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Food For All

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# FOOD FOR ALL

HARDWICK AREA FREE AND REDUCED COST FOOD RESOURCES

Hardwick Area Health Center, Hardwick,VT Vicenta Hudziak, MS-III Family Medicine Clerkship, 2016-2017 Project mentors: Sarah Morgan, M.D., McKalyn Leclerc, M.D., Katharine Ingram, Ruby Dale-Brown

## PROBLEM IDENTIFICATION AND DESCRIPTION OF NEED

- Problem: Food Insecurity and Food Insecurity with Hunger in Vermont
- Description of Need:

#### Food Insecurity in Vermont

- 13% of all Vermont households are food insecure
  33,000 Vermonter households
- 13% of all Vermonters are food insecure 79,800 Vermonters
- 17% of Vermont children live in food insecure homes 20,400 Vermont Children
- 8% of Vermont seniors are living with food insecurity 11,300 Vermont Seniors

The food insecurity data here are 3-year averages, from 2012-2014, from the Current Population Survey of the United States Census.

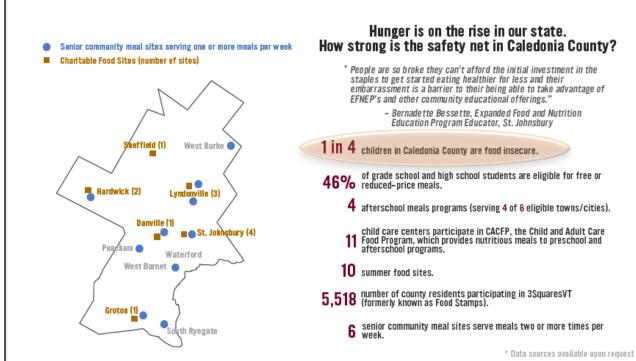
Images source: Hunger Free VT 2015 VT Hunger Facts

### Food Insecurity with Hunger in Vermont

- 15,600 Vermont households struggle with hunger
  6% of Vermont households
- 31,200 Vermonters struggle with hunger
  5% of Vermonters
- 7,000 Vermont children live in households experiencing food insecurity with hunger
   6% of Vermont Children
- 4,800 Vermont seniors are food insecure with hunger 3% of Vermont Seniors

The food insecurity data here are 3-year averages, from 2012-2014, from the Current Population Survey of the United States Census. Unacceptable impact on children = increased risk for lifetime emotional, behavioral, health, educational, and social problems

## LOCAL NEED CONTINUED



Recent surveys show that 1 in 5 Vermont children and nearly 1 in 8 Vermont households are food insecure. Join us in our efforts to end hunger. Visit hungerfreevt.org for more information on solutions to hunger and how you can help.

# Hunger in Caledonia County



Vermont, and specifically **Caledonia County** where Hardwick lies, is no exception to the need represented nationally, where 25% of children are food insecure.

## PUBLIC HEALTH COST AND UNIQUE COST CONSIDERATIONS IN HOST COMMUNITY

Public Health Cost:

Furthermore, a recent study of 67,033 people in Canada showed that individuals with food insecurity have greater annual healthcare costs than their foodsecure counterparts. Cost was highest for those with highest severity of food-insecurity. (Tarasuk et al., 2015)

Exhibit 2 Estimated Costs Attributable to Food Insecurity and Hunger in the US, 2014

Source of Cost	Costs (\$Billion 2014 Dollars)
Direct health-related costs in 2014 based on new research evidence	\$29.68
Non-overlapping direct health-related costs reported by Brandeis researchers in 2011, continued in 2014 and expressed in 2014 dollars	\$124.92
Indirect costs of lost work time due to workers' illnesses or workers providing care for sick family members based on new research evidence	\$5.48
Total direct and indirect 2014 health-related costs	\$160.07
Indirect costs of special education in public primary and secondary schools, based on new research evidence	\$5.91
Total costs of dropouts reported by Brandeis research- ers in 2011, continued in 2014 and expressed in 2014 dollars	\$12.94
TOTAL ESTIMATED COSTS	\$178.93

Table from: Cook & Poblacion, 2016

### Public health concerns in the host community: Caledonia County

Table 4.3. Health and Diet in the NEK

Variable	Caledonia	Essex	Orleans
Percentage of adults who eat 3+ servings of vegetables per day*	24%	26%	29%
Pounds per capita Fruit & Vegetables	190	190	190
Pounds per capita packaged sweet snacks	118	118	118
Gallons per capita soft drinks	59	59	59
Pounds per capita meat & poultry	59	59	59
Pounds per capita solid fats	24	24	24
Pounds per capita prepared foods	299	299	299
Adult diabetes rate	7.9%	6.7%	7%
Adult obesity rate	24.6%	25.1%	24.8%
Low-income preschool obesity rate	11.5%	11.3%	10.8%
Percent adults meeting activity guidelines	73%	73%	73%
Percent high school students physically active	48%	48%	48%

Figure 4.2. Adult Obesity Rate in The NEK Adult Obesity Rate 40.00% 35.00% 30.00% 25.00% 20.00% 15.00% 10.00% 5.00% 0.00% Vermont Caledonia Orleans NEK Essex Source: USDA Food Environment Atlas

Figure 4.3 illustrates the NEK is lower that the state average for adults that report eating at least three servings of vegetables per day. About 22% of NEK adults report eating at least three servings of vegetables per day.

Source: Food Environment Atlas, data from 2002 – 2009. Exact data sources: http://ers.usda.gov/foodatlas/documentation.htm. \*Data from VT Department of Health, 2008

> Table and graph from: Regional Food System Plan for Vermont's Northeast Kingdom, June 2011

## COMMUNITY PERSPECTIVE

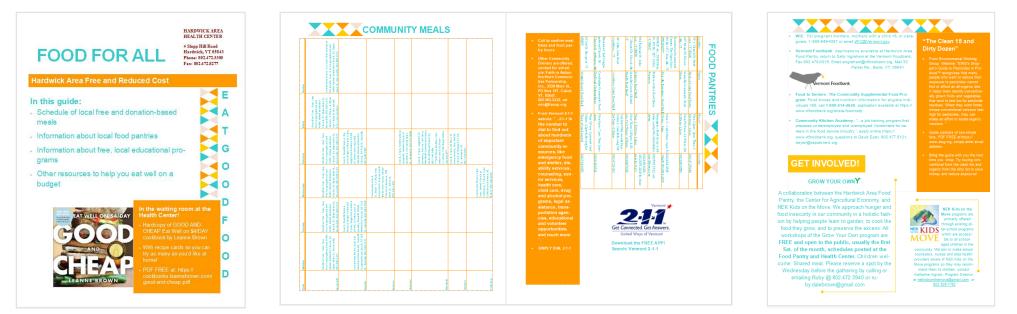
In	terview I: Executive Director Hardwick Area Food Pantry	Interview II/Steering Committee Meeting: Members of Committee and NEK Kids on the Move Program Director
*	Goal: Provide families with enough food to feed all members for 5 days, 3meals/d; intended to be supplemental. Fresh veggies and USDA items unlimited with discretion.	From website: "The program offers nutrition and cooking/food storage workshops to community
*	Grow Your Own program provides free monthly workshops on gardening, cooking, food preservation; holistic approach. Program maintains WIC benefits, also provides childcare.	members specifically targeting low-income residents of the greater Hardwick area. The goal is to increase food independence, and improve health through
*	Seed distribution day every April: 800-1200 packets of seeds! Buckets and containers available so no need to commit to a garden	shared knowledge and experience."
*	Food pantry clients have priority for 1/3 of beds at Community Garden	Discussion of possible collaboration with Hardwick schools to increase use of local foods in cafeterias and
*	Best way to engage food-insecure members of the community is boots on the ground, in-person invitations and education	make healthy low-cost substitutions for certain food
*	Last year 370 families served in the greater Hardwick area	items, especially at breakfast
*	Observation of clients with many health issues, especially obesity. Many clients on disability. Cost to community of poor health = inability to participate in community.	New initiative to bring a winter sports program to Hardwick schools.
*	Consistent decline in senior use of food pantry-area of concern: role for Health Center in investigating senior food insecurity?	How to increase children's engagement with local food? Role for gleaning projects in local schools.

## INTERVENTION AND METHODOLOGY

- Identified need for comprehensive resource through conversations with healthcare providers, patients, and community members
  - Healthcare provider perspective: patients with food insecurity may not ask for help/may not identify as food insecure; no existing resource at the clinic with comprehensive guide to local food resources
  - Patients: Endorse consumption of unhealthy foods, difficulty changing habits, meals with not enough food for all family members
  - Community members: Express presence of food insecurity, desire to increase access to and utilization of fresh local produce, support for role of Health Center in increasing community engagement in healthy eating
- Intervention: Created a comprehensive guide to local free and reduced-cost resources for healthy eating
- Combined resources obtained from food pantry, online searches, local churches
- Includes:
  - Schedules and contact information for local food pantries
  - Schedules and contact information for local free and reduced cost meals
  - Information about local assistance programs and educational programs
  - Information about free on-line cookbook for eating well on a budget
    - Color copy of cookbook set-up in waiting room next to recipe cards for patients to record recipes they would like to try at home
- Pamphlets set-up in waiting room, all patient exam rooms, behavioral health counselor's office, and food pantry

### **RESULTS/RESPONSE**

Newsletter-style 4-page pamphlet, two-sided color



- Shared pamphlet with all providers and front desk, was assisted by nursing in setting up pamphlets in exam rooms and waiting room, set-up cookbook with recipe cards and pamphlets on table in high-traffic area in waiting room
- Enthusiastic response to pamphlet containing local resources in one place; many expressed anticipated utility of meal and pantry schedules in particular

### EVALUATION OF EFFECTIVENESS AND LIMITATIONS

### Possible evaluation methods

- Use Food Pantry and Grow Your Own records prior to the introduction of the pamphlet into the community to compare to specific variables after its introduction at different time points; e.g. overall number of clients using the pantry, attendance at GYO workshops. Consider measurements at 1 month, 6 months, 1 year to gauge effect. Alternatively, could incorporate new item into Food Pantry intake form, e.g., "Where did you hear about us?" and monitor effect of Health Center resource. An increase in clients to the pantry who learned of it through the Health Center resource would indicate potential effectiveness.
- Similarly track meal attendance over time at community meals highlighted in the pamphlet. This would require established attendance data prior to the introduction of the pamphlet may also consider asking meal attendees where they learned about the meal time and location and record this information.
- For the waiting room cookbook: Ask front desk to observe patient interaction with the pamphlet and recipe materials for anecdotal gauge of success. Count number of recipe cards remaining after a certain time period, e.g. 1 month, 2, months, 6 months (implicit assumption that a recipe was recorded on the taken recipe card).
- No pre-testing was conducted as part of this intervention, so change in provider-patient interactions would not be possible to evaluate. However, to assist in identifying at-need patients, providers could institute a log of how frequently they see patients at risk for food insecurity who they subsequently provide with the pamphlet.

### **RECOMMENDATIONS FOR FUTURE INTERVENTIONS**

- Discussion with Executive Director of the Food Pantry elucidated potential decline in seniors utilizing food pantry resources with unclear reason for decline. She suggested a possible future collaboration between the Food Pantry and Health Center in which food boxes could be kept on-site at the Health Center and provided for free to seniors that come in for a visit and are identified by a provider to be at risk for food insecurity. This could feasibly be achieved with minimal paperwork and minimal personal information provided by the seniors to protect privacy. This was outside of the scope of the current project, but if implemented in the future could be featured as another resource on the pamphlet created this year.
- Initiate project to identify clinic patients with food insecurity. This could include a short 1-5 item screening questionnaire conducted by the nurses and incorporated into other screening questions asked while rooming patients, or could be done by providers at every new patient visit or as-need thereafter.

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### INTERVIEW CONSENT FORM

See separate document in ScholarWorks:"Food for All/Interview Consent Form"