

East Tennessee State University

Digital Commons @ East Tennessee State University

Appalachian Student Research Forum

2018 ASRF Schedule

Apr 4th, 11:00 AM - 11:15 AM

Increasing Fruits and vegetable consumption among SNAP recipients through an innovative prescription program: Appalachian Pharmacy

Kiriinya Mwirigi

Beenish Kamran

East Tennessee State University

Follow this and additional works at: <https://dc.etsu.edu/asrf>



Part of the [Community Health and Preventive Medicine Commons](#), and the [International and Community Nutrition Commons](#)

Mwirigi, Kiriinya and Kamran, Beenish, "Increasing Fruits and vegetable consumption among SNAP recipients through an innovative prescription program: Appalachian Pharmacy" (2018). *Appalachian Student Research Forum*. 213.

<https://dc.etsu.edu/asrf/2018/schedule/213>

This Oral Presentation is brought to you for free and open access by the Events at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Appalachian Student Research Forum by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.



An Evaluation of Appalachian (F)armacy

A Fruits and vegetables prescription program

KIRIINYA MWIRIGI, M.P.A, M.S. (Dr.PH. student)
Beenish Kamran, MPH(student)
Deborah Slawson, Ph.D., R.D., L.D.N.



**COLLEGE of
PUBLIC HEALTH**

EAST TENNESSEE STATE UNIVERSITY



Why fruits and vegetables?

- Very low consumption rates
 - TN 47th
 - 7% meet standard
 - Even lower for low income
- Nutrient dense
- Improve Health Outcomes
- Availability

Appalachian Pharmacy



Health
Assessment



Vouchers
Monthly
\$28- \$112



Farmers
Market



Nutrition
classes

Methodology



- Mixed methods approach
- Quantitative- Survey
 - Baseline
 - 6 months
- Qualitative –
 - Intercept interviews (n=22)
 - 2 focus groups (n=11)
- Thematic analysis
- Data analysis on SPSS

Baseline Results



Variable	TN	Wash.	Farmacy N=134
Adults with some college	67%	59%	43%
SNAP eligible food insecure adults	56%	61%	79%
Obesity	32%	29%	53%
Less than a fruit daily	46%	n.d	73%
Less than a vegetable daily	25%	n.d	72%
No physical activity	30%	32%	43%

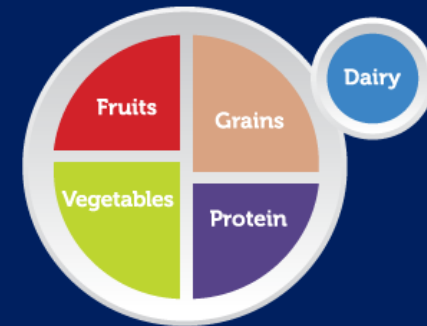
Follow-up results

Small paired sample size – clinical significance

Mean consumption rose from 4-6 times weekly to at least once daily.



Variable	Pre-test July N-29	Post-test Feb n-29
VERY food insecure adults	24%	20%
NO fruits at all in the past week	24%	3%
Vegetables only 1-3 TIMES a week	34%	10%



Themes

"Helps stretch my dollars"

"...I would not have been able to buy fruits and veggies for my kids"

- **ACCESS**

"things you wouldn't buy otherwise"

- **SOCIAL ENVIRONMENT**

"I got some recipes, some hints about how to freeze"

"Going to market gets me out of the house and gives me something to look forward to"

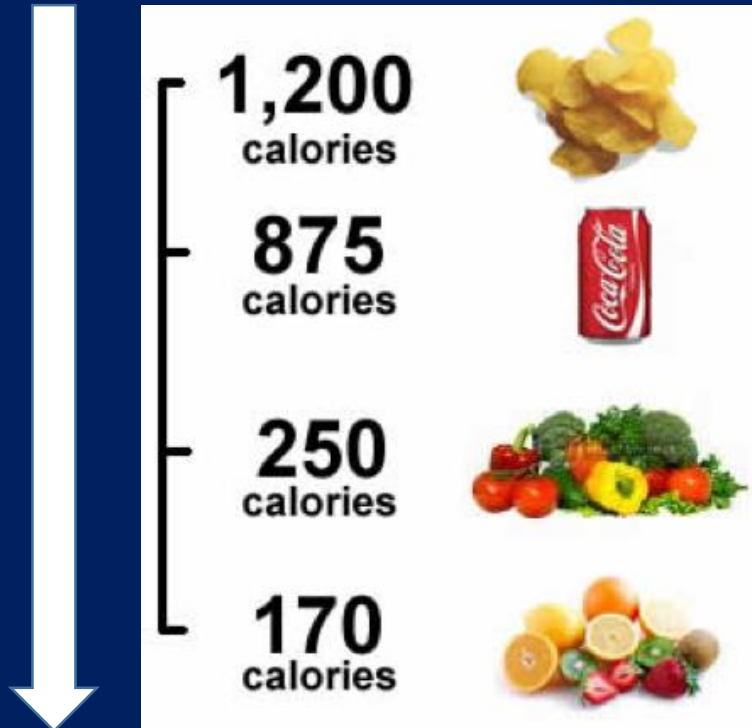
- **PERCEPTIONS**

"feeling a whole lot better"

"works my bowels"

"Diet is helping. Blood sugar has decreased"

Conclusion



Food Security
=
Better Health Outcomes

Recommendation

Promote



Access



Support

Food security assessment

Case management

Acknowledgement



Appalachian Farmacy Committee and partners during the launch at the Johnson City's Farmers Market in downtown Johnson City. Photo by Jeff Derby

Collin Brooks. (June, 2017) New programs hope to curb unhealthiness in area with fresh food prescriptions. *The Johnson City News and Neighbor*. 20(17)

References

- Berkowitz, S. A., Seligman, H. K., & Choudhry, N. K. (2014). Treat or eat: Food insecurity, cost-related medication underuse, and unmet needs. *American Journal of Medicine*, 127(4), 303–310.e3.
- Collin Brooks. (June, 2017) New programs hope to curb unhealthiness in area with fresh food prescriptions. *The Johnson City News and Neighbor*. 20(17)
- County Health Rankings (2018) Tennessee: Washington County.
- Gregory, C. A., & Coleman-Jensen, A. (2017). Food Insecurity, Chronic Disease, and Health Among Working-Age Adults.
- The State of Obesity (2011). State Rates of Fruit and Vegetable Consumption. Retrieved from <https://stateofobesity.org/lists/lowest-rates-fruits-vegetables/>
- Ziliak, J., & Gundersen, C. (2017). *The state of senior hunger in america in 2015: an annual report*. Retrieved from <http://www.feedingamerica.org/research/senior-hunger-research/state-of-senior-hunger-2015.pdf>

Questions