *Food Research and Action Center 2021.*

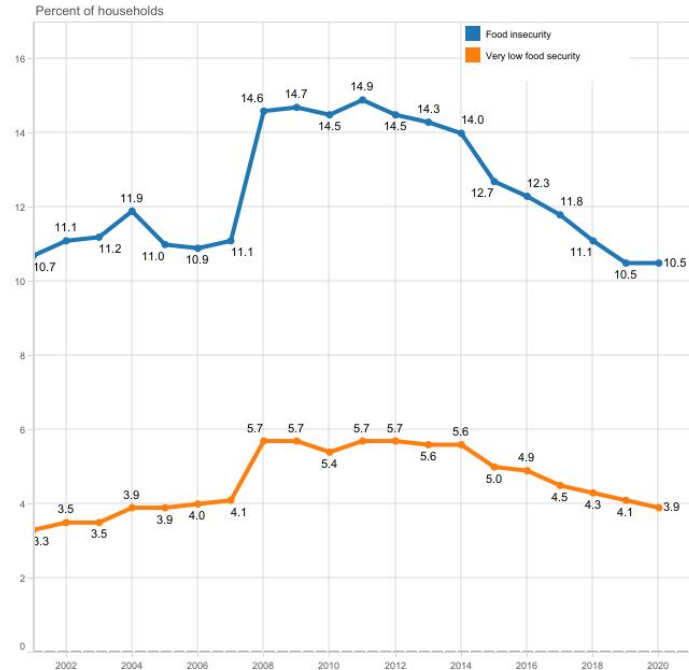
Nutrition security: means consistent access, availability, and affordability of foods and beverages that promote well-being, prevent disease, and, if needed, treat disease, particularly among racial/ethnic minority, lower income, and rural and remote populations including Tribal communities and Insular areas. Nutrition security is an emerging concept that complements efforts to increase food security while also:

- Recognizing that Americans, in general, fall short of an active, healthy lifestyle aligned with Federal dietary and physical activity guidelines, and
- Emphasizing equity to ensure our efforts serve all populations to promote access, availability, and affordability to foods and beverages, and address the connection between food insecurity and diet-related chronic diseases.

Food Security Rates in NYS

- Historic rates are trending upward
- Before COVID, in 2019
 - 10.7% food insecurity rate in NY = over 2 million people (feeding america)
- Dec 2020
 - 14% with $\frac{1}{3}$ of them food secure before pandemic (NYS Health Foundation)
- 2021
 - 11.4%, or over 2.2 million people (feeding america)
- Many food pantries experiencing increases since 2021. Drivers include food inflation and reduced eligibility for SNAP

Trends in the prevalence of food insecurity and very low food security in U.S. households, 2001-20



Source: Calculated by USDA, Economic Research Service, using Current Population Survey Food Security Supplement data.
<https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/>

Demographics at Risk

Food insecurity and poverty are not always experienced by the same families

40 million people live in households with concern about affording sufficient food

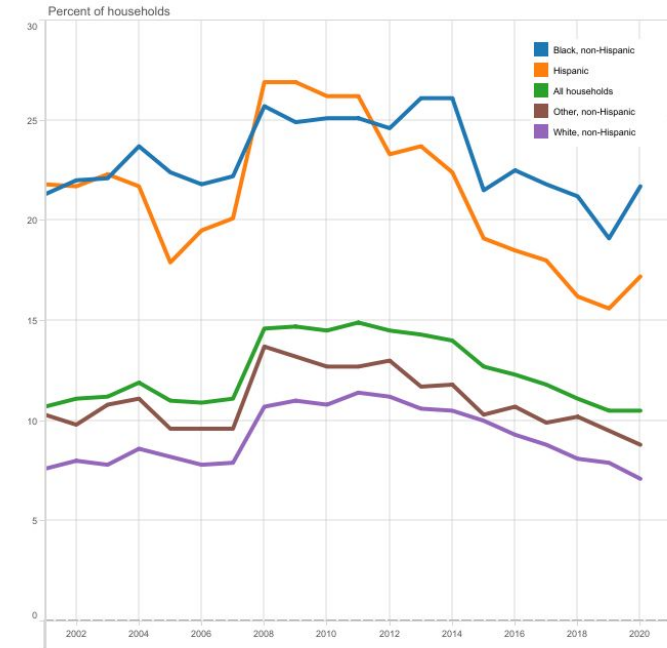
39.7 million people earn incomes that put them below the poverty line

Among them, **59%** earn incomes **above poverty***

Yet **61%** report being **food secure**

*Among food insecure households whose income is known.

Trends in food insecurity by race and ethnicity, 2001-20



Source: Calculated by USDA, Economic Research Service, using Current Population Survey Food Security Supplement data. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/>

1. Food Insecurity and Poverty in the United States: Findings from the USDA and the U.S. Census Bureau. 2018, https://hungerandhealth.feedingamerica.org/wpcontent/uploads/2018/10/Food-Insecurity-Poverty-Brief_2018.pdf.
2. USDA Economic Research Service. Food Security in the U.S., Interactive Charts and Highlights. 2022. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/interactive-charts-and-highlights/#trends>



Impact on chronic disease

- A 2017 report from the USDA found that **food insecurity is associated with 10 of the costliest and most deadly noncommunicable diseases** in the country, including hypertension, diabetes, cancer, and stroke (Christian, ERS)
- Hungry children have greater odds of being hospitalized, and the average **pediatric hospitalization costs approximately \$12,000** (Cook and Jeng).
- Food insecure adults in NYS have annual **health care expenditures that are \$2,064 higher.**
- Food insecurity is estimated to have an impact of **\$3.4 billion in excess health expenditures in NYS, and \$52.9 billion in nationally** (*Feeding America Research, 2016*).

A Conceptual Framework:
Cycle of Food Insecurity & Chronic Disease



Adapted: Seligman HK, Schilling D. N Engl J Med. 2010;363:6-9.

1. Christian A. Gregory & Alisha Coleman-Jensen, U.S. Dep't of Agric., Food Insecurity, Chronic Disease, and Health Among Working-age Adults (2017), https://www.ers.usda.gov/webdocs/publications/84467/err-235_summary.pdf?v=2983.5.
2. Cook, John, and Karen Jeng. Child Food Insecurity: The Economic Impact on Our Nation.
3. <https://public.tableau.com/app/profile/feeding.america.research/viz/TheHealthcareCostsofFoodInsecurity/HealthcareCosts>



Efforts to Increase Nutrition Security in New York



Food Access Strategies

1. **Consumer purchasing assistance (SNAP/WIC, farmers market coupons, subsidized CSA, universal income)**
2. **Emergency food assistance (TEFAP, HPNAP, FEMA EFSP, county and local private funds for pantries, soup kitchens, and food banks, Meals on Wheels senior programs)**
3. **Institutional feeding programs (NFSN, NSLP, SBP)**
4. **Community food projects (Farmer's Markets, Veggie Vans, Community Gardens, Produce Prescriptions, Retail Partnerships to Increase Produce Availability)**

Community Actions

1. **Join a local Food Policy Council to help draft & support comprehensive food policies in NYS and advocate for resources.**
2. **Coordinate cooperative grants to bring state/federal/foundation resources to your community**
3. **Educate elected representatives and local residents about nutrition insecurity in your community and specific actions to support and implement.**

Hunger Advocacy Organizations

1. Hunger Action Network of New York State
2. Feeding New York
3. New York State Council on Hunger and Food Policy

A New Plan to Increase Nutrition Security in NYS

Jill Dunkel, Director of Div. of Nutrition (DOH) and Susan Zimet, NYS Food and Anti-Hunger Policy Coordinator (OTDA) are in the beginning phases of establishing a framework to determine what a statewide nutrition security plan will look like

Read "New Yorkers in Need: Food Insecurity"

2023 Report by the Office of Budget Policy and Analysis for insights into what a NYS Nutrition Plan may contain



Federal Programs

- Supplemental Nutrition Assistance Program (SNAP)
- Women, Infants & Children (WIC)
- National School Lunch Program (NSLP)
- Commodity Supplemental Food Program (CSFP)
- Child & Adult Care Food Program (CACFP)
- Farmers Market Nutrition Program (FMNP) via NYS
- Food Distribution Program on Indian Reservations (FDPIR)

NYS Programs

- Hunger Prevention & Nutrition Assistance (HPNAP) to fund food banks, soup kitchens, and shelters
- NourishNY for NYS farm to pantry purchases
- Feeding NYS: 10 Food Banks & Affiliated Pantries
- FreshConnect Farmers Market Checks
- NYS Farm to School-- 30% NYS Initiative
- Food As Medicine- Section 1115 Waiver underway

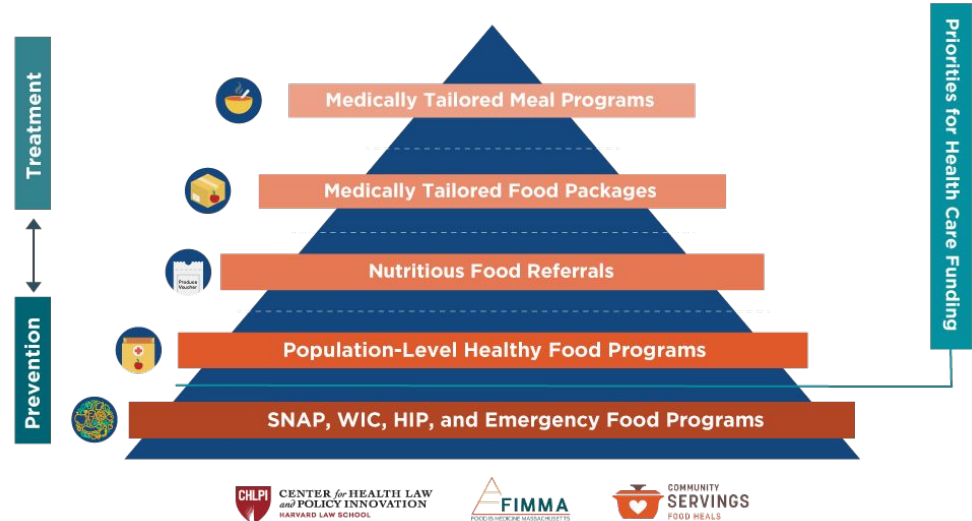
Local Community Food Access Programs

- DoubleUp Bucks & Local Farmers Market Coupons
- Sliding Scale Farm Stands and Independent Grocers
- Mobile Farmers Markets / Veggie Vans
- Subsidized Community Supported Agriculture Shares
- Community Garden & Seed & Garden Giveaway
- Farm to Pantry Programs

Food as Medicine

- FAM Programs
 - MTM, MTG, Produce Rx
 - Food Security Screening, Referral Systems & Nutrition Education
- What Makes FAM distinct?
 - Healthcare provider involvement: referrals and treatment program support
 - Rigorous outcomes evaluation
 - Public health funding, not agricultural subsidy or philanthropy
- Current Landscape of FAM opportunities
 - White House Conference on Food and Hunger
 - National Funding: GusNIP, Rockefeller
 - NYS Funding: DSRIP, NYS Health Foundation, Healthcare Foundations, contracts for VBP/prevention programs, local donors

FOOD IS MEDICINE PYRAMID





NYS State Policies & Future Directions

Many Food as Medicine Programs operating in NYS, funded by federal, state and local dollars

1115 Medicaid Waiver Renewal

- Food as Medicine Coalition of NY Forming - *Get Involved!* Email Lisa@thefoodpantries.org
- Recommendations Available at https://docs.google.com/document/d/1SykheaC2Jp0vot2skTrw60K_Y8XuLcwL/edit
 - Reimbursements for CBOs/contractors that offer FAM through partnerships with Medicaid providers
 - Expanded access to RDs, CHW, and nutrition educators
 - Standards for digital health systems that facilitate CBO Referrals
 - Medical CPE in nutrition, training to refer to FAM programs
 - Statewide standards and evaluation of FAM programs

NYS Comptroller's Office Recommendations Include FAM

- Implement the White House Strategy on Hunger, Nutrition and Health.
- Continue to Pursue Innovative Approaches. (including expansion of medically tailored meals provided by Medicaid)

Seven Valleys Health Coalition Produce Prescription Program PRx



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SVHC

- Rural health network for Cortland County
- Focus on supporting social determinants of health by cultivating local solutions and collaborative actions that advance the health and well-being of the Cortland community.
 - Community health education
 - Data, referrals, and resources
 - Food systems work
 - Transportation
 - Maternal health
 - Supports for health



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Cortland County

- Federally designated rural area; northernmost county in Appalachia
- Approximately 46,000 residents
- 15.5% of the population lives in poverty;
 - 24% of children under the age of 5 live in poverty
 - 82% of single female households with children under 5 live in poverty
- 12.1% of the county is food insecure (NYS rate is 11.4%)
- 65% of adults and 38% of children are obese
- Cortland County ranks 45 of the 62 NYS counties on the NYS Health Behavior scale
- 18 active food pantries
- 2 soup kitchens
- Multiple pop-up food distribution sites



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Produce Prescription (PRx)

- Providing CSA (community supported agriculture aka produce boxes) shares - subsidized and/or no cost - since 2019-20
- Work in partnership with local healthcare providers, Guthrie Medical Center, Family Health Network (FQHC), and Family Counseling Services to identify Medicaid and Medicare patients
- Other participants come from SVHC programming
- Funding has shifted, and ranged from Care Compass Network, private foundations, state grants, and FLIPA - part of the NY Health Foundation



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2023 PRx by the numbers



125

CSA shares



3

Local farms



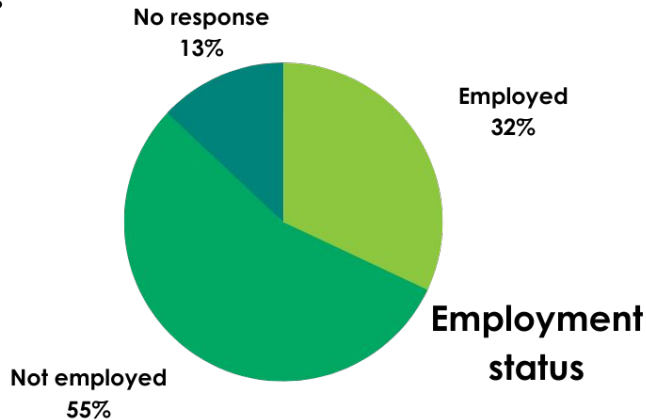
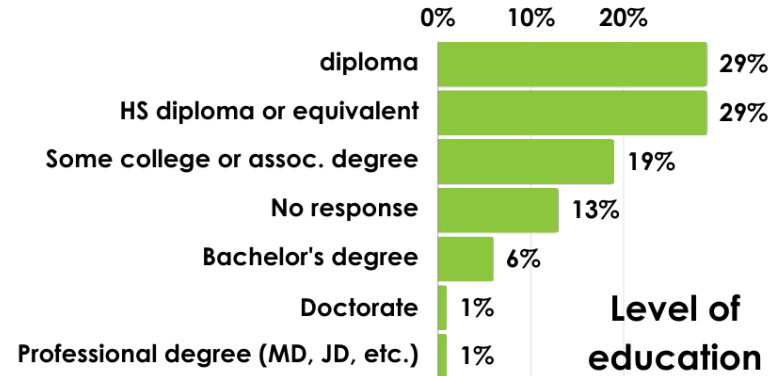
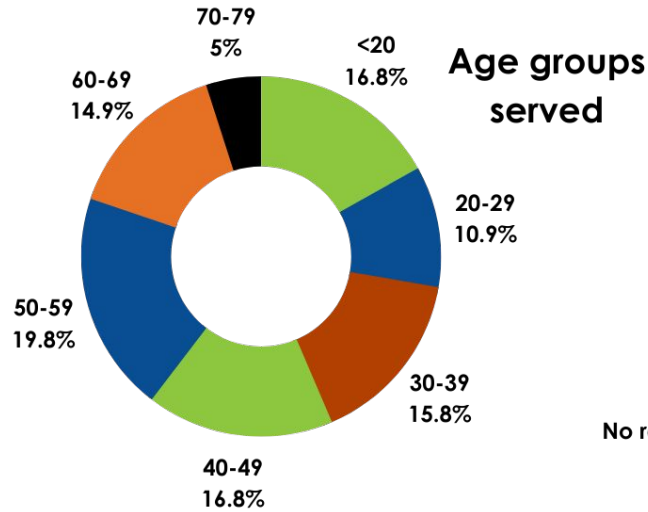
3,938

Miles driven



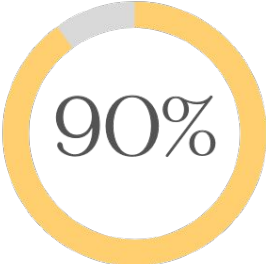
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2023 PRx by the numbers

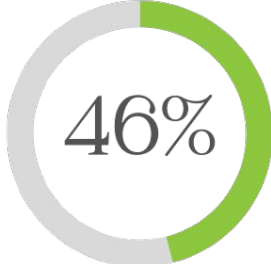


2023 PRx by the numbers

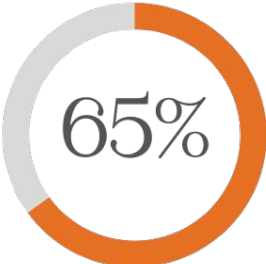
Knew some or knew a lot about preparing fresh produce



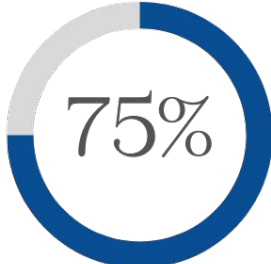
Described their health as being fair or poor prior to PRx shares



Recognize the importance of fresh produce in their family's diet



Said that it was often or sometimes true that the food purchased didn't last, and they didn't have enough money to buy more each month



PRx Wraparound Care

- Deliver CSAs directly to participants
- Provided a variety of spices with CSAs
- Weekly recipe and produce storage tips
- Connect with additional local resources



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Weekend Specials

~ Veggies ~

- fresh OKra - 2 pints / \$5.00
- fresh Red peppers - 3 / \$3.00
- fresh Yellow Peppers - 3 / \$3.00
- fresh Orange peppers - 3 / \$3.00
- orange bunched carrots - (no tops) \$1.00
- fresh local mustard greens - 2 / \$4.00
- fresh broccol Rabe - 2 bunches / \$6.00
- NYS Vine Ripened tomatoes - \$1.99 lb
- fresh local Cilantro - 2 bunches / \$3.00
- fresh local flat leaf Parsley - 2 bunches / \$3.00
- NYS Cherry On the vine tomatoes - 2 pints / \$3.00

~ Fruit / Citrus ~

- Fresh bartlett Pears - \$3.00 qt
- mini seedless watermelons - \$2.49 ea
- lemons - 2 / \$1.00

North Carolina Strawberries AVAILABLE!

~ Bakery Seasonal Specials ~

- blueberry crunch cookies
- lemon doodles
- Spring inspired sugar cookies
- fresh biscuits (to go with your berries)

- * Fresh
Bread Sat. & Sun - *
- Roasted Red Pepper & Feta
 - Croutons made from our bread
 - Italian bread & rolls

Vestal location Opens May 4th!

South Central NY Produce Prescription Program SCNY PRx



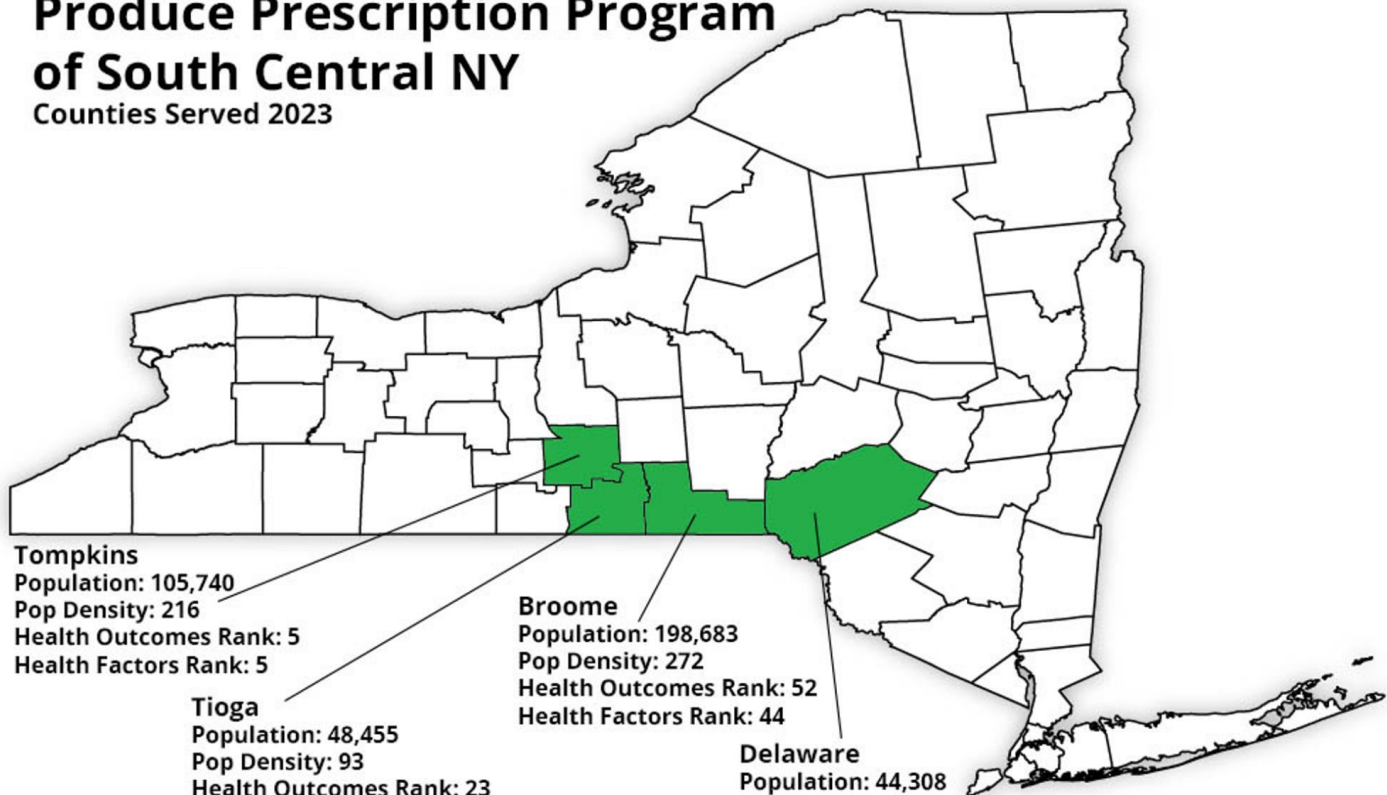
Mission:

To advance the health and well-being of rural people and communities.

- **Community Health**
- **Food and Health Network**
- **Getthere Mobility Services**
- **Rural Health Service Corps (AmeriCorps, VISTA)**
- **Rural Health Planning**

Produce Prescription Program of South Central NY

Counties Served 2023



Tompkins
Population: 105,740
Pop Density: 216
Health Outcomes Rank: 5
Health Factors Rank: 5

Tioga
Population: 48,455
Pop Density: 93
Health Outcomes Rank: 23
Health Factors Rank: 20

Broome
Population: 198,683
Pop Density: 272
Health Outcomes Rank: 52
Health Factors Rank: 44

Delaware
Population: 44,308
Pop Density: 30
Health Outcomes Rank: 46
Health Factors Rank: 38

*Pop Density:
people per square mile

PRx Growth: Pilot to Regional Expansion

PRx Pilot:

- DSRIP PPS Innovation Funding
- 2 primary care clinics
- 80 participants

- 400 PRx participants
- RHN Community Health Worker expansion
- Medicaid & non-Medicaid populations

- 600+ PRx participants
- 50+ shopping sites
- 23 healthcare providers

2016

2017

2018

2020

2022

PRESENT

"Growing Health Forum" with over 100 stakeholders to design PRx program & plan for pilot funding

- 230 PRx participants
- 12 clinics
- 3 counties

- Full-time FaM Coordinator
- GusNIP PPR Award
- 4 counties

PRx South Central NY: Program Overview

- Est. 2017
- 4 Counties (Broome, Tioga, Delaware, Tompkins)
- 600+ participants (2023)
- 53 redemption locations (28 unique firms)
 - 41 farm-direct (farmers' markets, CSA/farm share pick-ups, farm stands)
 - 12 brick and mortar (independent rural grocery and regional grocer)
- 6 - 8 months (\$60/month)
- Cooking kits: spices, utensils, baking sheets, knives
- 2.4 FTE staff and AmeriCorps VISTA
- Funding:
 - Federal (GusNIP)
 - Private foundations
 - Grants from insurers
 - MCO/hospital system contracts (*PRx as part of larger social care network*)

Produce Rx Program



Getting Started Guide

SHOPPING • TRANSPORTATION TIPS & TRICKS FOR STORAGE & USE



Welcome to the Produce Prescription Program!

This guide walks you through how and where to shop for fruits and vegetables, gives you options for getting to shopping sites, and has a few tips for storing and cooking what you bring home.

Thank you for joining us!

INFORMATION TO KNOW

Your PRx ID#
(please be sure this
is on all vouchers!)

Your PRx Provider Info:



Sign up to receive weekly tips & resources:

Receive Texts:
Text your Produce Rx ID# to 844-558-5696

Receive Emails:
tinyurl.com/RemindPRx

Receive Phone Calls:
Call 607-692-7669 extension 206
Leave your phone number and PRx ID#

HOW IT WORKS

SHOPPING

You can fill your
prescription in three
different ways:

A. CSA Subscription Box/Farm Share

1. Choose a share program from the list.
2. Determine your pick up location or choose home delivery, where applicable.
3. Call, text or email the program directly beforehand to sign up and mention that you are filling your Produce Rx.

B. Shop at Participating Farmers Markets

Farmers Markets are generally open on specific days, during certain hours. Be sure to check out the schedules in the Farmers Market section of this guide.

1. Look for "Fill your Produce Rx here" signs to find local farmers to fill your prescription.
2. Use your vouchers as currency.

*When visiting the Broome County Regional Market please visit the Market Info Table located in the main market area. When you enter the front of the building, turn left, the market table has a dark red tablecloth with the words Cornell Cooperative Extension.

C. Shop at Participating Retail Farm Stands and Grocery Stores

Use your vouchers as currency.

*When visiting Price Chopper please note there is a limit of \$10 per transaction, per day with your AdvantEDGE card.





Cornell Cooperative Extension | Delaware County



Cornell University
Master of Public Health

BINGHAMTON
UNIVERSITY
STATE UNIVERSITY OF NEW YORK



Mother Cabrini
HEALTH FOUNDATION



United Way
of Broome County



National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

RURAL HEALTH
NETWORK
Serving South Central New York

Highlighting Rural Success:



- ✓ Trusting collaborations
- ✓ Building upon existing relationships/resources
- ✓ Flexibility: tailoring to each communities assets and needs
- ✓ Streamlining where possible
- ✓ Communication!

Spotlight: Northern Broome

- Leveraging local farm stands and CSAs partners to increase access
- Expanding partners outside the clinic (school district, senior center, community hubs (churches, libraries))

Evaluating Impact



Provider

- Greater engagement with patients
- Increased collaboration among providers
- Referrals to outside sources
- New Partnerships with Community Based Organizations



Patient

- Improvement of dietary health through increased consumption of fruits and vegetables
- Reduction of individual and household food insecurity
- Reduction in emergency healthcare use and costs associated with managing diet-related chronic disease



Vendor

- Allowing local farms and businesses to reach new, repeat customers
- Building long-term relationships within new markets and community organizations
- Increasing produce sales for retail partners
- Farmers and grocers becoming partners in health

From Healthcare Providers

"I think one of the most important things that I learned from the patients was how the shopping made them feel. They were very proud of the fact that they were able to shop at a farmer's market and pick fruit and vegetables (like any other shopper). It made them feel good knowing that they were able to make healthy choices without having to worry about their SNAP benefits or if they would have enough food at the end of the month. So many patients also stated it put their mind at ease, particularly diabetics as they know they need to make healthy food choices."

From Patients

"PRx helped me eat healthier so that I could lose the weight I needed to. It helped me afford what I need. My A1c has significantly lowered since starting the program."

"When taking my kids to the store they can get fruits and veggies and I don't have to say no or try rebudgeting money to say yes."

"I could get vegetables that I normally couldn't afford. Learned to eat better, deal with issues with my health from the class I took. Learned what vegetables were and how to store/cook them."

From Vendors

"Our farmers have gained new customers as well as income from this program and enjoy that we are always looking for new ways to reach those who may not shop with us otherwise."

"PRx has helped us reach another population, those with chronic health-related conditions, who benefit from receiving vegetables through a CSA but might be hesitant or have major barriers to access due to budget restrictions, or because they are intimidated by shopping/preparing food out of their comfort zones."