



VIRTUAL
2020 NATIONAL
RYAN WHITE
CONFERENCE ON
HIV CARE & TREATMENT

Addressing Food Insecurity Through Food Assistance Programs to Improve HIV Outcomes

Molly Westbrook MS, RDN, LDN

Dietitian-Nutritionist

PACT at UPMC Center for Care of Infectious Diseases

Objectives



Understanding ways to identify and address food insecurity in the HIV community



Acknowledging the positive impact food assistance programs may have on retention in care for PLWH



Educating PLWH and their providers on ways to stretch food dollars and food resources more effectively

Why is addressing food insecurity important in healthcare?



- Is it our “job” as healthcare providers to address this?
- Food insecurity skims the line of clinical care and social services
 - Great opportunity for collaboration among healthcare providers
 - Supports the need for an interdisciplinary team
- The “why?”
 - Increased hospital readmissions
 - Lack of protein can affect healing
 - Overall malnourishment
 - Can impact regulation/treatment of disease
 - HIV/AIDS, Dialysis, DM, COPD, Obesity, Cancer



Don't Overlook Its Impact On Your Profession!



DOCTORS/NURSES



DIETITIANS/NUTRITIONISTS



SOCIAL WORKERS



PSYCHOLOGISTS

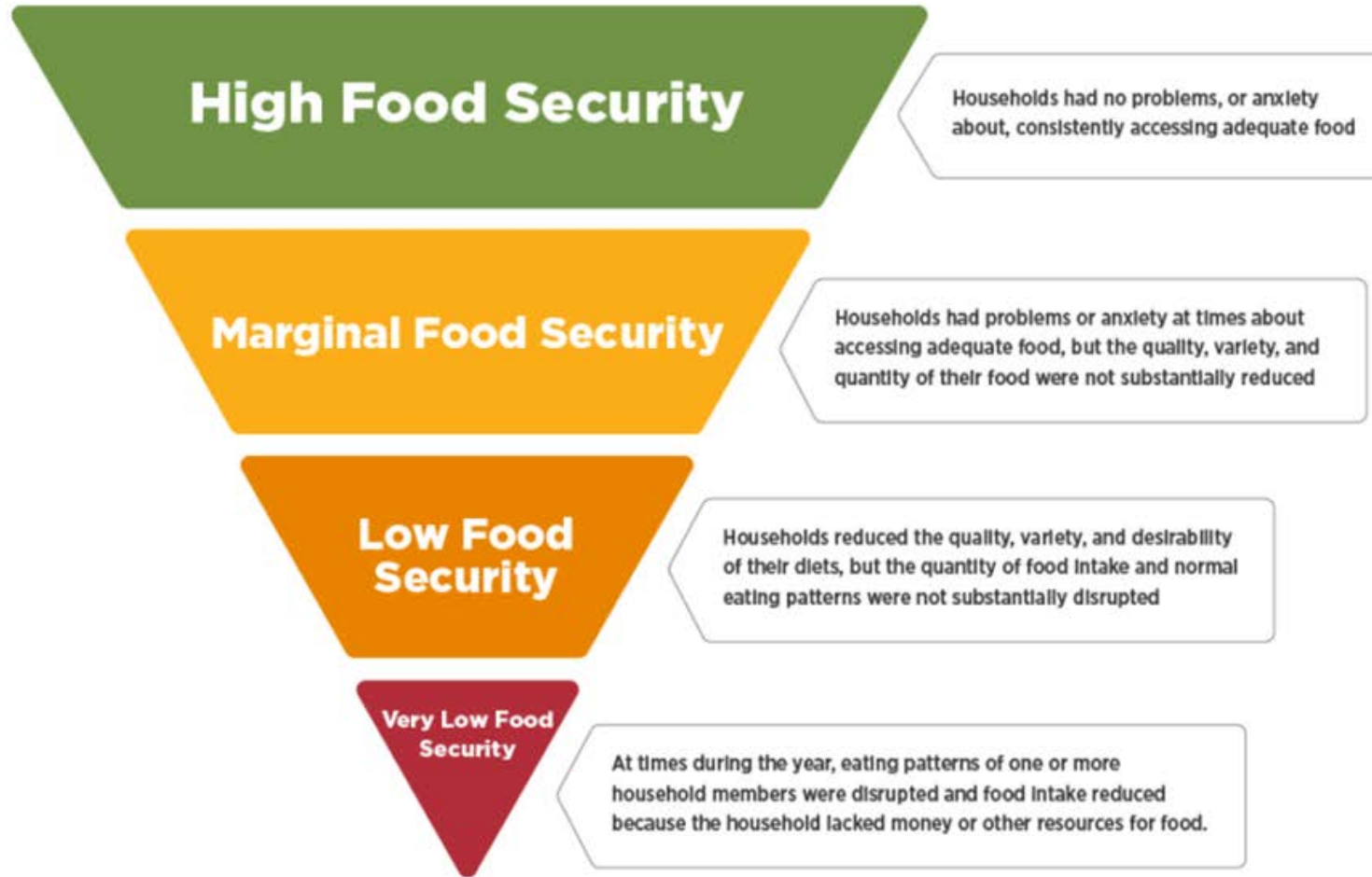
Definitions:



- Food insecurity
 - USDA: “a lack of consistent access to enough food for an active, healthy life”
 - Not specific to any level of income or poverty
 - Living < FPL does not equal food insecurity
 - Living > FPL does not equal food security
 - Hunger and food insecurity are not the same
 - Hunger = personal/physical sensation; physiological level issue
 - Food insecurity = lack of financial resources for food; household level issue
 - Ranges of food security (next slide)

FPL =
Federal
Poverty Line

Definitions: (cont.)



Source: Adapted from the USDA Economic Research Service.

Definitions: (cont.)



- Food Deserts

- Residential areas with limited access to affordable and nutritious food
- Linked to poor diet and greater risk of obesity
- Often assessed by the distance between homes and supermarkets

- Food Swamps

- Neighborhoods where fast food and junk food largely outweigh healthy alternatives
- High density fast food and junk food items
- Low density healthy food restaurants and stores

Food Insecurity Broken Down

A Conceptual Framework: Cycle of Food Insecurity & Chronic Disease



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



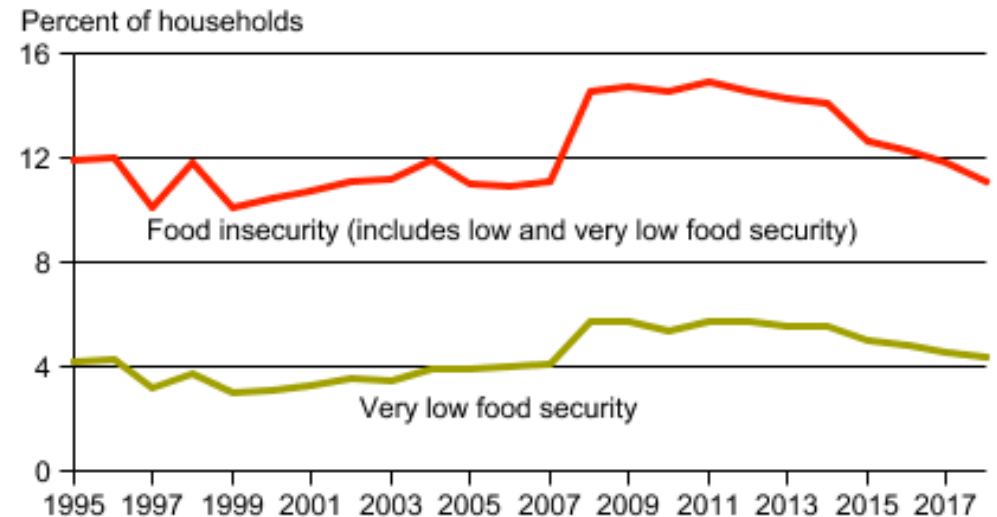
Food Insecurity in the United States



Food Insecurity in the United States

40 million
-or-
1/8 
people are food insecure.

Trends in prevalence rates of food insecurity and very low food security in U.S. households, 1995-2018

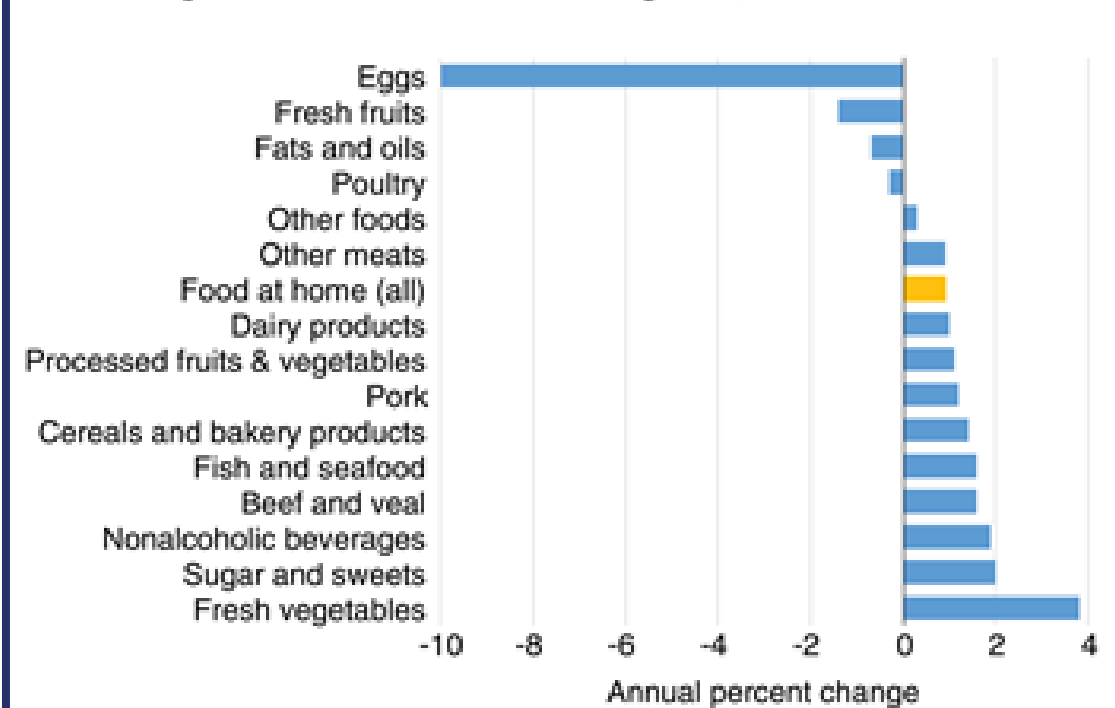


Note: Prevalence rates for 1996 and 1997 were adjusted for the estimated effects of differences in data collection screening protocols used in those years.

Source: USDA, Economic Research Service, using data from Current Population Survey Food Security Supplement.

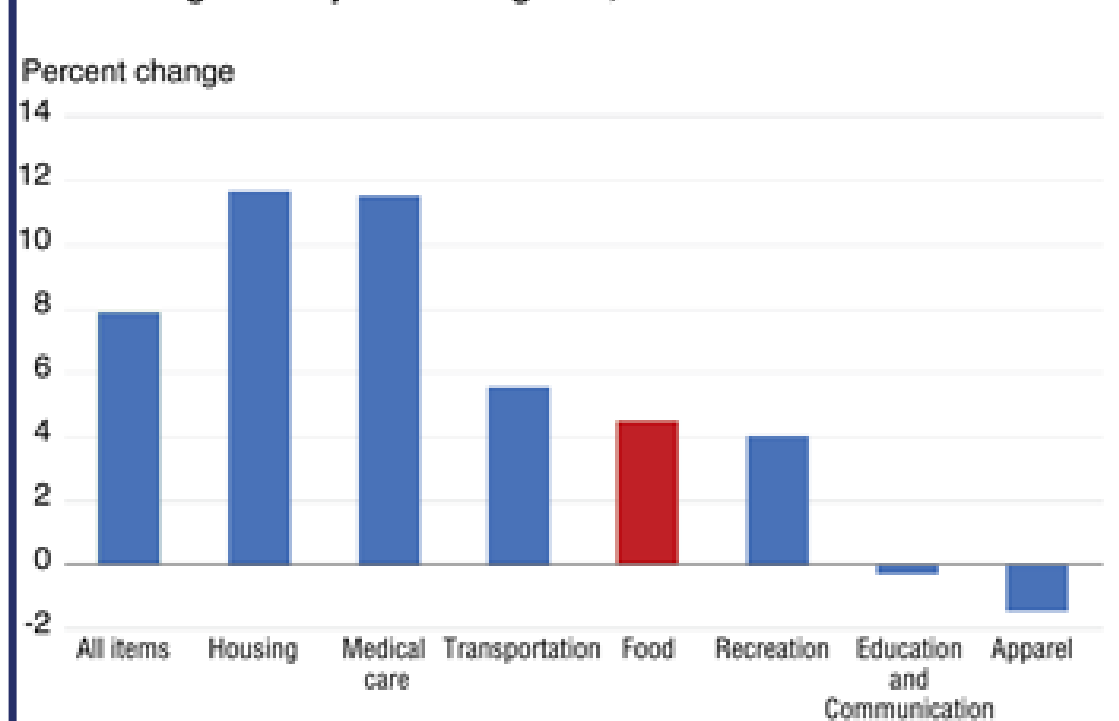
Food Insecurity in the United States

Price changes for CPI at-home food categories, 2018 to 2019



CPI = Consumer Price Index
 Source: USDA, Economic Research Service using U.S. Bureau of Labor Statistics CPI data.

Price change for major CPI categories, 2015-2019



CPI = Consumer Price Index.
 Source: USDA, Economic Research Service using data from the U.S. Bureau of Labor Statistics.



A need
in our
Ryan White
Program...

The data that jumpstarted it all...



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CARTOON
MOVEMENT

- In 2017, almost half of patients served fell below 130% of the Federal Poverty Line (FPL)
 - $806/1678 = 48\%$
 - SNAP Guidelines = at or below 130% FPL



Other barriers to food insecurity identified in our population:



- Insufficient SNAP (food stamps)
 - Maximum \$194 per month for 1 person in PA
 - Feeding America = average monthly spending \$275 for 1 person
- Lack of knowledge regarding nutrition and budgeting
- Lack of confidence in the kitchen
- Limited cooking equipment

Food Insecurity Amongst PLWH



- Access to Care in the Homeless (REACH) Cohort (2009)
 - San Francisco area
 - Population: Homeless and marginally housed PLWH
 - Food insecurity measure: Household Food Insecurity Access Scale (HFIAS)
 - Out of 104 participants, 51% identified as food insecure
- Findings
 - Severe food insecurity was associated with a 77% lower rate of viral suppression

Food Insecurity Amongst PLWH (cont.)



“food insecurity detrimentally shapes HIV health behavior and outcomes”

- Whittle, H.J. et al (2016)
 - San Francisco Bay Area
 - Population: Low income PLWH receiving food assistance at a local non-profit
 - Food insecurity measure: In-depth one-on-one interviews
- Findings
 - Food insecurity was reported to contribute to the following:
 - Poor ART adherence
 - Missing clinic visits (due to feelings of hunger/fatigue, exacerbated ART side effects w/o food)
 - Avoiding food bank/pantries/ free meal sites d/t HIV stigma
 - Depression (due to chronic hunger, feelings of failure, undernourishment)

How Food Insecurity Might Impact: PLWH (Persons Living With HIV)



- Lack of access to appropriate food and nutrition can further exacerbate complications of HIV/AIDS...
 - Malnutrition/ wasting
 - Compromised immunity
 - Nutrient deficiencies
 - Increased vulnerability to infectious diseases
- Consequences are more severe for AIDS
 - Requires increased calorie and protein needs
 - More vulnerable to food borne illness
- Some ART must be taken with food for proper absorption
 - Rilpivirine requires 390 calories



How Food Insecurity Might Impact: Malnutrition



- Increased calorie and protein intake needed for weight gain
 - Many high protein foods are costly and harder to find at food banks/pantries
- May benefit from oral nutrition supplements for weight gain
 - Not all insurances will cover
 - Not all patients have insurance
 - Expensive to purchase OTC



How Food Insecurity Might Impact: Diabetes

- Many low-cost food items are carbohydrate-rich
 - Pastas, rice, bread, packaged/processed food items often contain added sugar
- Fresh vegetables, meat, seafood are costly
- Specialty sugar-free, diet, keto, diabetic-friendly alternatives are often more expensive than their counterparts



How Food Insecurity Might Impact: Hypertension & Heart Disease



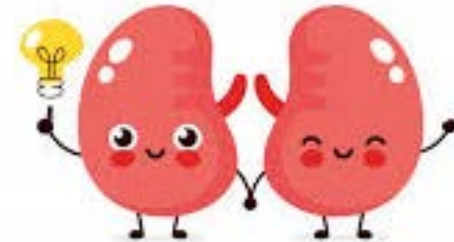
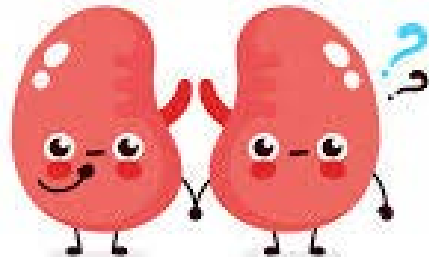
- Packaged, canned, processed food items are high in sodium
 - Often types of foods found at food banks/pantries
- Food recommended for low sodium diet are fresh produce and meats
 - More costly
 - Not usually found at food banks/pantries
- Heart healthy alternatives are usually more costly
 - Ex: butter vs olive oil, beef vs fish
- Low-cost dining out options are high in sodium and saturated fat



How Food Insecurity Might Impact: Renal (Kidney) Disease



- Increased calorie and protein needs due to dialysis
- Very specialized, restricted diet
 - Tight food budget may not allow for patients to purchase items needed
- Food bank/pantries might not have food items appropriate for diet



How Food Insecurity Might Impact: Seniors (65+)



- Immunosenescence
 - More fruits and vegetables
- Difficulty with access to grocery stores
- Difficulty transporting / carrying heavy groceries





UPMC CCID's
Food Assistance Program

About

- Launch date: August 2017
- 78 patients active in 2018
- 72 patients active in 2019
- Program capacity = 100 patients



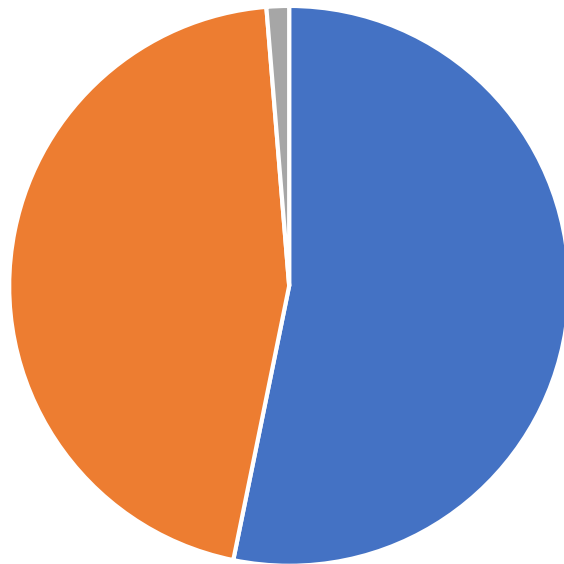
Demographics of Program Patients



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2018

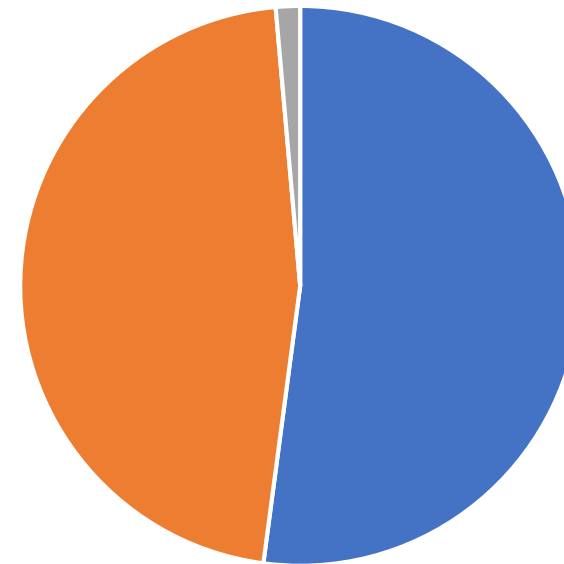
Gender



■ Male ■ Female ■ Transgender

2019

Gender



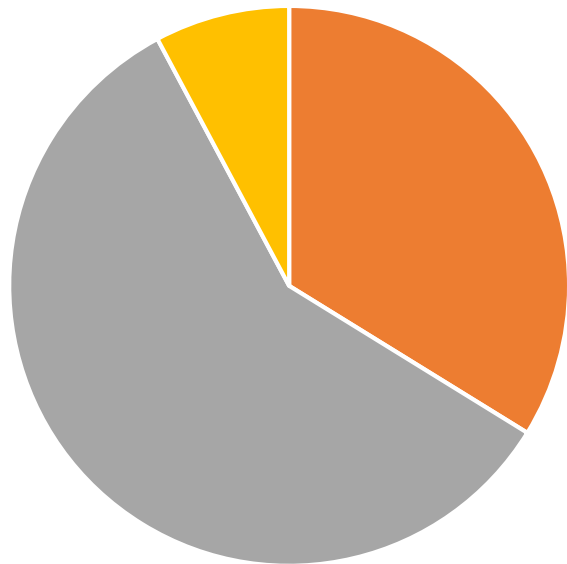
■ Male ■ Female ■ Transgender

Demographics of Program Patients



2018

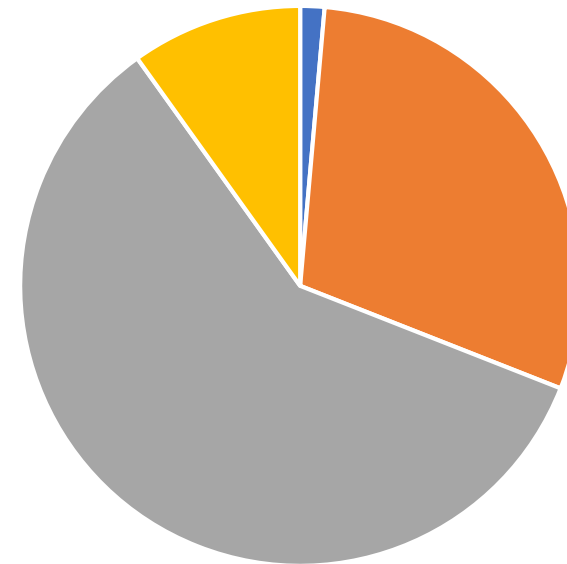
Age



■ 13-24 yo ■ 25-44 yo ■ 45-64 ■ 65+ yo

2019

Age



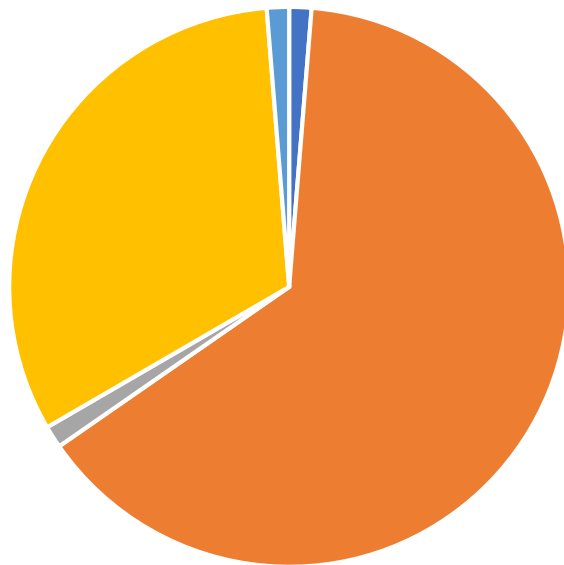
■ 13-24 yo ■ 25-44 yo ■ 45-64 yo ■ 65+ yo

Demographics of Program Patients



2018

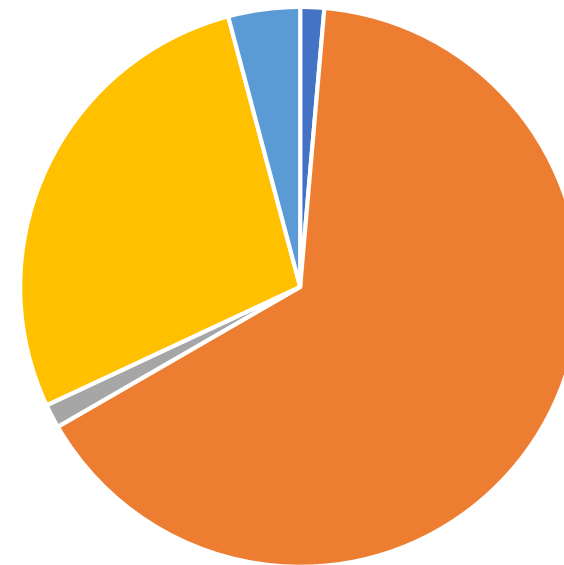
Race/Ethnicity



■ Asian ■ African American ■ Hispanic ■ White ■ More Than One Race

2019

Race/Ethnicity



■ Asian ■ African American ■ Hispanic ■ White ■ More Than One Race

Food Assistance Program Mission:

To supplement additional needs for food beyond referrals to SNAP, local food banks and pantries through reliable and consistent access to food via month-to-month gift cards.



Funding

340B Program



Referrals

- Patients are assessed for eligibility by referral
- Referrals by anyone in our care team
 - Physicians, APPs
 - Social Workers
 - PharmD
 - Nursing staff
 - Peer Advocates



1. Screening Tool

- Adopted from U.S. Adult Food Security Survey Module

The first statement is “(I/We) worried whether (my/our) food would run out before (I/we) got money to buy more.” Was that often true, sometimes true, or never true for (you/your household) in the last 12 months?

- Often true
- Sometimes true
- Never true
- DK or Refused

“The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

- Often true
- Sometimes true
- Never true
- DK or Refused

2. Income

- $\leq 130\%$
Federal
Poverty
Line

SNAP Income Limits

There are a few factors that contribute to higher SNAP allowances and income limits in Pennsylvania. Factors include household size, monthly income, and if a member of your household is 60-years-old or older, or has a disability. The best way to determine if and how much your household will qualify for SNAP is to apply.

Income requirements, beginning Oct. 1, 2019 through Sept. 30, 2020:

Household Size	Maximum Gross Monthly Income
1	\$1,354
2	\$1,832
3	\$2,311
4	\$2,790
5	\$3,269
6	\$3,748
7	\$4,227
8	\$4,705
each additional member	+ \$479

Criteria For Enrollment



3. SNAP Enrollment (or attempt to)

- Why do we require this?
 - Addition made after starting the program
 - Many patients who identified as food insecure were found to be eligible for SNAP, but did not sign-up or renew for a variety of reasons
- Can refer to social work for assistance
- Exceptions: Non-citizens

Additional Data Collected

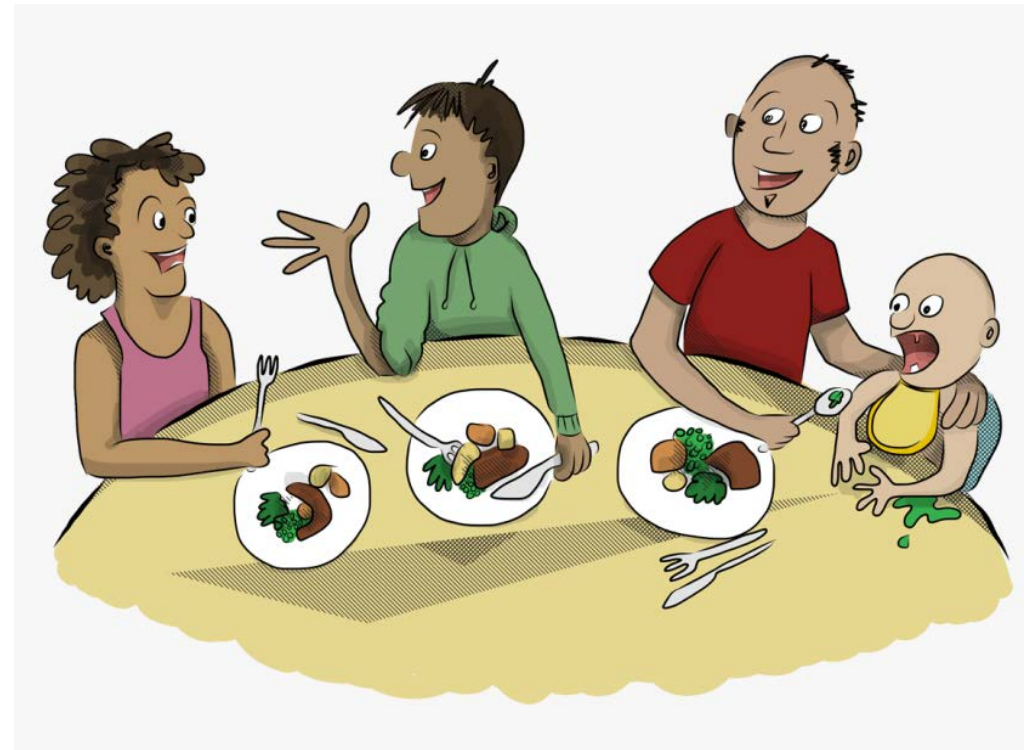


- Other food resources utilized
- Diet history
 - Diet recall
 - Food preferences
 - Food frequency
- Recent weight loss (if any)
- Nutritional deficiencies
 - Ex: Ca, Vit D, iron, B12, folic acid, thiamine

Food Assistance

Households 1-2 persons
= \$25 / month

Households 3+ persons
= \$50 / month



Food Assistance

Utilize Discount Retail Grocery Chain

- Does not sell alcohol or tobacco products
- Sells fresh fruits/vegetables/meats
- Several locations in the Pittsburgh area
 - Accessible from bus lines



Guidelines

- Receipts must be returned in order to receive next gift card
- Gift card must be used to purchase HEALTHY/NUTRITIOUS food
 - No soda, candy, chips, fried food, pet food, etc



Food Assistance Follow-ups



- Monthly
 - Patient's responsibility to schedule follow-up appointments
- Receipts reviewed
 - Procedure for unhealthful items purchased
 - Insight to patient's diet
 - Arguably more reliable than diet recall
- Loss of receipt procedure

Food Assistance Follow-ups (cont.)



- Required formal nutrition visit/assessment at least every 6 months
- Additional nutrition visits required at discretion of dietitian in consideration of nutrition-related comorbidities
 - Ex: DM A1C >7.0
- Must have seen MD within the past 6 months to receive next gift card





Food Assistance Program Outcomes

1. Retention in Care

PACT Goal =
<12%



2018 Gaps in Care Indicator

Patients at PACT	Patients in PACT Food Assistance Program
239/1314	5/73
18.19%	6.85%

2019 Gaps in Care Indicator

Patients at PACT	Patients in PACT Food Assistance Program
222/1300	6/58
17.08%	10.34%

2. Viral Loads

PACT Goal =
>90%



2018 % Viral Load Suppression

Patients at PACT	Patients in PACT Food Assistance Program
1442/1579	72/77
91.32%	93.51%

2019 % Viral Load Suppression

Patients at PACT	Patients in PACT Food Assistance Program
1467/1600	64/71
91.69%	90.14%

3. Diabetes



**PACT General Population
% Patients Living With Diabetes**

	Total # Patients	# Patients with DM	% Patients with DM
2018	1585	367	23.15%
2019	1607	358	22.28%

**PACT Food Assistance Patients
% Patients Living With Diabetes**

	Total # Patients	# Patients with DM	% Patients with DM
2018	78	22	28.21%
2019	72	26	36.11%

3. Diabetes (cont.)



PACT General Population Average A1C of DM Patients

	Average A1C of DM Patients
2018	6.90
2019	6.92

PACT Food Assistance Patients Average A1C of DM Patients

	Average A1C of DM Patients
2018	6.76
2019	6.74

3. Diabetes (cont.)



**PACT General Population
% DM Patients With A1C >9.0**

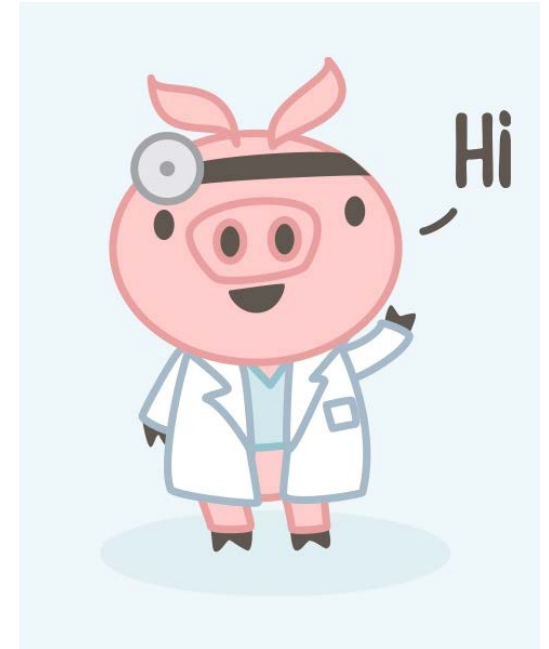
	Total # Patients	# Patients with A1C >9.0	% Patients with A1C >9.0
2018	1585	56	3.53%
2019	1607	53	3.30%

**PACT Food Assistance Patients
% DM Patients With A1C >9.0**

	Total # Patients	# Patients with A1C >9.0	% Patients with A1C >9.0
2018	78	4	5.13%
2019	72	3	4.17%

4. Increased engagement

- In diabetes, nutrition and psychotherapy visits
- “Piggy-backing” appointments
- Reminders of upcoming visits
- RDN communicates with care team about patient needs



5. Increased rapport

- Monthly visits build relationships and trust!
- Discussing nutrition can be intimidating!
 - Program helps develop rapport/trust that nutrition discussions are meant to be helpful, not judgmental!



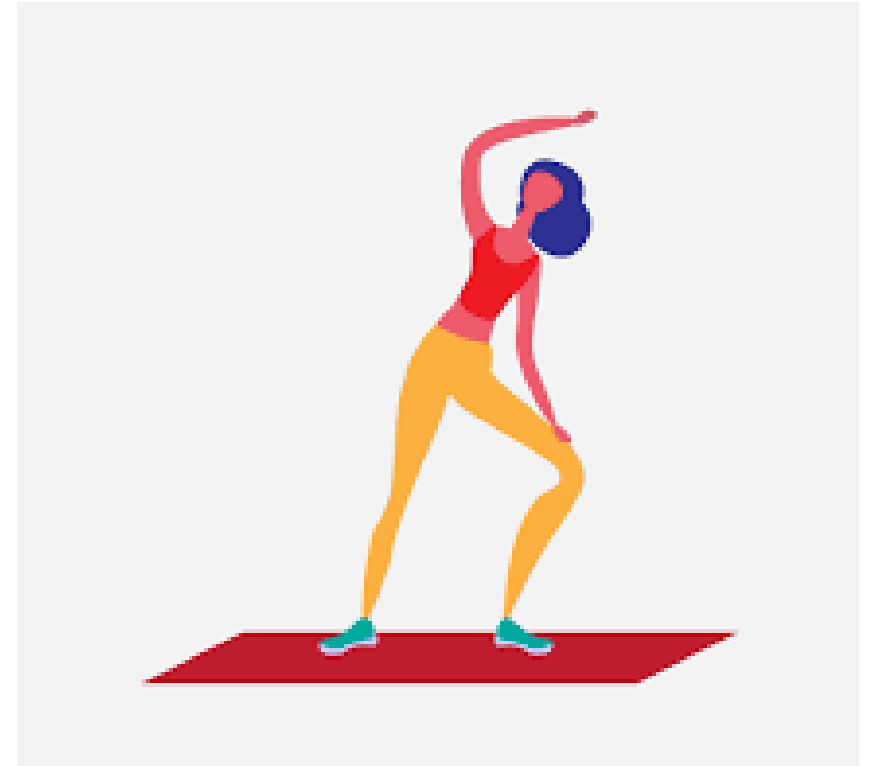


Clinical Cases

Weight Management

Ms Lisa

- 63 year old African American female
- Lives in senior high rise, limited transportation, independent, receives \$194 SNAP monthly
- Joined food assistance program and started shopping at discount grocery stores to save money, referred to traveling discounted farmer's markets and senior benefits
- Nutrition goal = weight loss and healthy lifestyle choices
- Joined local exercise program 3 days/week
- Walks ~45 mins 2-4 days/week
- Mindful eating
- **LOST 44# IN ONE YEAR!!**
 - Improved arthritis-associated pain and mental health

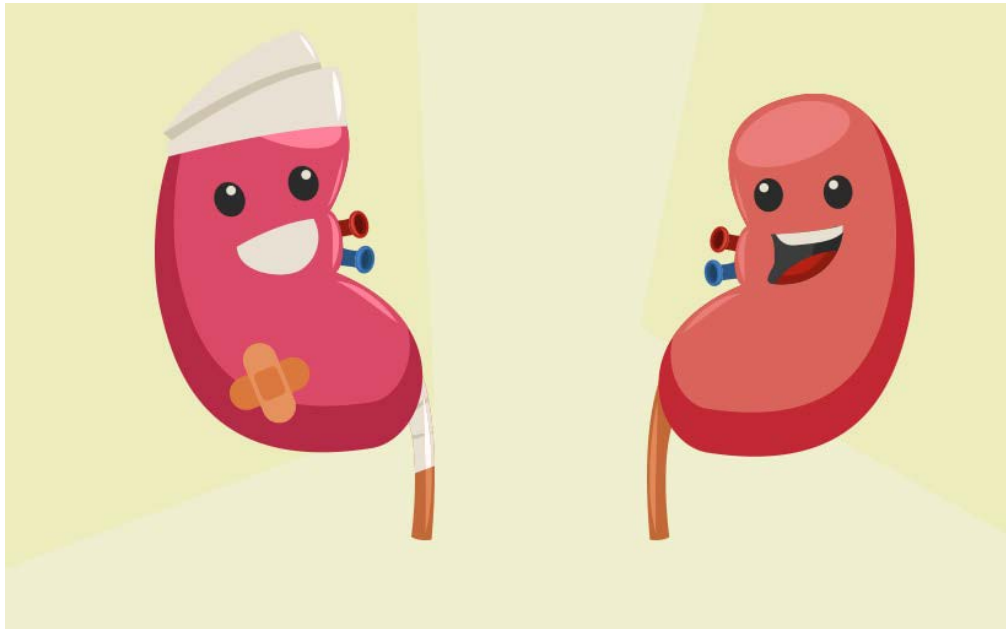


Diabetes Management

Frederick

- 39 year old African American male
- \$194 SNAP monthly, lives in food desert, does not own car, transportation is a large barrier
- Stated he is knowledgeable about DM-friendly diet but cannot afford fresh produce- eats mostly low-cost processed meals
- Joined food assistance program and started shopping at discount grocery stores to save money, referred to food pantry <1 mile from his house for additional resources
- Nutrition goal = better DM control; eat more fresh produce
- Discussed stretching food dollars, DM plate, creating budget—friendly healthy meals
- **After enrolling in food assistance program in 2017, his A1C dropped from 7.9 to 6.3**

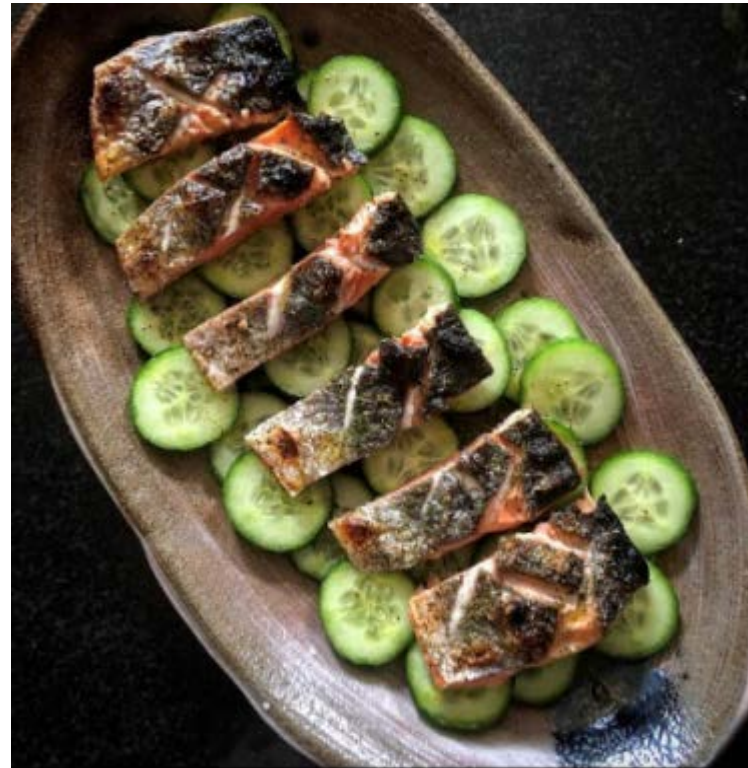




Haven

- 51 year old African American male, has wife and 2 teenage children
- Received kidney transplant 2019
- Soon after developed post-transplant DM
- Food assistance program helped build rapport prior to transplant and DM diagnosis
- Diagnosed w/ DM 2/2019 => by 7/2019, his A1C was well-controlled at 6.2 through weekly help from the PACT care team

Healthy Meals On A Budget



Meals made by patient, Graham, using gift cards from food assistance program!



Challenges (And How To Address Them)



Transportation

- Ways to address...
 - Providing bus tickets
 - Mailing gift cards to patients with extreme difficulty with transportation
 - Ex: far distance, disability/health reasons
 - Case workers can drive patients to clinic or pick up gift cards for patients
 - Other household members may pick up with patient's permission

Lost receipts

- Ways to address...
 - Patients given return envelopes for easy return
 - Patients can email picture of receipt to dietitian
 - Case managers can drop off/mail/fax receipts for patient



Misuse of Gift Cards

- Purchasing unhealthful food items
- Purchasing non-food items
- Purchasing food for pets

Ways to address...

- Nutrition education/counseling opportunity on healthy choices
- Referral to PACT's hygiene closet
- Referral to Animal Rescue Center for free pet food





Program Limitations

Limitations

- Finite resources
 - Funding
 - Staffing
- Suspect that some patients are left unidentified
- We hope to find a way to address all patients in need





New Additions & Expansions

to the Food Assistance Program

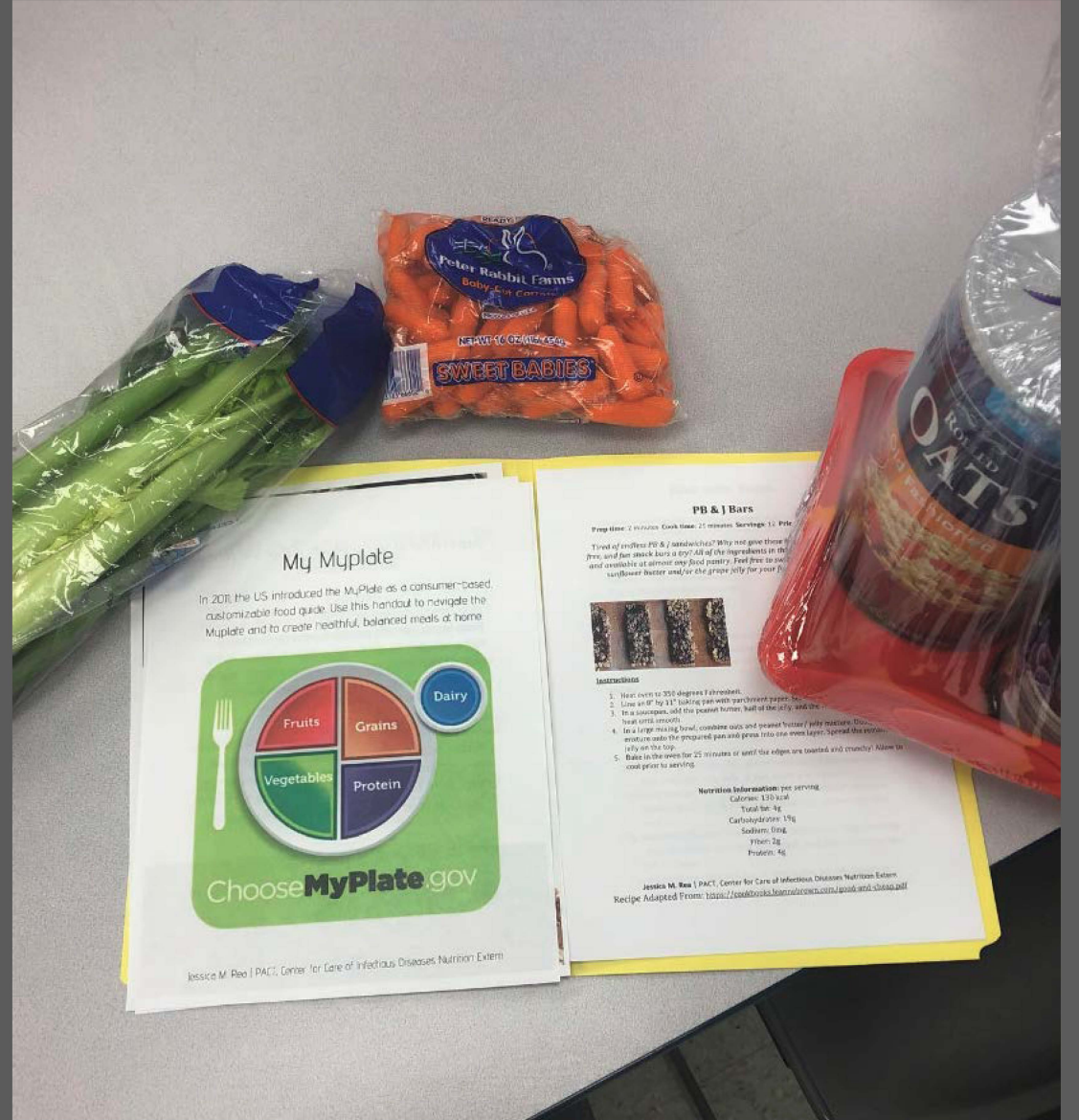
1. Cooking Classes



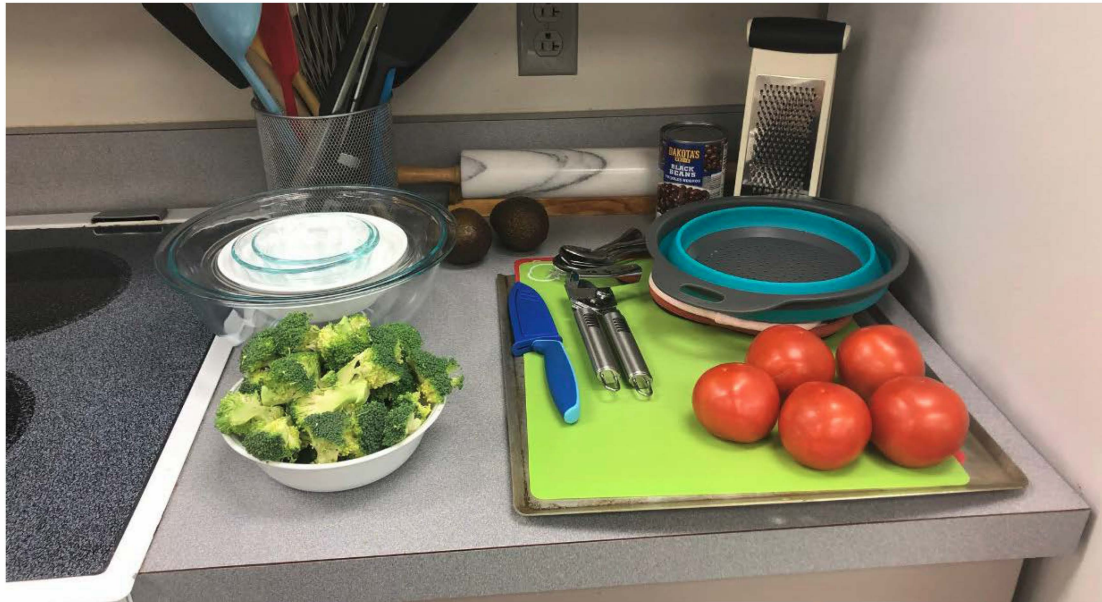
- Theme : Creating Healthy, Balanced Meals with MyPlate
- Objectives

After the demonstration has concluded...

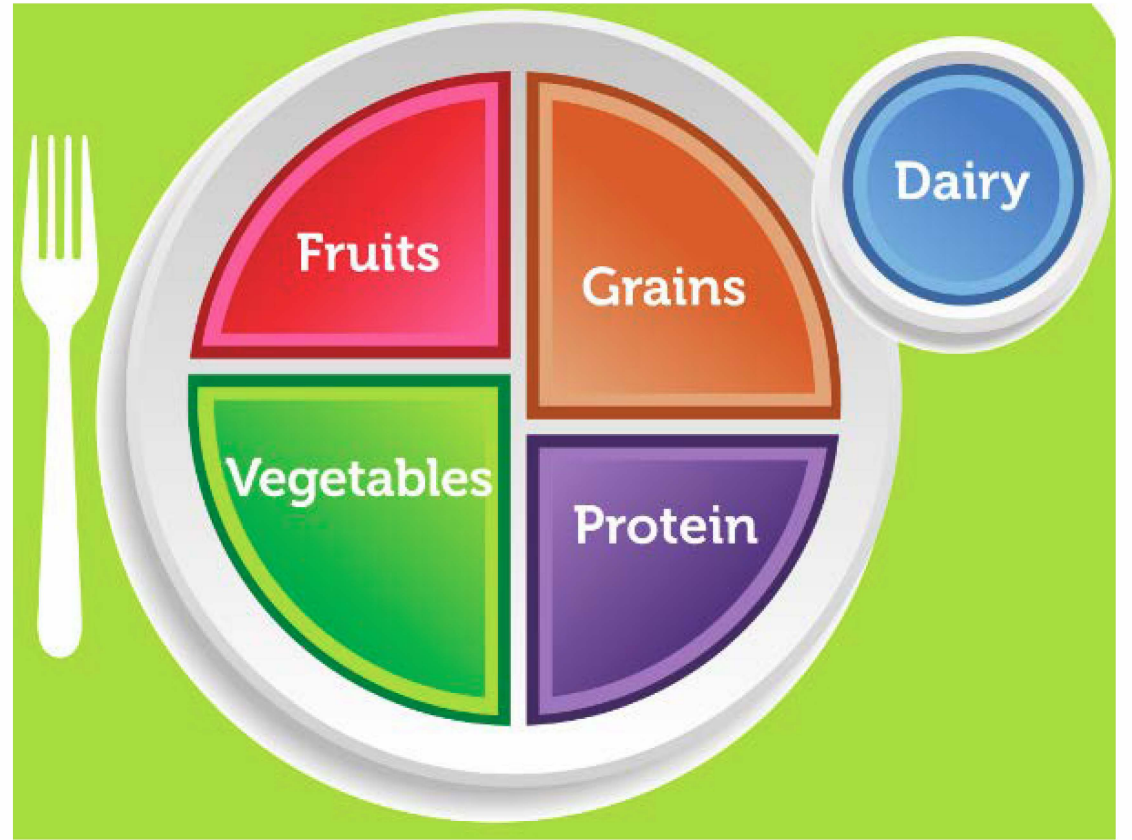
1. Participants will be able to identify and state the 5 sections of the MyPlate
2. Participants will be able to navigate the provided “My MyPlate” handout to create a balanced meal.
3. Participants will be able to demonstrate how to properly cut an avocado, drain/rinse canned beans, and steam cauliflower/broccoli
4. Participants will be able to state one nutritional benefit of (plain) russet potatoes

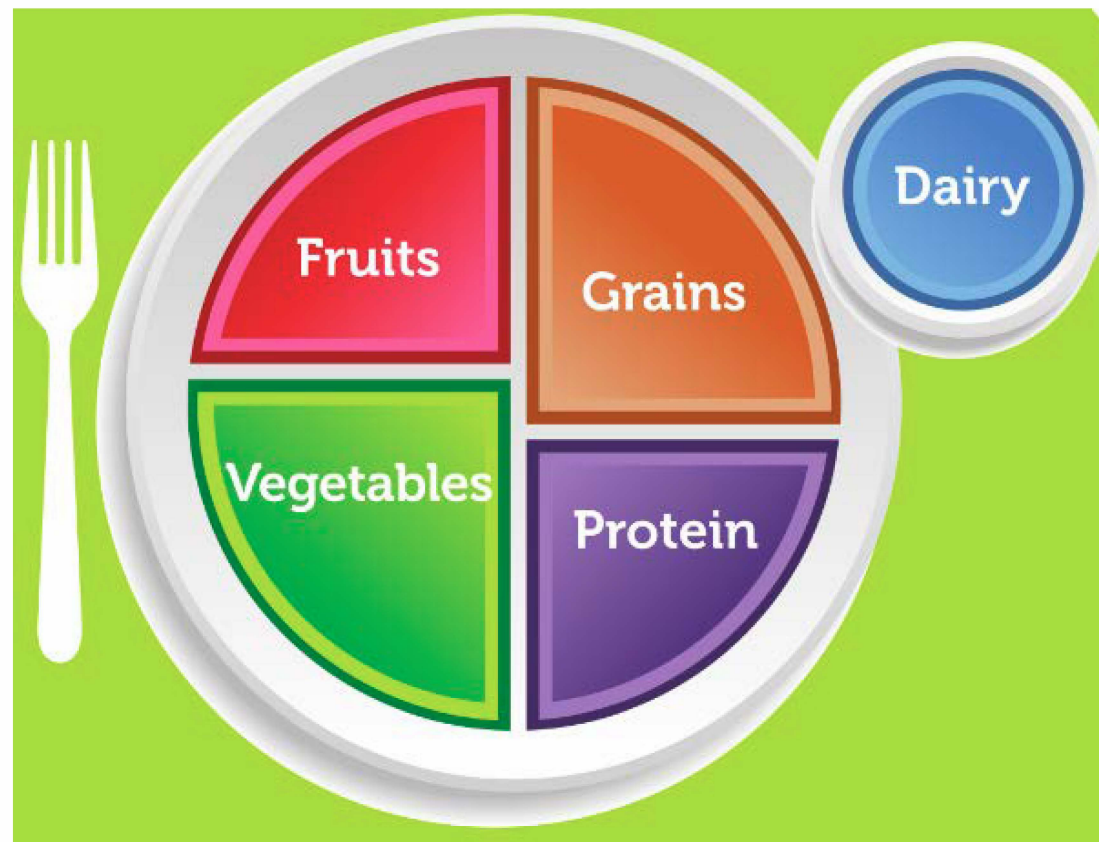












Class Outcomes

List 3 things that you learned today:

1. How to make sure the food is cooked at the right temp.
2. The difference between wheat beard and whole wheat beard.
3. How to work and cook difference type of food together.

List 3 things that you learned today:

1. The difference between whole grain and non-white grain (nutrients + fiber)
2. Why potatoes are important (Mag, Cal, K, fiber)
3. How to steam veggies

Patient Feedback

- “Everything [went well], even everyone’s meal that they prepared”
- “Slicing, dicing and cooking chicken went well”
- “Baking potatoes was easy!”

What went well and what didn't?

Everything went well, from the cooking to the education from the graduate student.

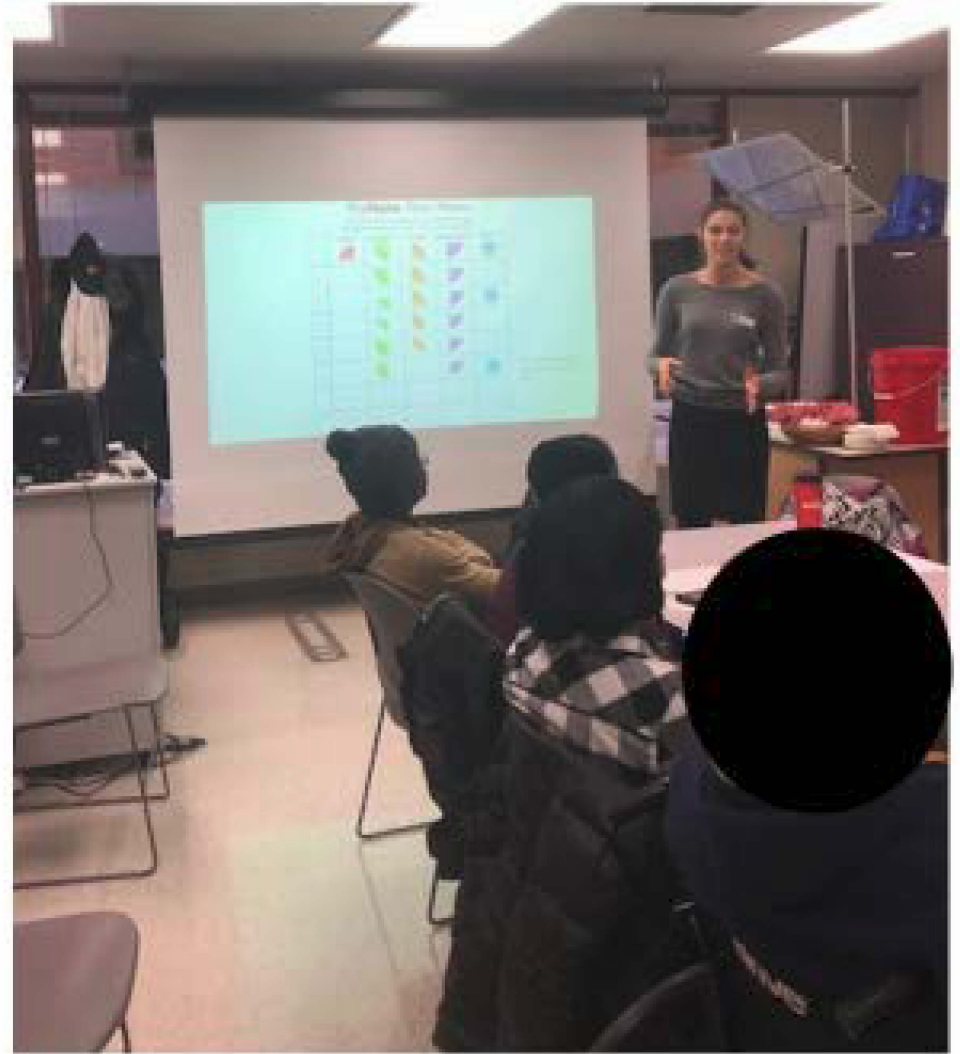
2. Educational Group Classes

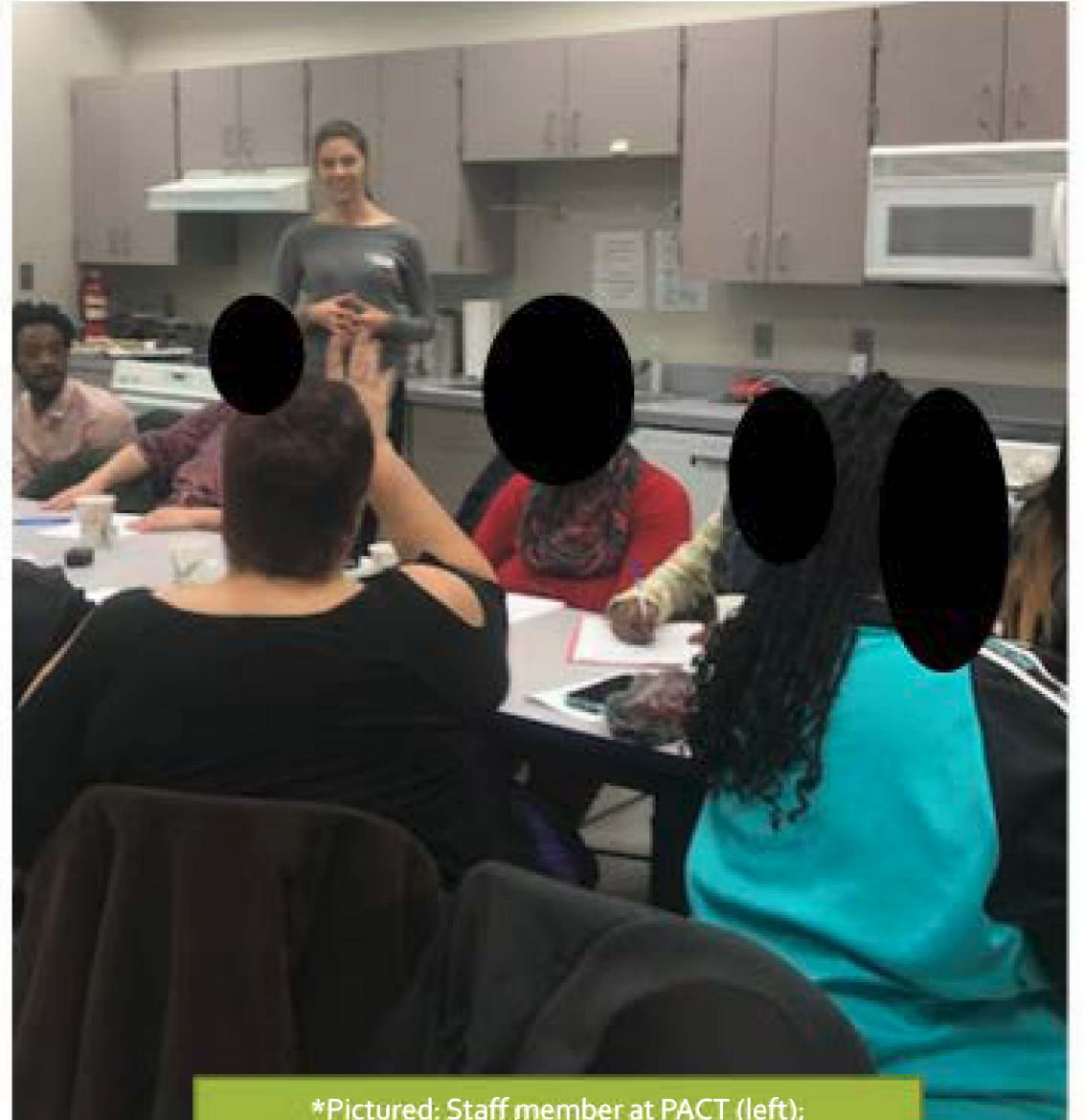
- Theme : Shopping and Preparing Healthy Meals on a Budget

- Objectives

After the lesson, attendees will be able to...

1. Accurately recall the 5 sections of MyPlate
2. Provide 3 examples of grain-based carbohydrate sources
3. Develop a meal plan that accurately reflects MyPlate guidelines
4. Distinguish between starchy and non-starchy vegetables
5. State two grocery shopping budgeting tips without aid





*Pictured: Staff member at PACT (left);
Dietitian Intern (right)

Description	Amount
Boneless, Skinless Chicken Breast (\$1.69/lb)	\$1.69
*Salmon Filet (1lb)	\$9.99
*Cheddar Cheese (8 oz)	\$1.89
*Spinach (8 oz)	\$1.75
Broccoli, frozen (12 oz)	\$1.05
*Potatoes (5lb)	\$3.09
*Green Beans (16 oz)	\$1.85
Carrots, canned (15 oz)	\$0.55
*Onions (3lb)	\$1.35
*Whole Grain Tortillas (17.5 oz)	\$1.09
Bell Pepper	\$0.89
*Celery (bundle)	\$1.09
*Brown Rice (16 oz)	\$1.65
*Low Sodium Chicken Broth (32 oz)	\$1.35
*Edamame (12 oz)	\$1.95
*Reduced Sodium Soy Sauce (15 fl oz)	\$1.45
White Mushrooms (8oz)	\$1.45
Total	\$34.13
Unit Total	\$14.61





Rea_2019



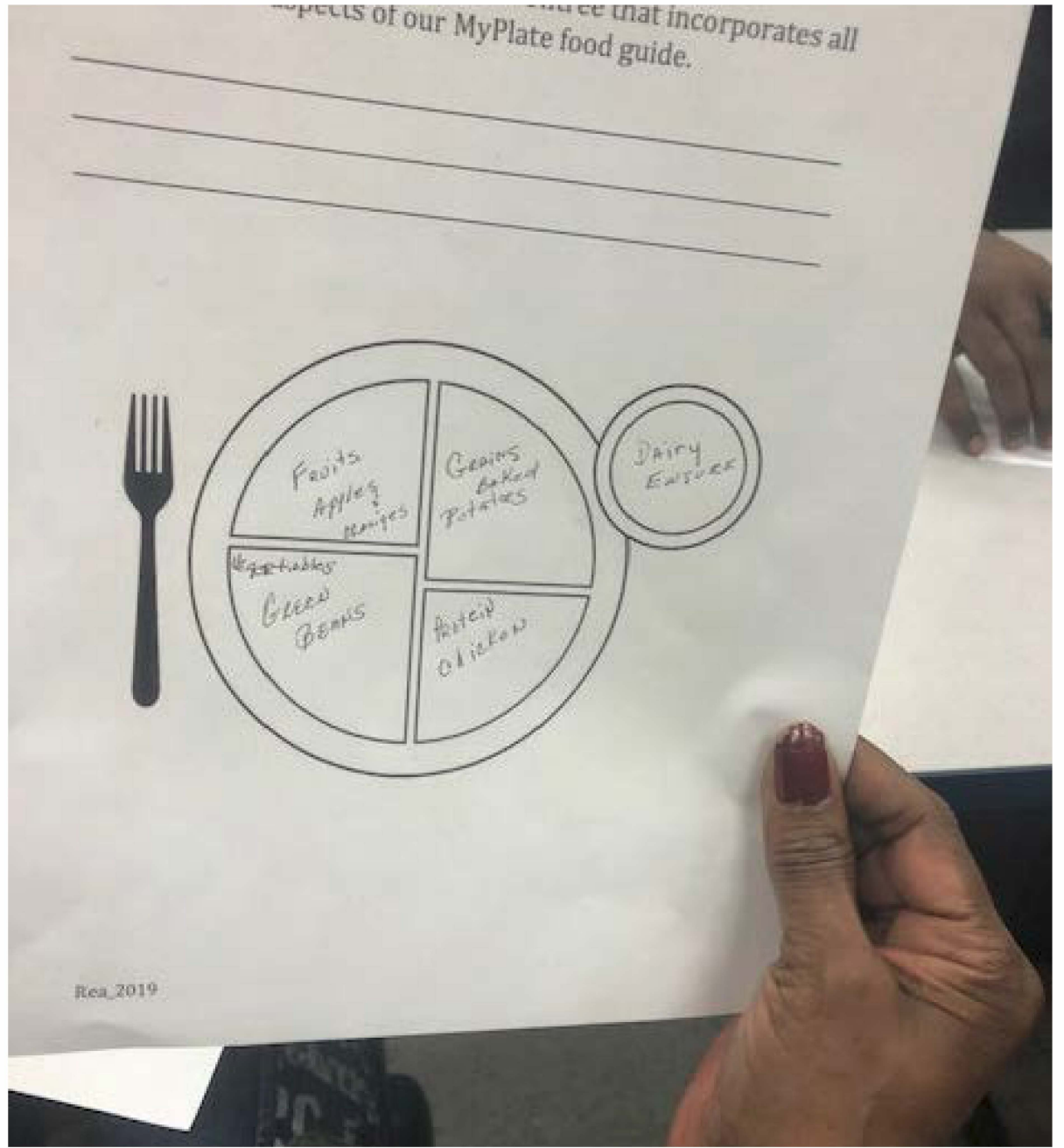
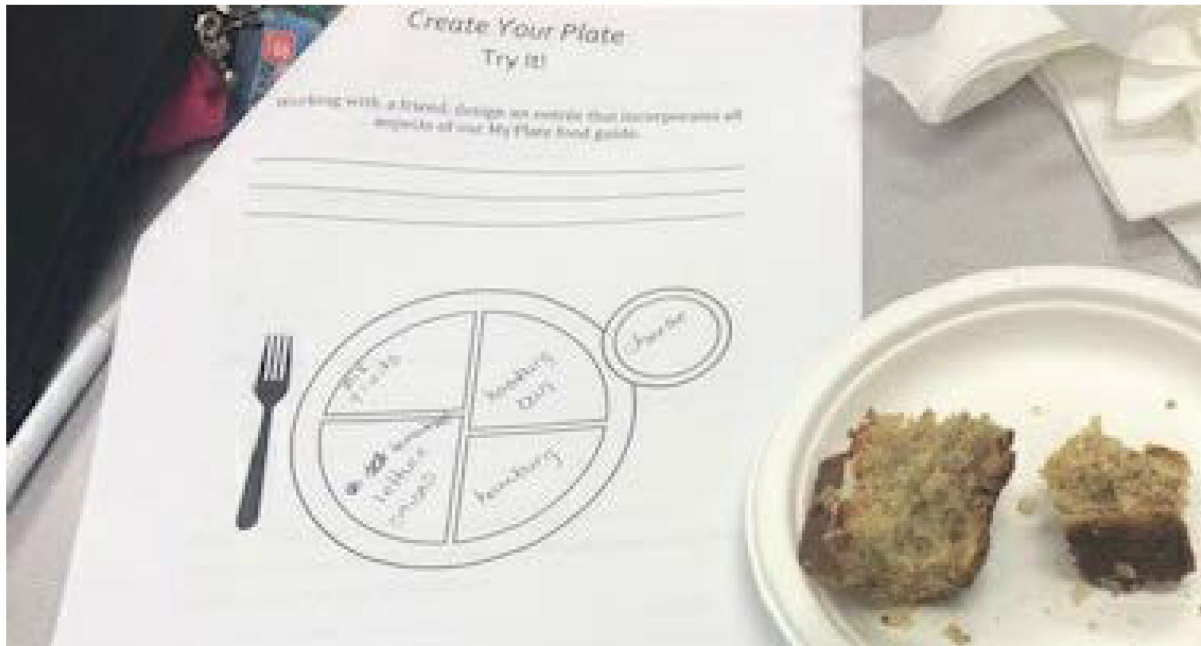
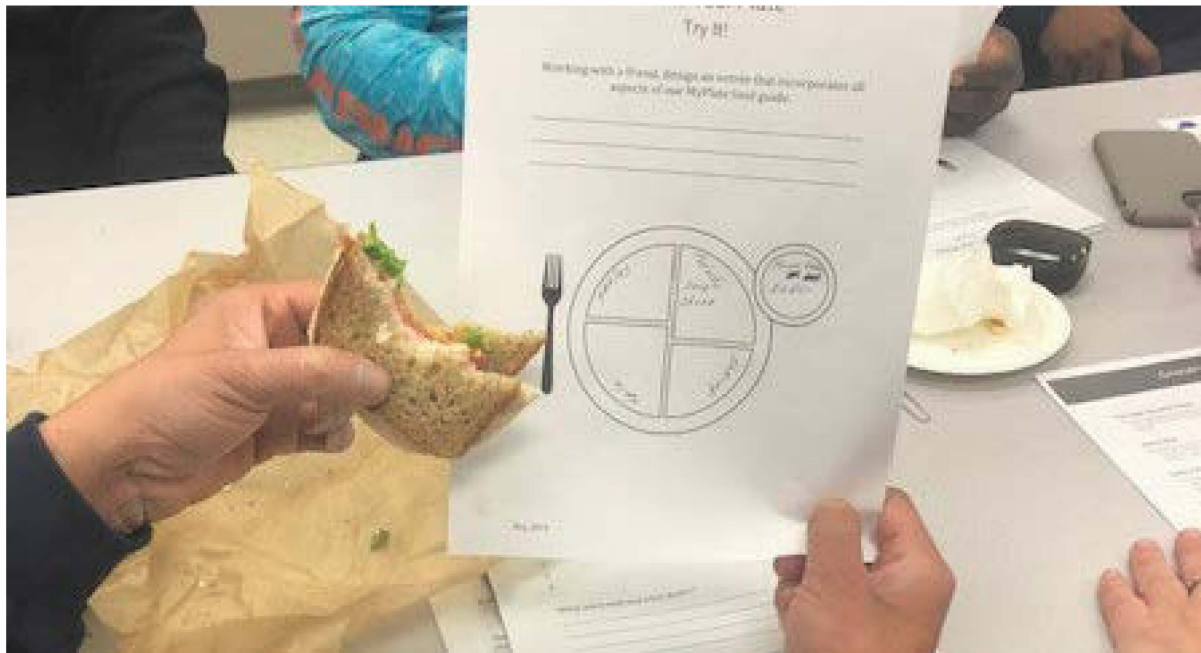
Rea_2019



Rea_2019



Rea_2019



Class Outcomes

List 3 things that you learned today:

1. How to snack
2. 3 meals a day are important.
3. Different between wheat & whole grain bread.

List 3 things that you learned today:

1. How to Shop more on a budget
2. How to buy in bulks and save
3. How to plan meals on a budget

List 3 things that you learned today:

1. HOW TO EAT HEALTHIER IN WINTER
2. HOW TO EAT WHEN YOU ARE ON BLOOD THINNER
- 3.

Patient Feedback

What went well and what didn't?

Everything went well, the teacher was very hands on and answered every question everyone had.

What went well and what didn't?

Everything was good
Jessica was an angel

What went well and what didn't?

Everything went well
Very informative



The COVID19 Pandemic

& it's impact

Feeding America:

“Pre-pandemic data reflect the lowest food insecurity rates seen since before the Great Recession, but the current crisis is likely to reverse the improvements that have occurred over the past decade”

Impact

Feeding America: “Unemployment has soared, and demand has spiked at food banks and pantries across the country.”



- Unemployment increased significantly
- Depleted/ overwhelmed food banks/pantries
- Drive-up food distributions are not accessible by those without a car
- Increased food costs , especially meat
- Children home from school – more mouths to feed
 - \$3.02 = average cost of one meal in the US
 - Children in low-income households get breakfast and lunch Mon-Fri
 - 10 meals per week
 - $\$3.02 \times 10$ meals per week = ~\$30 extra per child per week
 - $\$30 \times 4$ weeks = ~\$120 extra per child per month
- Transportation limited during social distancing/stay at home orders

Table 1. Food Insecurity Projections by Scenario

	Scenarios		
	A	B	C
Unemployment rate increase (% pts)	1.1	4.5	7.6
Poverty rate increase (% pts)	1.5	2.6	4.8
Food Insecurity rate increase (% pts)	1.0	3.0	5.2
Increase to number of food-insecure individuals	3.3 million	9.9 million	17.1 million

Source: Calculations by Dr. Craig Gundersen with data from the 2014 to 2018 Current Population Survey, December Supplement.

Figure 3. Food Insecurity Trends & Projections

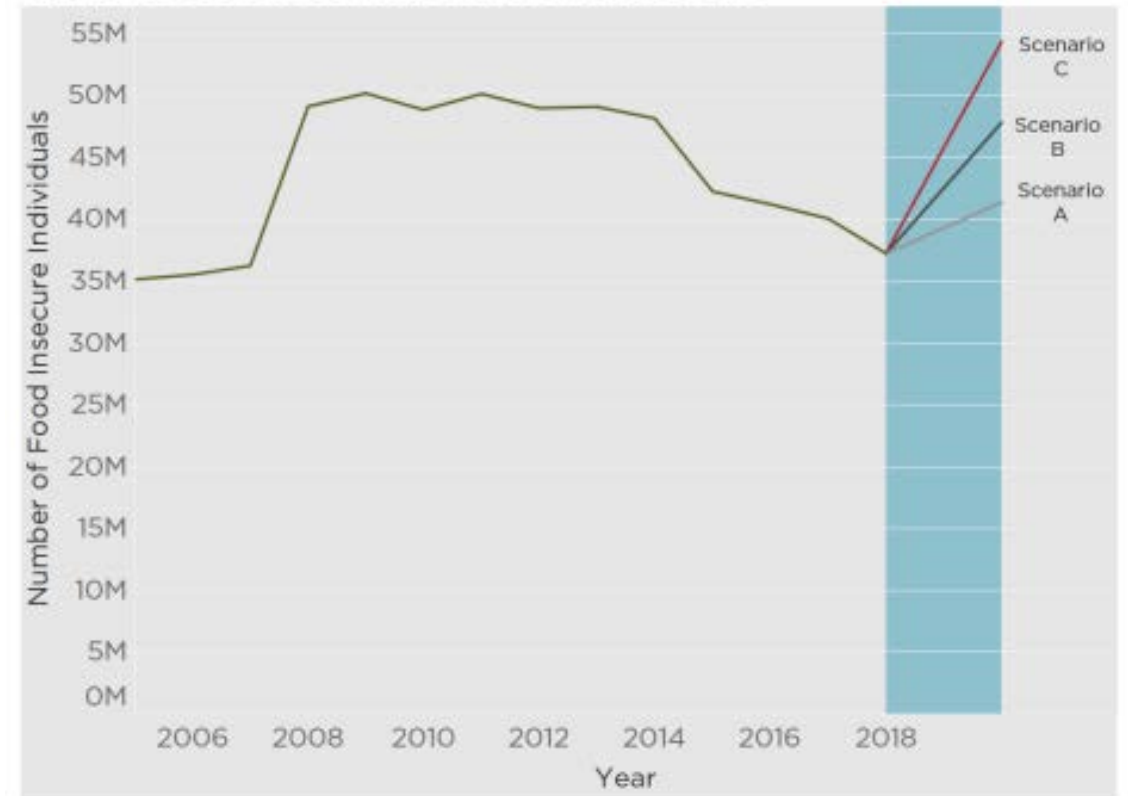
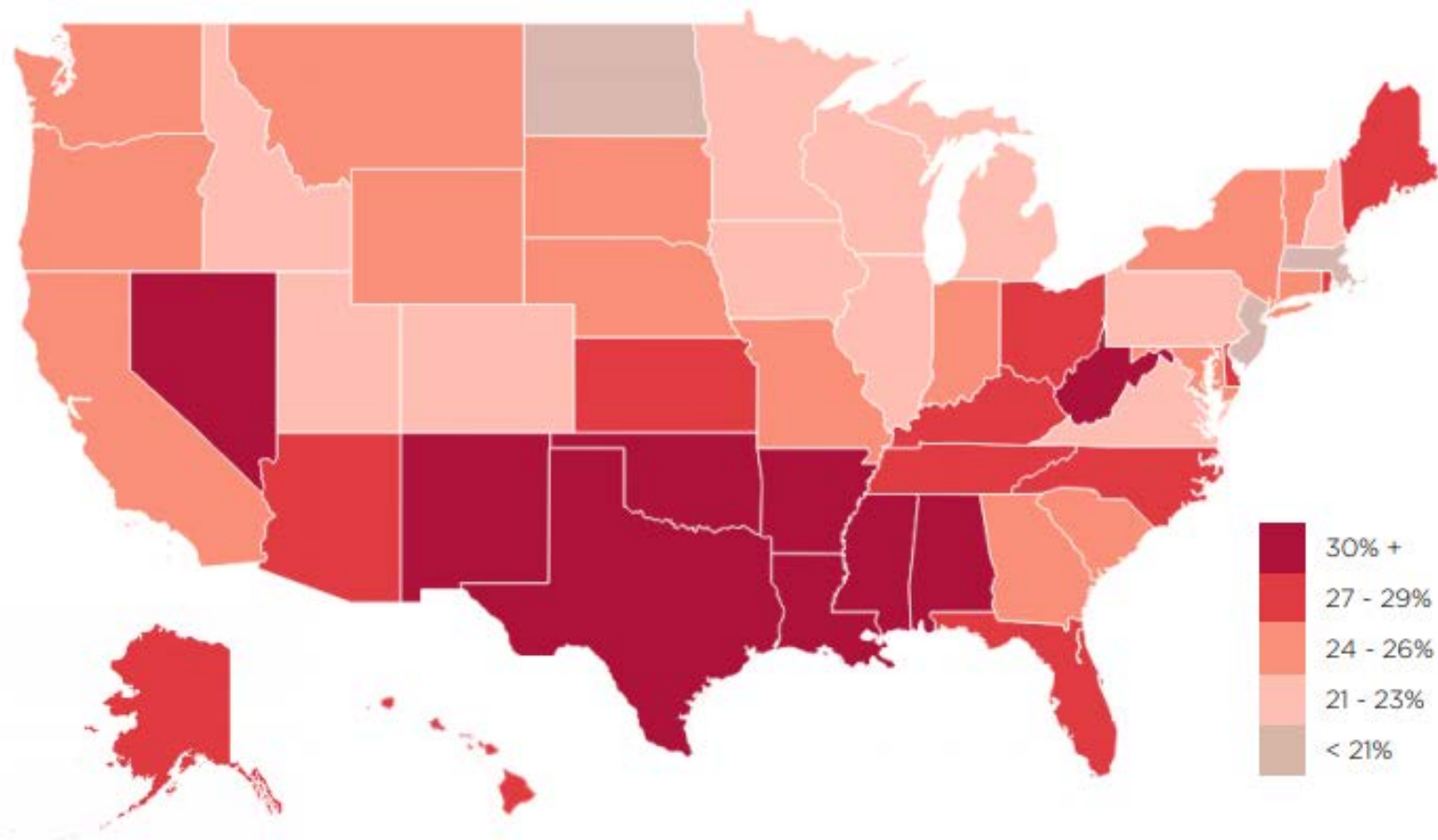


Figure 2. Projected rates of child food insecurity in 2020 by state





How to
**Start A Food Assistance
Program At Your Clinic**

What you'll need



1. Identified group that poses a need (Low income patients)
2. Funding source (340B Program)
3. Dietitian, Nutritionist, Social Worker, Peer Advocate (Dietitian)
4. Screening tool (U.S. Adult Food Security Survey Module)
5. Agreement form (Developed)
6. Form of accountability (Receipts)
7. Follow-up procedure (Monthly scheduled visits)

- Hold patients accountable for their purchases!
 - Don't be afraid to engage patients in a discussion about their shopping habits
- Ask patients questions that encourage them to reflect on dietary choices and spending habits
 - Ex: "Did you take advantage of this weeks produce deals?"
 - Ex: "How did you make your grocery list?"
 - Ex: "What meals did you cook for you/your family this week?"
- Have alternative resources for patients
 - Additional food resources, toiletry and hygiene item resources, pet food resources
- Encourage patients to take pictures of their meals to share!



How to
Start A Cooking Class!

What you'll need

1. Identified group that poses a need (Low income patients)
2. Funding source (340B Program)
3. Cooking Demo Lab (At University of Pittsburgh)
 - With cooking equipment!
4. Dietitian, Nutritionist (Dietitian)
 - And assistants (Dietitian Interns)
5. Agreement form (Developed)
6. Lesson Plan (Developed)
7. Pre/post survey (Developed)



Tips

- Safety, safety, safety!!!
- Have one instructor/assistant per 2-4 patients for assistance and to answer any questions
- Include education, followed by activity for patients to put into action
- Encourage interaction amongst patients – work together!

AND HAVE FUN!



Conclusion



“As a result of the vicious cycle of food insecurity and HIV/AIDS, international organizations such as the World Health Organization, WFP, and others are now recommending the integration of nutrition interventions into HIV/AIDS treatment and care programs.”

References



- <https://hungerandhealth.feedingamerica.org/understand-food-insecurity/>
- <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>
- https://www.ers.usda.gov/webdocs/publications/45014/30940_err140.pdf
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5708005/#:~:text=Food%20swamps%20have%20been%20described,relative%20to%20healthier%20food%20options.>
- https://www.feedingamerica.org/sites/default/files/2019-05/2017-map-the-meal-gap-food-price-variation_0.pdf
- <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx>
- <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-prices-and-spending/>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2607506/>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5917641/>
- <https://www.sciencedirect.com/science/article/pii/S0277953616305561?via%3Dihub>
- https://www.feedingamerica.org/sites/default/files/2020-05/Brief_Local%20Impact_5.19.2020.pdf
- https://www.feedingamerica.org/sites/default/files/2019-05/2017-map-the-meal-gap-food-price-variation_0.pdf
- https://www.feedingamerica.org/sites/default/files/2020-05/Brief_Local%20Impact_5.19.2020.pdf
- https://www.feedingamerica.org/sites/default/files/2020-04/Brief_Impact%20of%20Covid%20on%20Food%20Insecurity%204.22%20%28002%29.pdf



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Questions?

Thank you for listening
& for all your work
in the HIV community!!!

Contact:

Molly Westbrook MS, RDN, LDN
westbrookmm@upmc.edu