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Four For Food: WIC Farmers' Market Nutrition Program

Kentucky Public Health Leadership Institute Scholars:

Anna Littleton

Program Coordinator/District Supervisor
Gateway District Health Department

Christine Atkinson; B.A., R.S.

Food Safety Branch Manager
Department for Public Health Protection and Safety
Cabinet for Health and Family Services

Morgan Barlow; B.A.

HANDS Sr. Health Educator
Madison County Health Department

Neal L. Rosenblatt; M.S., B.A.

Systems Technology Specialist IT
Cabinet for Health and Family Services
Office of Information Technology

Mentors:

Kenny Ratliff; B.A., R.S.

Director, Division of Geographic Information
Commonwealth Office of Technology

J. David Dunn; M.P.N., Dr. Sc. in Hyg.

Professor of Public Health
Interim Department Head
Department of Public Health
Western Kentucky University

Executive Summary:

Think globally, act locally. This can apply to many aspects of our lives: recycling, fuel efficiency, and the food that we eat. In our global economy there are a myriad of food choices. To act locally, to “eat” locally, is a challenge. Our supermarkets are brimming with raspberries from Brazil, strawberries from Mexico, blueberries from Guatemala, bananas from Ecuador, papaya from Belize. Global industries, with multi-million dollar buying power, bring such luxuries to our market, for a price.

Hunger needs are changing. Malnutrition is declining, at the average rate of 1.7 percent a year since 1990. Research from the World Health Organization and the U.N. Food and Agriculture Organization reflect for “every two people who are malnourished, three are overweight or obese.” In the United States, low-income Americans struggling with obesity reaches 35 percent while middle- and high-income Americans rest at 29 percent. Americans are “food-insecure,” not because they are hungry, but because they are undernourished. Nutritional epidemiologist, Barry Popkin, notes the achievement over lack of food as an important sociological shift. With this shift, though, comes an alternate cost; “we’re dying not of starvation or infection, but of abundance.”¹

Socioeconomic factors permeate food choices and healthy food accessibility. Supermarkets in more affluent neighborhoods tend to stock more fresh produce and fruits, key to nutrition. In more disparate communities nationally, food choices are limited and healthy foods are nearly nonexistent. Stores are often stocked with starches and bulk purchasing. Fast food chains fill the gap.² “The rich have Whole Foods... The poor have 7-11 [stores]... When money’s tight, you feed your kids at Wendy’s and stock up on macaroni and cheese. At a lunch buffet, you do what your ancestors did: store all the fat you can.”³ Nutrition is not a consideration.

Is there a way to challenge behavioral patterns and support access to healthier foods, reversing the nutritional disadvantage?

Local farmers’ markets have the potential to change the health of a community. Our project focuses on the broad social problem of poor nutrition and obesity by partnering the efforts of two established preventative health programs. Health Access Nurturing Development Services (HANDS), a first-time parent program, and the Women, Infants and Children Farmers’ Market Nutrition Program (WIC FMNP), a nutritional voucher program, are both programs with targeted, healthy outcome goals. In joining HANDS’ efforts to support the work of WIC FMNP with specific education and interventions, Kentucky will begin to see healthier families.

Introduction/Background:

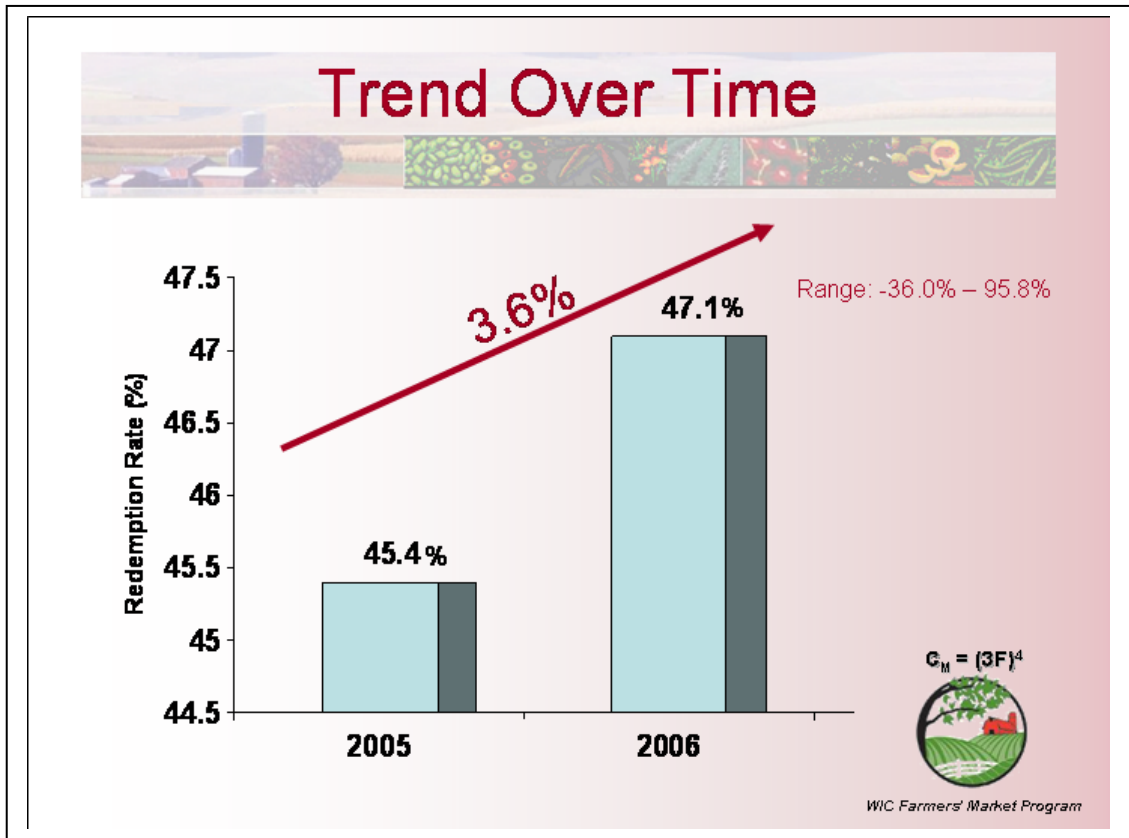
The WIC Farmers' Market Nutrition Program began as a pilot in 1992, in a dual effort to increase fruit and vegetable consumption among the poor and to support the local agriculture economy.⁴ Once annually, from May to October, each WIC recipient in Kentucky receives Automatic Food Instruments (vouchers) worth \$20, to be spent on fresh, unprepared fruits, vegetables, and cut herbs at local approved markets. WIC nutritionists provide families with flyers (see Appendix A) on food options and the address of the local market. Beginning in 2007, nutritionists will also provide a cookbook.

Despite quality improvement attempts and high WIC FMNP voucher distribution, the statewide redemption rate is annually below 50%, with variations between individual counties (see Appendix B). A number of clients are not redeeming their coupons. In researching needs and resources, our team saw an opportunity to address the statewide low redemption rates through targeted educational interventions of the HANDS program. Families in the program currently receive information addressing developmental benefits of good nutrition, throughout pregnancy and early childhood, from the core curriculum content of *Growing Great Kids*⁵ and *Growing Great Families*.⁶ HANDS serves first-time parents with the majority of HANDS families also receiving WIC. FMNP operates 54 sites in Kentucky. The HANDS program is in every county, and would become a reinforcing and consistent common denominator for the FMNP, secondary to WIC.

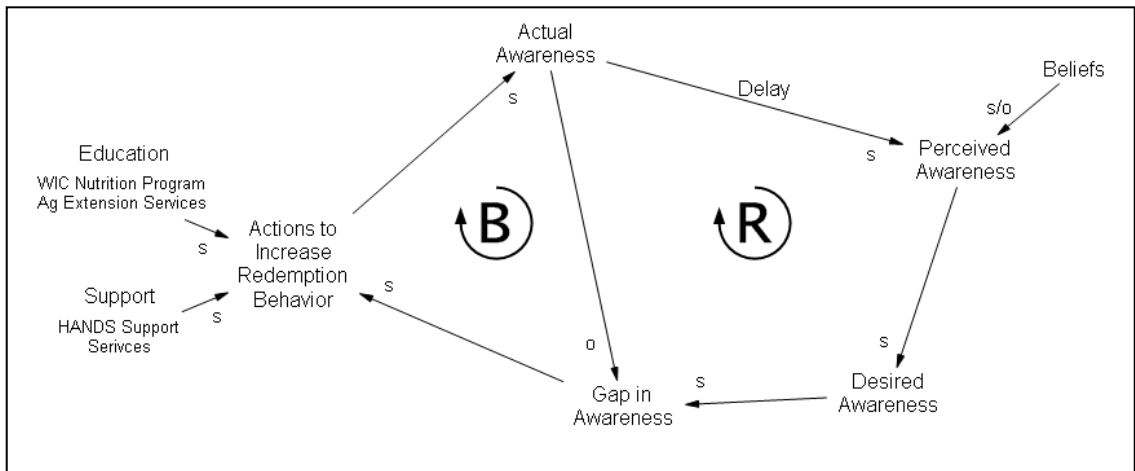
Problem Statement:

Why, despite high WIC Farmers' Market voucher distribution, is there an overall low redemption rate?

Behavior-Over-Time Graph:



Causal Loop Diagram:



10 Essential Public Health Services/National Goals Supported:

Of the Ten Essential Public Health Services, establishing a viable and reinforcing connection between HANDS and FMNP provides for Essential Service #4, to “mobilize community partnerships to identify and solve health problems.” Implementing a policy within HANDS to utilize the supplemental information supports Essential Service #5, to “develop policies and plans that support individual and community health efforts.” Educating the HANDS home visitors who, in turn, follow up with the HANDS- and WIC-receiving families maintains Essential Service #3, to “inform, educate and empower people about health issues.”

Of the 21st Century Center for Disease Control goal areas, our project addresses:

Healthy People in Every Stage of Life:

- Infants & Toddlers, ages 0-3: “Start Strong”
- Adolescents, ages 12-19: “Achieve Healthy Independence”
- Adults, ages 20-49: “Live Healthy, Productive, and Satisfying Life”

Healthy People in Healthy Places:

- Healthy Communities
- Healthy Homes

The information and structure of the tools (see Appendix C, D, & E) aim to directly enhance:

Healthy People 2010 goal 1.3, which calls for counseling about health behaviors through clinical preventive care

Healthy People 2010 goal 19.5, regarding fruit intake

Healthy People 2010 goal 19.6, regarding vegetable intake

Utilizing the knowledge to actualize change, (increased voucher redemption, conversations integrating the *Growing Great Kids* curriculum with community resources, and increased fruit and vegetable consumption), also sustains:

Healthy People 2010 goal 5.8,
addressing gestational diabetes

Healthy People 2010 goal 16.10,
addressing low birth weight and very low birth weight

Healthy People 2010 goal 16.12,
addressing weight gain during pregnancy

Healthy People 2010 goal 16.16,
striving for optimum folic acid levels

Healthy People 2010 goal 19.1,
striving for healthy weight in adults

Healthy People 2010 goal 19.2,
addressing obesity in adults

- Healthy People 2010 goal 19.3,
striving to reduce the proportion of children and adolescents who are
overweight and obese
- Healthy People 2010 goal 19.12,
addressing iron-deficiency in young children and in females of child-
bearing age
- Healthy People 2010 goal 19.13,
addressing anemia in low-income pregnant females
- Healthy People 2010 goal 19.14,
addressing iron-deficiency in pregnant females

The potential reinforcing cycles of positive change are evident in the breadth of goals listed.

Project Objectives/Description/Deliverables:

Our objective is to increase healthier food choices through increased farmers' market voucher redemption. Making a collaborative connection between HANDS and WIC FMNP sustains the consistent, proactive approach to positive health education the farmers' market voucher program attempts to achieve. The Kentucky HANDS program is one of the largest home visitation programs in the nation. The relationship between educators and families in the HANDS program is a proven model of effective communication. In 2004, HANDS was honored for its approach in teaching and collaboration to promote sustained positive outcomes, including lower instances of abuse and neglect, lower percentages of premature, low weight, and very low weight babies.⁷ Given the HANDS program's sustained history of success in targeted interventions, the opportunity to utilize HANDS to increase effective outreach in the area of healthy food choices is a positive one.

The four goals of the HANDS program align with healthy nutritional objectives:

- Positive pregnancy outcomes
- Optimal child growth and development
- Children live in healthy/safe homes
- Family decision-making and self-sufficiency⁸

We put together a packet of correlating information, linking the two programs, in an effort to "promote continuous quality improvement of public health systems," an article from the National Public Health Performance Standards Program. This packet includes a HANDS home visitor guide (Appendix C), and a two-page supplemental which our team assembled and adapted to meet the needs of the families (Appendix D & E).

The home visitor guide is a cheat sheet for HANDS workers. Opportunities to discuss the WIC FMNP vouchers are connected to applicable *Growing Great Kids'* curriculum, the primary resource used in home visits, and the new Daily Do, "Body Builders" (see Appendix C). Throughout families' participation in the HANDS program, they become

familiar with tools for strengthening their child’s mental, social, emotional, verbal, and physical development (“Daily Dos”), appropriate to their stage. Families are also aware of the “payoffs” for such consistent and empathetic work, based on developmental studies, their values, and what they want for their child.

The two supplemental handouts to leave with the family reflect the growing seasons of the fruits and vegetables,⁹ a map of participating counties, and nutritional benefits.¹⁰ Through conversation with the home visitor, families will be able to engage in dialogue about their options and the long term “payoffs” should they choose to redeem their FMNP vouchers. The families receive from WIC, at the time of voucher distribution, an FMNP flyer, including the local market address (Appendix A). The two handouts reinforce options and opportunities, including redemption of the vouchers at other sites across the state.

Methodology:

Our group met over the subject title of Food Security. At the outset it was not truly understood by all members exactly what was meant by this title. It meant different things to different people. For one member in the group whose job deals with food safety issues the title implied measures to make the food supply safe from harm. To others it meant the ability to merely obtain food to eat and for one member it denoted the acquisition of foods that were wholesome from a nutritional and organic source. As we began to debate the intent of the project many more ideas were presented, all relating to food security.

It was quickly established that we were not speaking of food in the “defense” aspect of the supply. As in, keeping the food supply safe from harm. As the discussion streamed along, time after time it took on the shape of great expanding and contracting. The range would broaden out to encompass fast food, supermarkets, imported foods, and local farmers markets. Throughout, the theme would replay that those who could afford whatever they wanted had the access, whereas those with less means often had to take what was the most convenient or what they could get. What began to emerge most clearly were the broad issues of socioeconomic disparities, affecting the ability to purchase fresh wholesome and nutritious fruits and vegetables.

Looking at socio-economically distressed groups, the question as to why the choices were not made available led to the more actionable question of what if the choices were available? Would these more nutritious choices be taken advantage of, or would the learned behavioral patterns reign?

An underlying theme strongly held by one member of the group was making food choices that support local growers and producers. Acting locally, building community, eat where you live, the slow food movement, all of these trends in food consumption that ultimately lead to choices that affect not only nutrition but work for a larger purpose of feeding the individual as well as the whole community.

Trying to meld these themes: community, nutrition and access to choice, ultimately led back to the question of why, when the choices are made available, are they not taken?

We choose the Farmers' Markets to be our representative of the local producer and supplier of fruits and vegetables. After gleaning through much information regarding Kentucky markets we learned that the WIC program supported the choice of purchasing locally-grown foods through the voucher system. A select number of markets were approved to redeem WIC FMNP vouchers. Despite the system being in place it was not working to capacity. WIC administered a survey in 2006 and discovered some reasons for low redemption rates. Education was a major reason for non-redemption. Working to solve some of the issues, the Department of Agriculture is addressing concerns regarding food recognition, preparation, and storage with a cookbook and picture brochure for 2007. Lack of knowledge of market hours and locations was another set of problems, which they addressed in their 2007 flyer (see Appendix A).

One of our members works in the HANDS program. She suggested introducing the farmers' market as a source for nutritious, healthy, food in the regions funded to receive WIC FMNP. The farmers' markets could be integrated into resource directories given to all surveyed families and further become a common referral source, supporting family self-sufficiency. The farmers' market shopping "adventure" supports outings as a time for parent-child interaction and developmental curiosity.

We worked with Cindy Sullivan, in the WIC program, and Cheryl Miller, in the HANDS program, to coordinate our information, seek advice, and finally assemble supplemental handouts appropriate for HANDS home visits.

Results:

The short-term outcome of our project was the establishment of communication links and resources between HANDS and WIC FMNP in the regions where their work overlaps. With approval to implement use of the supplemental handouts in HANDS initial parent surveys and long term home visitation, we established a wider working community of buy-in from health educators. From here, we have a more integrated and reinforcing structure working for higher farmers' market voucher redemption and actual healthy communities.

Conclusions:

Healthy lifestyle choices are available to the public at large, but not all socioeconomic groups can readily access healthy foods. Primary barriers to access include financial limitations, lack of knowledge, and lack of support. The WIC FMNP voucher program attempts to reverse the disadvantage through targeted financial support and a limited educational encounter. The overall success of FMNP from 2006 data was positive (increasing an average 3.6%), but inconsistent across all counties (range of -36% to +95.8%).¹¹

By introducing supplemental materials for HANDS home visiting use, we expect to increase voucher redemption in every county. The supplemental materials connect relevant *Growing Great Kids'* and *Growing Great Families'* curriculum, the primary resource for HANDS visits, to the local availability and nutritional benefits of fresh fruits and vegetables. The HANDS program is in every county, becoming a reinforcing common denominator for the FMNP program in education and support, secondary to WIC.

Education and support make the difference in how choices are made. The long-range outcomes will reflect the continued partnership between programs. A continued conversation between the two programs, and genuine collaboration from the point we leave (in the work to increase Farmers' Market voucher redemption) will support true progress on three of the Ten Essential Public Health Services. Sustained success in increased voucher redemption will mark progress simultaneously on a number of Healthy People 2010 goals, targeting preventative behaviors and managing compromised health conditions.

Leadership Development Opportunities:

Christine Atkinson

The best thing about KPHLI was meeting my teammates. They have been tolerant and kind. Our topic Food Security, took me away from my usual Food Safety job duties, and brought me back to my area of degree Agriculture. For that I am happy. This was my first year in a new position and my available time was scarce. I think KPHLI could be a great experience for anyone, but it demands more than people who work full time jobs have to give. Thanks for your individual uniqueness, Anna, Morgan and Neal, keep in touch.

Morgan Barlow

This was a refining process, the work of self-reflection in the midst of our yearlong team project. With gratitude, I lift up thanks that my public health teammates brought in the mix good creativity, questioning, wandering, and sound data. Let's hear it for fruits and veggies, the original fast food! Fall 2007, I plan to attend the University of North Carolina-Chapel Hill, working toward a master's in public health, maternal-child health.

Anna Littleton

I have really enjoyed this past year at KPHLI. At first I felt overwhelmed with it all but after we all got started and acquainted I really started to enjoy the program. The program has really made me start thinking about going back to school and getting my degree in Public Health. With the retirement coming up for so many in 2008 I might just have a chance of becoming an Administrator somewhere one day. That is what I really would enjoy doing. I work well with all the people I supervise now and I think it would be wonderful to have my own Health Department to run. With KPHLI it has made me look farther down the road into my future and my family strengths. I want to say to my Change Master Team Mates I have really enjoyed getting to know each and everyone of you and I think we have all done a super job with our project. We all had different strengths in different areas and it all made it come together fantastic.

Neal Rosenblatt

The KPHLI program has been a very enriching experience on several fronts. I have gained new insights into my ultimate field of interest – the built environment and public health impact. The Change Master experience has afforded me time to focus on a very specific aspect of this field – food access – especially among socio-economically distressed populations. It is my hope that my KPHLI experience, professionally, will eventually lead to a role in which I can apply public health principles to the field of urban planning and design. In addition, lessons in leadership from root cause and causal loops, to Situational Leadership and Emotional Intelligence, have broadened my awareness of critical aspects of leadership development – thinking, focusing, and doing. Finally, I thoroughly enjoyed the Change Master process and working with such dedicated, bright, and talented people. Although our team’s initial scope was very broad, through communication and a strong desire to do something meaningful, not only have we produced a result that will hopefully enrich the lives of those who participate in the WIC Farmers’ Market Nutrition Program, but also I feel I have found true friends in Anna, Morgan, and Christine. Thanks for a wonderful (and challenging) year $C_M=(3F)^4!$

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