



Empowering Future Physicians and Communities in Chicago

Learnings from 4 Culinary Medicine Initiatives

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Land Acknowledgment

- The ICIMH conference resides on the indigenous lands of the Erie and Seneca people .
- For millennia they occupied, traversed, lived from, and cared for land and waterways in Ohio—from *Ohi:yó*, an Onöndowa'ga:' (Seneca) term meaning “beautiful river.”
- By making a land acknowledgment, we recognize that Indigenous peoples are the traditional stewards of the land that we now occupy, living here long before Cleveland was a city and still thriving here today.
- As we work, live and play on these territories we must ask what we can do to right the historic wrongs of colonization and state violence, and support Indigenous communities' struggles for self-determination and sovereignty.

Objectives



1. Discuss the culinary medicine model both in medical and community education and the challenges to conducting research in these settings



2. Discuss and understand decolonized and culturally sensitive and relevant methods to approach culinary medicine interventions that respect diverse food traditions and cultures



3. Define food apartheid, food insecurity and understand the impact of these challenges and importance of addressing them when developing and implementing food as medicine programming



4. To learn about successful curricula and projects in Chicagoland and action steps to create culinary medicine programs

Culinary Medicine: The art of cooking meets nutritional science



Background of Culinary Medicine

- evidence-based field in medicine that blends the art of food and cooking with the science of medicine
- help people make good personal medical decisions about accessing and eating high-quality meals
- helps prevent and treats disease and restore well-being
- 50 medical schools and 65 sites



La Puma J. What Is Culinary Medicine and What Does It Do? *Popul Health Manag.* 2016 Feb;19(1):1-3. doi: 10.1089/pop.2015.0003. Epub 2015 Jun 2. PMID: 26035069; PMCID: PMC4739343.

Scoping review- 2023

- culinary medicine programs for medical students
- 251 studies, of which 12 met inclusion criteria
- consistently improved student knowledge in key areas of nutrition application and changed knowledge and attitudes about food and nutrition
- Funding was often noted as a barrier to program sustainability . When funding source was provided, it derived from philanthropic or academic sources
- 34 programs offering medical student-focused culinary medicine courses

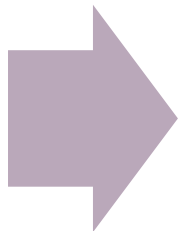
Rise in Culinary Medicine interest

- Conflicting popular dietary advice, especially about weight management and chronic illness
- Widespread dissatisfaction with conventional medical approaches to chronic illness
- enthusiasm about integrative medicine
- Lots of highly processed and convenience foods, accompanied by an increasing suspicion of their health value
- rising cost of health care
- reports of 30% of low-income older US adults having to choose between purchasing medication or food
- dearth of healthy food procurement and promotion policies in institutions, worksites, schools, and government
- Revived enthusiasm for additive-free organic food, home gardening, local agriculture, and farmers' markets.

Culinary Medicine is patient-centered, cost friendly and accessible

Classic Recommendation

- “Eat fruits/vegetables, cut back on fat/sugar & exercise regularly”



Culinary Medicine Approach

- Where can the patient access healthy foods in a low-resource environment?
- How can we help the patient prepare healthy, quick meals at home in an enjoyable way?

“Food Deserts” - Problematic

- Stigmatization
 - Narrow focus
 - Fails to address structural inequities
 - Overlooks community assets
-
- Solutions oriented language, acknowledging broad systemic issues

Food Apartheid

- the framing prompts an examination of the underlying food system
- who benefits from food production
- who has power to make decisions about what to grow
- who ends up eating the final products
- whose health is impacted by all of these cumulative decisions

What are the strategies to address underlying inequities by shifting and de-consolidating wealth and power from mega-corporations back to communities?

Food & Health Inequities in Chicago

Figure 67. Locations of food deserts by census tract, 2014
(US Department of Agriculture)

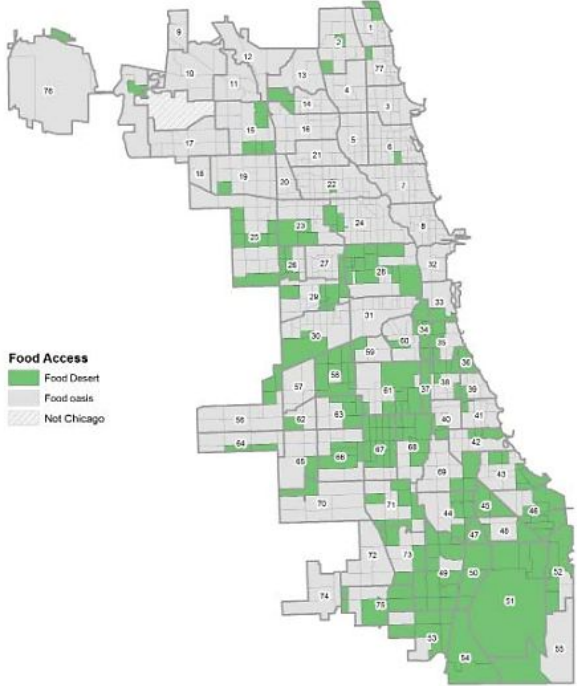
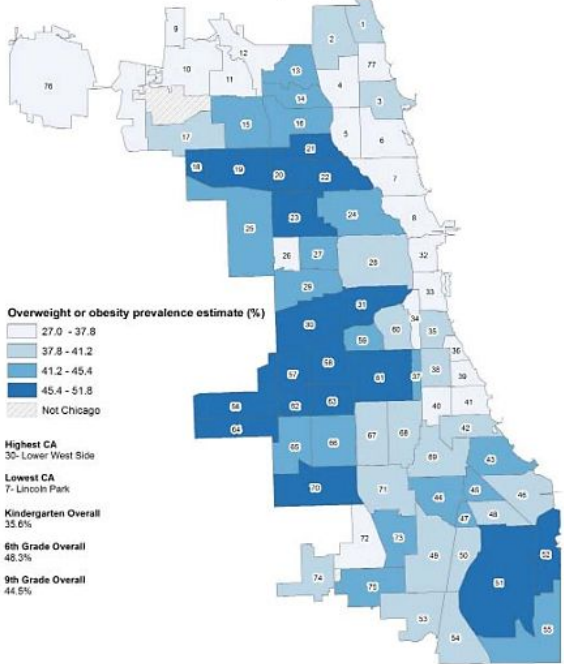


Figure 26. Overweight or obesity in CPS kindergarteners, sixth and ninth graders by community area, 2012-2013 (CPS)



How do we heal and grow?

THE VISION

- Train future physicians to be fluent in food, nutrition and food justice/health equity
- Train and learn with students in our communities in a culturally respectful and community-driven manner
- Support our patients with chronic disease to use food as medicine
- vital to sustaining this movement until our food system produces equitable, healthy outcomes for each person within it

Getting Started... in 2015

- What we needed: a chef, a kitchen, funding for supplies and food, a curriculum, interested students!
- What was important to us:
 - community building
 - focus on equity and food justice
 - alongside healthy eating
 - excellent teaching
 - a warm environment for students
- Started to create partnerships in our community



The Deets:

Early stages

Donations: Local culinary school: kitchen rental time

Local grocery store : gift cards for food

Chef time

Personal expenses: some supplies

Philanthropy: Applied for and received funding from Womens' Board, U Chicago

Culinary Medicine Program

University of Chicago
& NorthShore
University Health
System (Endeavor
Health)

Medical Student
Elective

Food is Power –
Chicago Public
School

Community
Cooking and
Nutrition
Classes

Cross-pollination

Med
students

Chef

Teachers at
CPS

Community
stakeholders

Medical Student Elective



- University of Chicago
 - medically underserved area
 - deeply affected by chronic disease
- Each class focuses on specific diet and conditions (e.g. DASH, Mediterranean, GERD, HTN, DM)

Medical Student Elective

- Co-taught by physicians & chef in a local community kitchen
- Partner with community orgs, deeply invested in the neighborhood
- 8-week elective for MS4s



Kitchen partnerships

2016: Moved from culinary school to community based kitchen in a synagogue nearby medical school

2018: Added Experimental Station as a kitchen site- build independent cultural infrastructure by providing essential resources that respond to local needs

2021: Added Englewood Community Kitchen- community space for the Greater Englewood community to gather together and improve health outcomes through positive food experiences and personal wellness. Englewood Kitchens includes a full-service kitchen as well as a larger classroom space

Benefits: focused on local food sovereignty, much cheaper, easier for students, created long partnerships with organizations aligned with our goals, supports their financial health

Trifecta of Programs /Curricula

2015- one of the first 5 academic institutions to license the Tulane culinary medicine curriculum for medical students, since adapted for our geography

2020- wrote de novo decolonized AfroCentric curriculum for middle schoolers on South Side in Chicago Public Schools

2022- started community classes for patients with chronic diseases - adapted curriculum

Food is Power in a Chicago Public School

- Teaching culinary medicine to middle schoolers
- Food sovereignty, food systems, food justice, nutrition knowledge
- Decolonized curriculum, explores cultural foodways



Decolonization definition

- To free (a people or area) from colonial status : to relinquish control of (a subjugated people or area)
- To free from the dominating influence of a colonizing power





**Lens of
Decolonization**

- Rethinking, reframing and reconstructing the current curriculum in order to make it better and more inclusive

Food is Power Program History

- Created as an outreach aspect of the successful Culinary Medicine program
- Teach youth who have the capacity to then benefit from a lifetime of powerful decisions around food, requested by community
- Work in an area affected by food apartheid – how are we sharing abundance and skills?

Food Is Power guiding values

- 1. Food is power.
- 2. Healthy food is delicious.
- 3. Food is the best medicine.
- 4. Fresh food is the best food.
- 5. Understand food routes.
- 6. Honor food roots.
- 7. Students are already food experts.
- 8. We believe in food sovereignty
- 9. Our food choices don't define us



Integrated Curriculum

- Follows the Colors of the Rainbow
- Nutrition, Food is Power cooking



- **ORANGE LESSON**
- Nutrition lesson : Vit A and C, anti oxidants, deficiencies, historical perspectives
- Food is Power lesson: Flavor, Food Science and Marketing, “Bliss Point”, taste map on the tongue
- Recipes: Sweet Potato fries, Mango Salsa



Reimagining delicious
healthy food

Using locally sourced
and grown food

Making powerful
decisions!

Field trip to Food 4 Less:

Label reading
Investigating
Questioning
Learning

Decolonizing



Honor Foodways

Use resources that honor the routes and roots of heritage:

Oldways- <https://oldwayspt.org/>

Healing Foods Pyramid- U of M
<https://www.canr.msu.edu/foodsystems/uploads/files/TheHealingFoodsPyramid.pdf>

Talk to your patients about their heritage foods if you are unfamiliar

Partner with local agencies that represent heritage of your patient population



A closer look :



food is power
a field guide for students
on nutrition, health, and food justice



Developed by:
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Julia Hesse-Fong, B.A.
2020

University of Chicago Pritzker School of Medicine



**Each
lesson
has three
sections.**

 **the food rainbow: red**



Nutrition lesson:

- Vitamin A
- Lycopene

Food is Power lesson:

- Natural vs. Artificial foods
- Natural food color vs. added/synthetic food dyes (esp. red)
- Food roots and routes: cabbage

Cooking lesson:

- Recipe: Red Cabbage Salad
- Recipe: Easy Tomato Sauce
- Recipe: Mini English Muffin Pizza
- Skills: slicing and marinating

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2

3



Where do foods get their bright red color? The answer is—micronutrients!

The vibrant red color of many fruits and veggies comes from a wonderful nutrient called **lycopene**. **Lycopene** makes many of the fruits and veggies we eat a beautiful red or pink color. It's also an antioxidant that helps fight against sunburns and promote skin health. Most (80%) of the lycopene in our diets comes from tomatoes.

In some red foods, we can also find **Vitamin A**. Vitamin A strengthens your vision and your immune system to help you fight off colds.

antioxidant - substances from food that neutralize damage and protect the body from harmful byproducts from cellular activities. The best sources of antioxidants are fruits and vegetables

spotlight on: lycopene

- Nutrient that makes plants red and pink
- An antioxidant

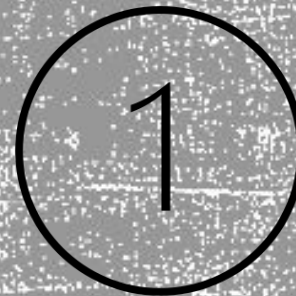
Found in: red carrots, watermelons, grapefruits and papayas

spotlight on: vitamin A

- Supports vision and immune system
- Helps your organs work well

Found in: green leafy veggies, green, yellow and orange fruits and veggies, including carrots, broccoli, cantaloupe, apricots and mangoes

Nutrition



What are we bringing into the kitchen?



from *Food is Power Field Guide*

Red & Pink

beets, cherries, cranberries, pink grapefruit, pomegranates, radicchio, raspberries, red radishes, red apples, red grapes, red onions, red peppers, red potatoes, rhubarbs, sorrel (jamaica), strawberries, tomatoes, watermelons,

Yellow & Orange

acorn squash, bananas, butternut squash, apricots, cantaloupes, cauliflower carrots, corn (maize), grapefruit, lemons, mangoes, nectarines, oranges, orange peppers, papayas, peaches, pineapples, pumpkins, summer squash, sweet potatoes, tangerines, yams, yellow apples, yellow peppers, yellow squash

Green

artichokes, asparagus, avocados, bok choy, broccoli, brussels sprouts, celery, collard greens, cucumbers, green beans, green cabbage, green grapes, green onions, green peppers, kale, kiwis, leeks, limes, lentils, mustard greens, nopales (cactus), okra, pears, peas, romaine lettuce, snow peas, spinach, sugar snap peas, watercress, zucchini

Blue & Purple

blackberries, blueberries, black currants, dates, eggplants, grapes, plums, prunes, purple figs, raisins

(red cabbage, beets and red onions can also fall under blue and purple)

Brown

barley, beans, brown rice, garlic, Jerusalem artichokes, onions, potatoes, parsnips, shallots wild rice mushrooms, jicama, hominy, teff, millet

These foods are traditionally associated with these colors – but do you know about:

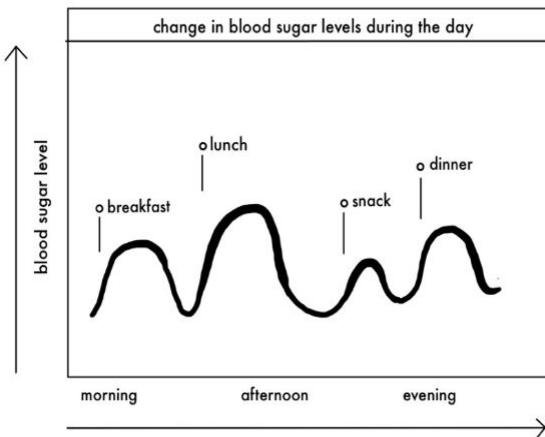
- purple corn, cauliflower & tomatoes**
- red, yellow, & green lentils**
- green nuts**
- red, white, & black quinoas?**

What foods are we bringing into the kitchen?

What health stories are we bringing into the kitchen?

Have you ever felt sleepy after eating a sugary treat or pasta? This is because these foods raise the blood sugar very quickly, and then the blood sugar goes down very quickly, which can lead to an energy “crash”. Some foods that have a high glycemic index (GI) include: sugary soft drinks, sugary food, white bread, potatoes, white rice. Whole wheat bread and pasta takes longer for the body to break down, so the blood sugar doesn’t go up or down as quickly.

During the day, our energy levels go up and down. For mood and energy, it’s important to have blood sugar levels that are steady.



If you have family members with **diabetes**, they often take medicine to help keep their blood sugar steady and follow an eating plan with low GI foods. While diabetes can run in families, it is affected by many things that you can change (like diet, exercise, and stress levels). Just because you have family members with diabetes doesn’t mean you will too.

For more information, check out WANDA: Women Advancing Nutrition Dietetics and Agriculture (<http://www.iamwanda.org/>)



Food is Power

2

Empowering a
relationship with food...
beyond cooking and
nutrition



We can empower ourselves by growing food ourselves. This way we can also recognize the types of food that are already growing around us. Our ancestors were **foragers**, people who knew and survived off of the hundreds of edible plants growing on the land.

We can start to rebuild our knowledge about food through growing food ourselves. By growing food, we can also grow our own food supply!

Kale growing at Urban Growers Collective's South Chicago Farm.
Photo by Urban Growers Collective.



from *Food is Power Field Guide*

food is power lesson

Flavor

Have you ever eaten a sea salt and vinegar potato chip and then eaten a whole bag?

Food marketers and scientists have engineered certain foods to taste very good and have made food from using some of the least nutritious ingredients (sugar, salt and processed white flour). This means that some of the food we crave might satisfy our hunger and taste-buds, but might leave our bodies still needy for nutrients.



An example of this engineering is the “bliss point” (a term developed by food scientists) that refers to a perfect balance of flavors designed to keep a food consumer coming back for “just one more.” This is the taste that keeps us eating “just one more” chip--over and over again.

Over time, these processed foods can lead to health problems down the line (like diabetes, obesity, and high blood pressure). Many people today—even doctors!—don’t discuss **whole foods’** importance to health.

exploring your taste buds activity

Ask: Can you name all the flavors? We can take control of what we eat by figuring out the foods that satisfy our taste buds and help fill our bodies.

Reflection questions:

- Which flavors are your favorite?
- What fruits and veggies taste the best to you?



roasted broccoli and buffalo sauce

ingredients

BROCCOLI

- 2 heads of broccoli
- 4 large eggs
- 1 cup bread crumbs (ideally whole wheat)
- ¼ tsp salt
- ground black pepper

BUFFALO SAUCE

- 1 tbsp unsalted butter
- ½ cup hot sauce
- ½ lemon juice
- ground black pepper

equipment

- knife
- baking sheet
- parchment paper
- bowls (2 medium, 1 small)

Which hot sauce do I use? You can buy hot sauce in the store or make it yourself. Try a mild hot sauce like Cholula, which is made from pequin peppers. Pequin peppers are native to the Mexican state of Tabasco.

Caribbean hot sauce is made from scotch bonnet peppers, which are native to Jamaica. Scotch bonnet peppers are one of the **hottest** peppers in the world.

prep

broccoli → wash and cut into florets

step-by-step

broccoli:

1. Gather all ingredients and pre-heat oven to 425° F.
2. Chop the heads of broccoli into florets lower down on their stems (so they look like small trees). Chop the large florets into smaller bite-sized at the stems.
3. Break the eggs into one medium bowl and whisk.
4. In the other bowl, mix the bread crumbs, salt, and pepper.
5. Dip the broccoli floret into the egg mixture, letting excess egg to drip off. Then, dip and roll each broccoli floret into the bread crumb mixture. Put the floret immediately onto the baking sheet. Bake for 15-20 mins.



sauce:

1. Make the sauce – Place butter in small bowl. Heat in the microwave or the stovetop. until completely melted.
2. Mix the hot sauce, lemon juice, and pepper into the butter and stir to form a smooth sauce. If the mixture isn't smooth, heat it for another 10 seconds.
3. Enjoy 1 tbsp of sauce per 1/2 cup of broccoli

Cooking

3

Amplifying voices



Author and historian Michael Twitty. (Photo by <https://www.sierraclub.org/sierra/2017-5-september-october/books/michael-twitty-wants-reconnect-african-americans-their-food>)

Michael Twitty is a well-known culinary historian of African and Jewish foods. He focuses on preparing, preserving and promoting African American foodways and its parent traditions in Africa and her Diaspora and its legacy in the food culture of the American South. He has written multiple books on the topic, including *The Cooking Gene* and *Afroculinaria*.

<https://afroculinaria.com/2016/01/16/a-letter-to-the-newgrorati-of-collards-and-amnesia/>

Curious about what edible plants might be growing in your neighborhood?

Check out TikTok sensation **Alexis Nikole Nelson** to find out how to identify plants around you.

IG - @blackforager

TikTok - @AlexisNikole

to the land
ca, and
seeds.

peanut
n.
and
butter).

*You can buy sun butter in the store or make it yourself (see the *Any-Seed Butter* recipe in the brown foods lesson)

Chef Sean Sherman (Oglala Lakota Sioux) uses sunflower butter in the recipes in his James Beard award-winning cookbook -- ***The Sioux Chef's Indigenous Kitchen***. To learn more about the exciting work his organization is doing to identify and reclaim native foodways, go to The Sioux Chef website (www.sioux-chef.com).

Community Cooking & Nutrition



- Free classes for diabetes and chronic diseases
- Co-led by UChicago MD's, medical students, and a chef
- Adapted from Goldring Center for Culinary Medicine

Class Recruitment and Eligibility

COOKING & NUTRITION CLASSES

UCHICAGO PATIENTS AND SOUTH SIDE RESIDENTS

FREE



led by chefs &
UChicago physicians

- Nutrition and cooking tips for chronic disease management.
- Prepare and eat a healthy meal
- We encourage adult family members and caregivers to attend together!

Go to <https://redcap.link/i7usyxo0> to sign up!

If you attend the class, you can also participate in a research study evaluating the course. Participation in the research is VOLUNTARY. You may attend the classes without participating in the study.
Sonia Oyola, Principal Investigator

Participation

- Complete two surveys (~5 min each)
- Complete one 30 minute interview
- You will receive \$10 per survey and \$25 for the interview upon completion as a thank you

Research Eligibility

- UChicago Medicine patient or South Side resident
- 18 years or older with a chronic illness

contact Megha Prasad with questions (meghaprasad@uchicagomedicine.org)

Attend one or multiple classes!

Thursday 5/25 (4-7pm)
Thursday 6/1 (4-7pm)
Thursday 6/8 (4-7pm)
Friday 6/9 (4-7pm)

Experimental Station
6100 S Blackstone Ave.
Chicago, IL 60637
1 mile from UCMC

participants must be
vaccinated and masking
during classes is optional



Recruitment

Classes were advertised through:

- UCM Clinics
- Kovler Diabetes Center newsletter
- SHARE Network
- Flyers in community

Eligibility

Participants were required to:

- Be residents of the South Side or UCM patients
- Have a chronic condition (ex. Diabetes, hypertension, etc.) or be caring for someone with a chronic condition
- Be 18 years or older

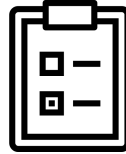
Methods



Pre-Survey: taken before participants' first class

Included:

- Information about **dietary practices**
- Confidence in **management of health conditions** and making healthy food choices
- Goals for the class



Post-Survey: taken after participants' last class

Many of the same questions from the pre-survey

Additional questions on **access** to resources and **gains** from the classes



Interview: taken after participants' last class






Conducted via Zoom and recorded

Semi-structured format, expanded on questions asked in surveys.



Article

Empowering Future Physicians and Communities on Chicago's South Side through a 3-Arm Culinary Medicine Program

Geeta Maker-Clark ^{1,*}, Ashley McHugh ² , Hannah Shireman ², Valeria Hernandez ² , Megha Prasad ³ , Tiffany Xie ³ , Arianna Parkhideh ³ , Carlin Lockwood ³ and Sonia Oyola ^{2,*}

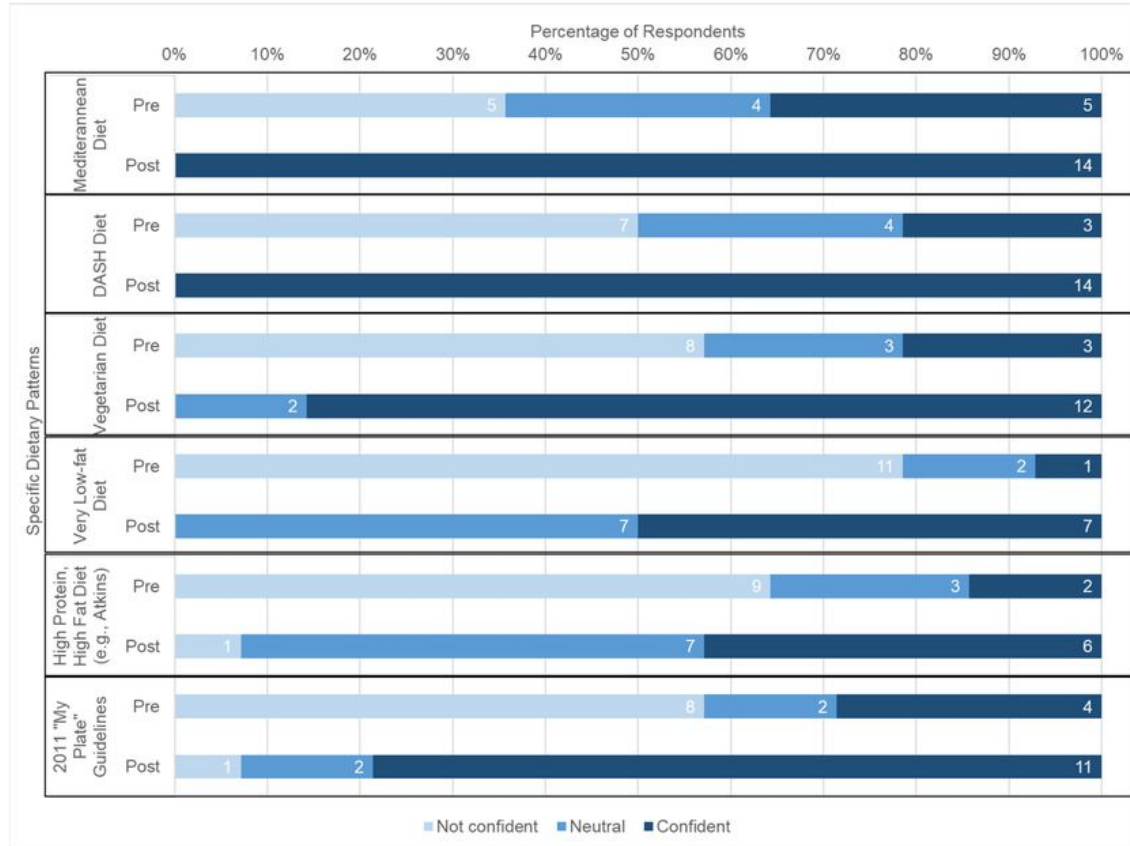
¹ Department of Family Medicine, NorthShore University HealthSystem, Evanston, IL 60201, USA

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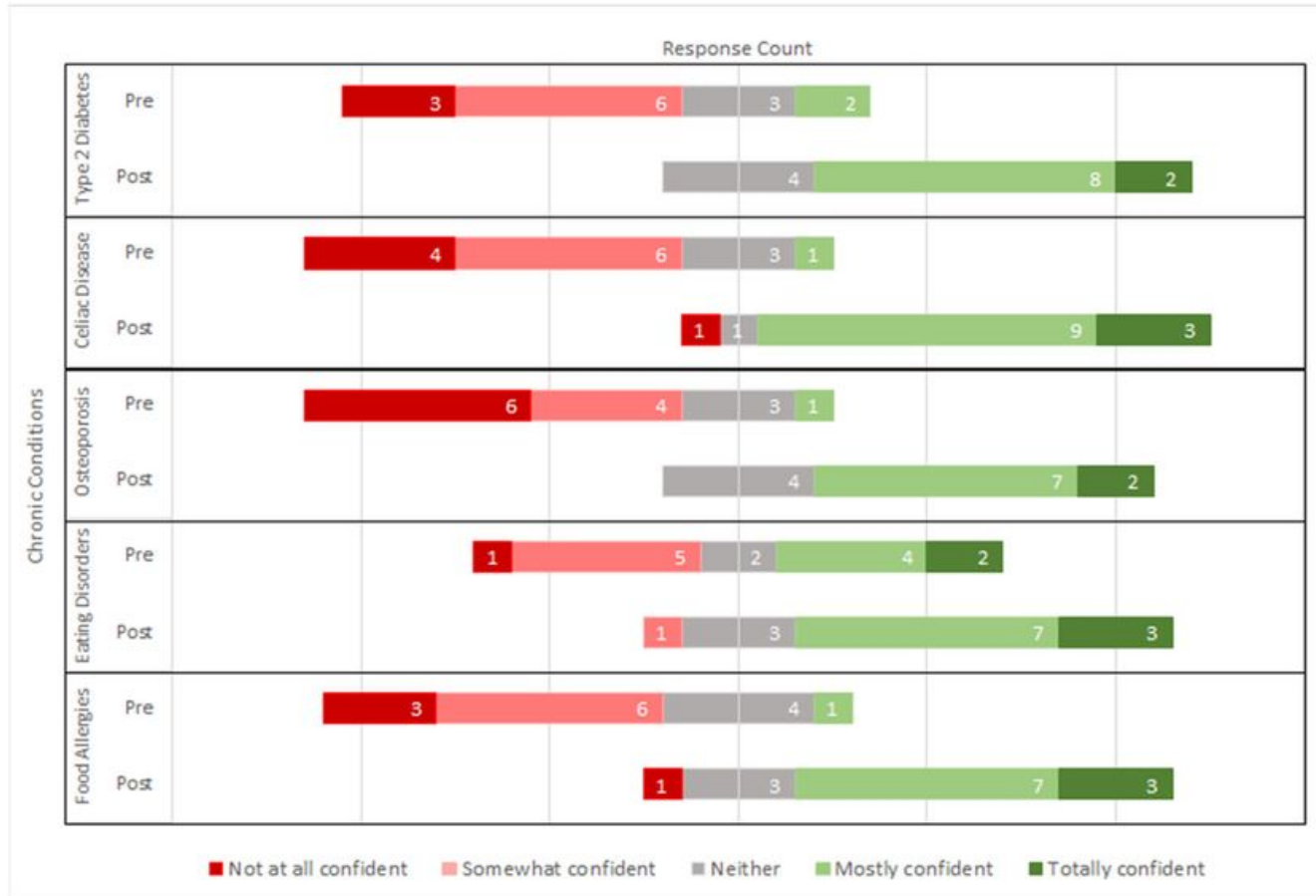
³ Pritzker School of Medicine, University of Chicago, Chicago, IL 60637, USA

* Correspondence: geetamaker@gmail.com (G.M.-C.); soyola@bsd.uchicago.edu (S.O.)

Change in med students confidence in nutrition counseling



Specific condition counseling



Food Is Power- the kids' feedback!

Table 2. Qualitative feedback shared by Food Is Power research participants.

| Understanding of "Food Is Power" Concept |
|--|
| "Food is Power to me means that food, health foods give you energy or power". 2021–2022 student |
| "It means you can make powerful choices for your body". 2022–2023 student |
| "It means that what you eat can affect you and is an important power of life". 2022–2023 student |
| "I think it means that the food you eat is [your] power". 2022–2023 student |
| "To me it means that food can help you in a lot of ways for your body". 2021–2022 student |
| "That is was important for people to know what they eat so they can learn from what they eat". 2021–2022 |
| Knowledge and Willingness to Try New Foods |
| "What I have learned in Food is power is that even when you don't like a particular food that you had in the past you can always try to improve it". 2021–2022 |
| "I learned to always try new foods. As many say 'Don't let anyone yuck your yum'". 2021–2022 student |
| ". . .I get to learn how to cook different types of food". 2022–2023 student |
| "My favorite parts was when we would learn the history of some foods and then be able to make something new out of it". 2021–2022 student |
| "I would learn different tips about different ingredients and facts". 2021–2022 |

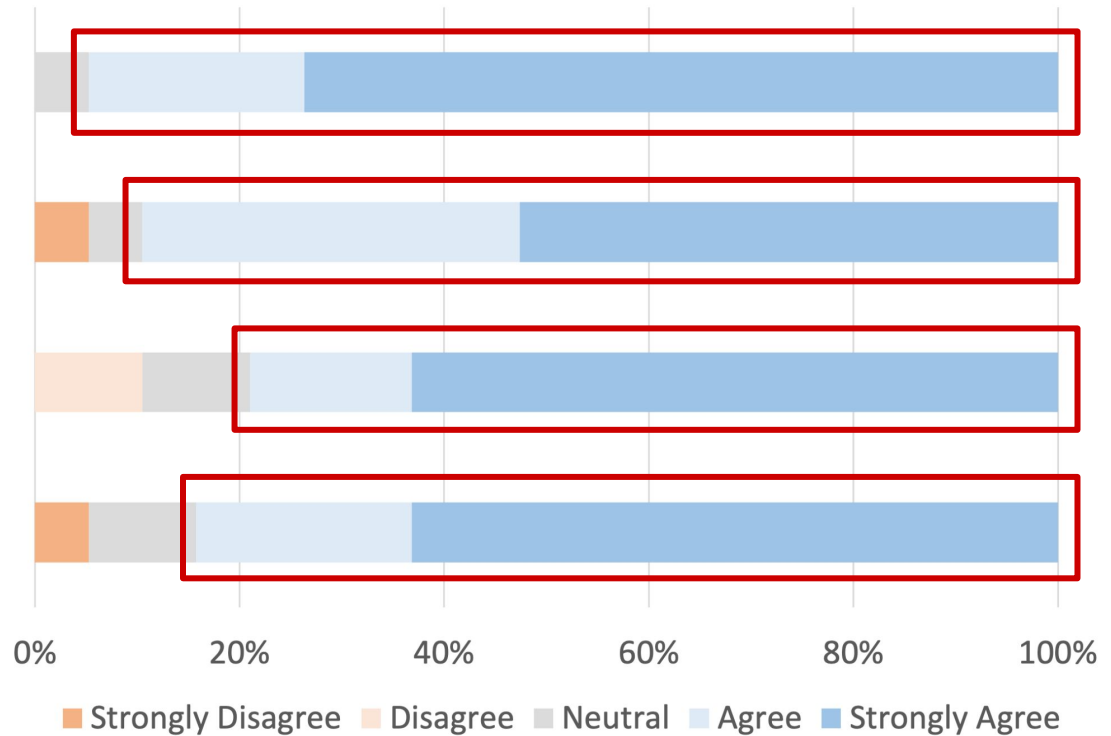
Survey Data: Self-Reported Access to Resources Used in Class

I can easily get to a grocery store that sells the ingredients we used in class.

I have time to make the recipes we learned on a typical day at home.

The recipes we learned in class would be easy for me to make at home.

The recipes we learned in class are affordable to make at home.



Interview Theme: Gains from Class

Subtheme: Behavioral Changes

"Even now I've decided that I don't eat out as much. I stopped, you know. **Don't buy as much fast food** as I-as I used to. And **I'd just rather cook at home**. I rather just cook my meals at home." - 2023 Participant



"My A1C was...12. Then it went down. my last one back last year was 10. **Now my A1C is 7.3.**" - 2022-23 Participant



Interview Theme: Gains from Class

Subtheme: Community

"I just loved the whole community of us getting together and making these dishes and then learning. And then also **exchanging ideas with each other!** I thought that was very very rewarding and an excellent experience and I can't wait to do it again. Matter of fact, **I miss you all!**" - 2023 Participant



"Coming to this class and the **camaraderie** we had with meeting other people and **everybody sharing their stories.** And we all had, you know, we all had our stories and our struggles. Because truly, truly diabetes, it is-it is a struggle." - 2022-23 Participant



Some Key Learnings:

- **Always seek out the leadership in your community for direction**
- **It takes time to grow relationships, trust and care- put the time in and be flexible**
- **Be mindful and critical about your curriculum- do not perpetuate harmful savior practices**



M Northwestern Medicine
Feinberg School of Medicine

Cooking Up Health through 2 Delicious Academic- Community Partnerships

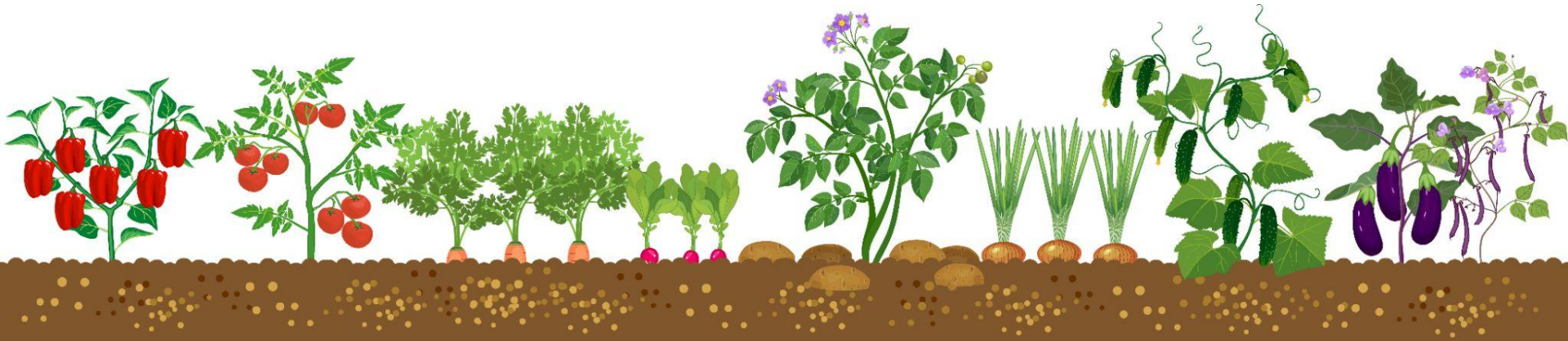
Osher Center for Integrative
Medicine at Northwestern University

The Role of Academic Research in Supporting Community Initiatives and Partners

“Community-engaged research” involves academic and community partners in a participatory approach to research

Benefits to the community partners include

- Capacity building on many or all aspects of research
- Explorations that are grounded in community priorities and realities
- Funding for intervention strategies (intervention research)
- Results that can help strengthen community initiatives and open them up to new opportunities

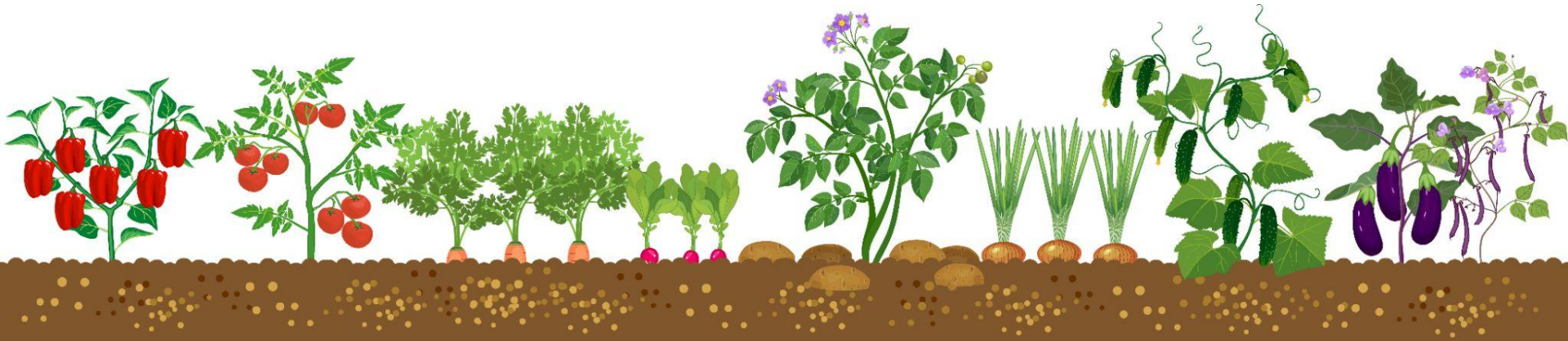


The Role of Academic Research in Supporting Community Initiatives and Partners

“Community-engaged research” involves academic *and* community partners in a participatory approach to research

Benefits to academic/research partners include:

- Capacity building on community realities
- Explorations that make the science more pertinent and “true”
- Funding for research activities
- Results that can enhance the credibility of the researcher and open them up to new opportunities



Alliance for Research in Chicagoland Communities

Seed Grants for Academic-Community Research Partnership Development



Common Threads

Northwestern Medicine[®]
Osher Center for Integrative Medicine





Cooking Up Health

CHOP CULINARY HEALTH OPPORTUNITIES FOR PROVIDERS

- ✓ **Applied Nutrition**
- ✓ **Diet as Disease Prevention & Management**
- ✓ **Public Health**
- ✓ **Nutrition Coaching**
- ✓ **Cultural Competency**
- ✓ **Culinary Skills**

LEARNING PATH

CUH M3/M4 Feb 12-23, 2024

→ CUH (M3/M4) Culinary Sessions

Continue Path

Courses Overview

- CUH (M3/M4) Introduction & Objectives**
- CUH (M3/M4) Culinary Sessions**
- CUH (M3/4) Lesson 1** OVERVIEW

Lesson 3-4: Assignment: Case

LESSON 6 OF 9

GI Case

Sam is a third year medical student who started his surgery rotation 3 weeks ago ... 5 weeks to go. He is waking up at 3:30 am and skips breakfast since he has no time to eat. He arrives at the hospital by 5 am to pre-round and drinks a 16 oz cup of black coffee. He has his first meal at noon at which point he is ravenous. At the hospital cafeteria his typical lunch is an 8 piece chicken nugget meal with curly fries and a 12oz bottle of Coke Zero. By the time he is done at 7 pm he's ready to crash, so he picks up 2 chicken tacos and a bean burrito from Taco Bell, and scarfs it down in the car on his way home. He heads to bed by 9pm exhausted. To make up for the hard work week, on the weekends he tends to binge eat, drinks beer with his friends, goes out until 3 am, and

Lesson 3-1: Videos

LESSON 4 OF 9

100% COMPLETE

LESSON 3-1: Videos

“Your gut is not Las Vegas. What happens in the gut does not stay in the gut.”

1

2

LESSON 3-1: Learning Objectives

LESSON 3-2: Readings (Optional)

LESSON 3-3: Knowledge Check

LESSON 3-4: Assignment: Case

LESSON 3-5: Experimental

LESSON 3-6: Session Reflection

Resources

Patient Resources - Handouts and Websites

References

Lesson 3-5: Experiential

LESSON 6 OF 9

We often make recommendations to patients based on guidelines without giving adequate consideration to the barriers and feasibility of actual implementation.

For session 3, consider: **Could YOU do the FODMAP diet?**

1. Look all the FODMAP food list here; how many have you eaten in the past 48 hours? Reflect on how hard/easy it would be to follow this diet long-term.

| | HIGH FODMAP FOODS AND | LOW FODMAP ALTERNATIVES |
|----------------------------|--|--|
| Vegetables | Artichoke, asparagus, cauliflower, garlic, green peas, mushrooms, onion, nightshade peas | Asparagus/eggplant, bean (green), bok choy, green capsicum (flat pepper), carrot, cucumber, lettuce, potato, green beans, squash (1/2 cup or less) |
| Fruits | Apples, apple juice, cherries, dried fruit, mango, nectarines, peaches, pears, plums, watermelon | Cantaloupe (1/2 cup or 100g), low fat (green), mandarin, orange, pineapple, strawberries (5 medium) |
| Dairy and alternatives | Cow's milk, oatmeal, evaporated milk, ice cream, soy milk (made from whole soybeans), sweetened condensed milk, yogurt | Almond milk, lactose-free milk, soy milk (made from soy protein), hard cheese, lactose-free milk, soy milk (made from soy protein) |
| Protein sources | Most legumes (beans, some marinated meat/poultry/seafood, some processed meats) | Eggs, firm tofu, plain cooked meat/poultry/seafood, tempeh |
| Breads and cereal products | Wheat (hardy) based breads, breakfast cereals, biscuits and snack products | Gluten free corn flours, oats, quinoa flours, quinoa/teff/corn/peas, rice cakes (plain), sourdough/spelt bread, wheat-free barley free breads |
| Sugar | High fructose corn syrup, honey, sugar, sugar confectionary | Dark chocolate, maple syrup, coconut sugar, xylitol, sugar |

Lesson 3-3: Knowledge Check

LESSON 4 OF 9

Matching

Match the type of fiber with its primary function or characteristic.

| | |
|------------------|---|
| Soluble Fiber | Lowers blood cholesterol and glucose levels |
| Insoluble Fiber | Adds bulk to stool and aids in digestion |
| Resistant Starch | Fermented by gut bacteria to produce beneficial short-chain fatty acids |

Patient Resources- Handouts and Websites

LESSON 8 OF 9

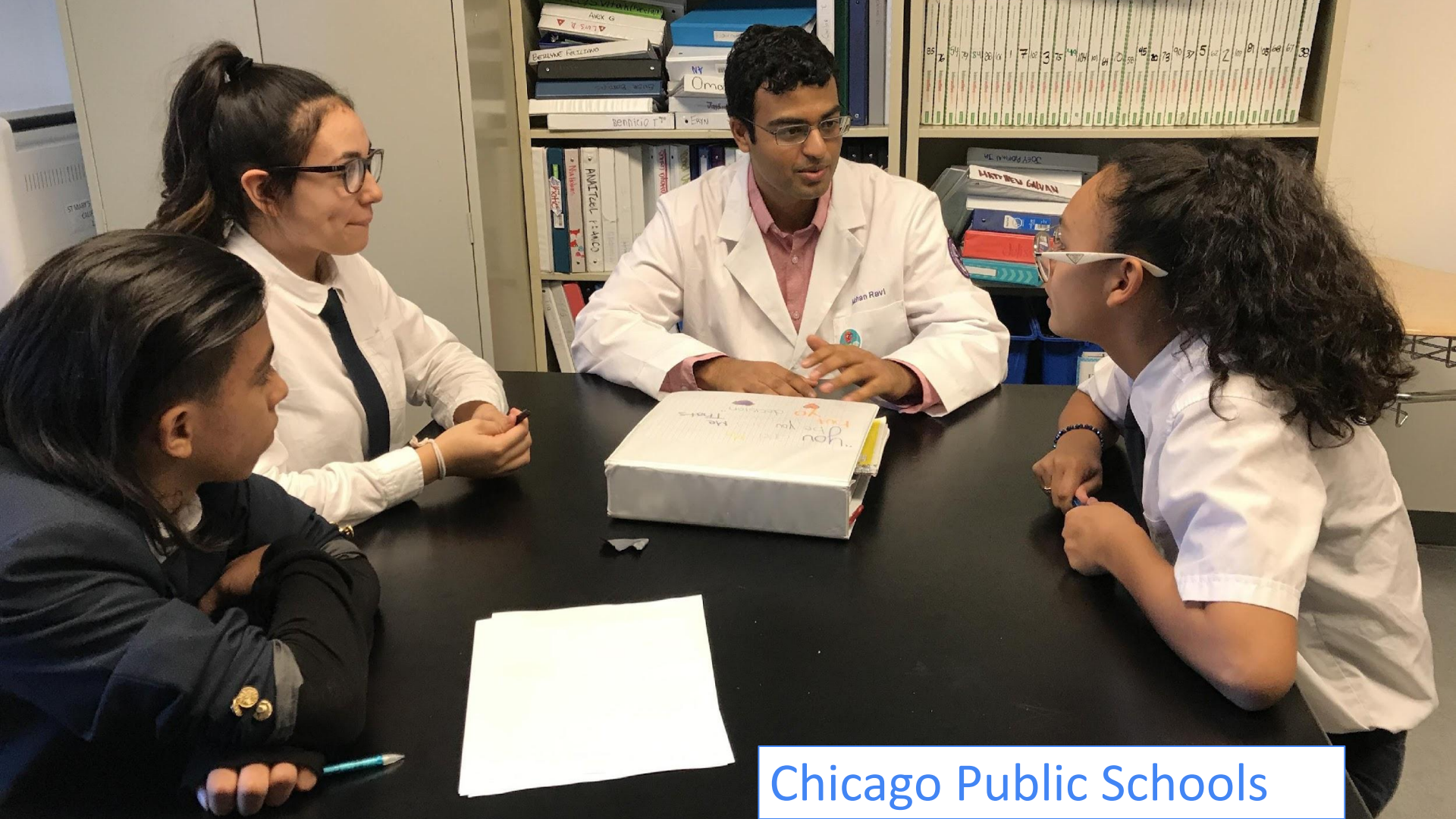
Patient Handouts/Websites

There are a plethora of high quality patient resources available that can supplement your patient counseling, in addition to making appropriate referrals and building an interdisciplinary care team. A few examples for you to explore:

- Portion Control Handout
 - portion-control-guide.pdf (3.4 MB)
- Monash FODMAP Site
- Promoting a Healthy Microbiome with Food and Probiotics
- An Integrative Approach for Treating Irritable Bowel Syndrome
- IBS Food as Rx in English and Spanish

In person > Virtual CUH

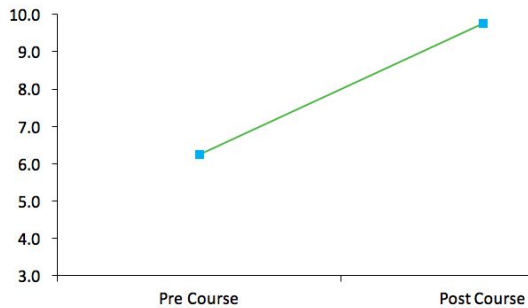




Chicago Public Schools



++ Significant Increase in Confidence in Basic Nutrition Counseling (0 to 10)



Other outcomes

2018 International Congress on Integrative Medicine and Health, Baltimore, MD, May 8-11, 2018
 Title: Do One, Teach One, See One: Flipping The Medical Learning Paradigm from Passive To Active
 Presenters: Melinda Ring, Rupa Mahadevan, Elaine Cheung, Sreela Nambodiri

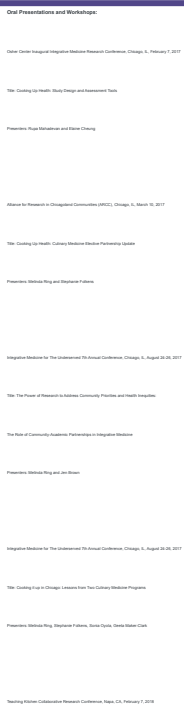
2018 International Congress on Integrative Medicine and Health, Baltimore, MD, May 8-11, 2018
 Title: Cooking Up Health
 Authors: Melinda Ring, Rupa Mahadevan, Elaine Cheung, Sreela Nambodiri

2018 International Congress on Integrative Medicine and Health, Baltimore, MD, May 8-11, 2018
 Title: Title: Power of a Culinary Medicine: A Culinary Medicine
 Authors: Melinda Ring, Rupa Mahadevan, Elaine Cheung, Sreela Nambodiri

Poster Presentations
 Teaching Kitchen Collaborative
 Title: Power of a Culinary Medicine: A Culinary Medicine
 Authors: Melinda Ring, Rupa Mahadevan, Elaine Cheung, Sreela Nambodiri

Panel Presentations
 Chicago Innovations Partnership
 Title: How Partnership
 Presenters: Linda Novick, Alyssa Plotkin, Shelley

2018 International Congress on Integrative Medicine and Health, Baltimore, MD, May 8-11, 2018
 Title: Culinary Medicine
 Presenters: Amy Locke



7th Annual ARCC Community-Engaged Research Partnership Award Recipient: *Cooking Up Health: Docs & Kids in the Kitchen*

The [Alliance for Research in Chicagoland Communities](#) (ARCC), a program of the [Center for Community Health](#) serving the Northwestern University's [Institute for Public Health and Medicine](#) and [Clinical and Translational Sciences Institute](#), developed the [Community Engaged Research Partnership Award](#) to recognize research partnerships that exemplify strong collaborative research principles and are working to impact the health of their community.



The 2018 award acknowledges the efforts of *Cooking Up Health: Docs & Kids in the Kitchen*, the exemplary partnership between lead community partner, Stephanie Folkens of [Common Threads](#), a community organization fighting childhood obesity through cooking and nutritional education, and lead academic partner, Northwestern's [Melinda Ring, MD](#) of the [Osher Center for Integrative Medicine](#).

Cooking Up Health grew out of the recognition that solving the obesity epidemic and its downstream health consequences depends on preventative efforts at the individual, community, and public health level. A 2013 analysis of childhood obesity in Chicago revealed an overall overweight/obesity prevalence of 43.3% among public school students. Additionally, although physicians are at the frontline of assessing and advising patients on nutrition and weight, only 27% of medical schools teach the recommended 25 hours of nutrition, and fewer than 14% of practicing physicians believe they were adequately trained in nutritional counseling.

2018 NUCATS Implementation and Dissemination Award/National Institutes of Health's National Center for Advancing Translational Sciences, Grant Number UL1TR001422

Cooking For Life

Two young women, one in middle school and the other in medical school, discover the healing power of food.



Share



SCAN ME



[HTTPS://TAKECARE.ORG/FILMS
/COOKING-FOR-LIFE](https://takecare.org/films/cooking-for-life)



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Growing Resilient, Equitable and Vibrant Communities from Within

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Access to **health care** is racial justice.

Environmental justice is racial justice.

Educational opportunity is racial justice.

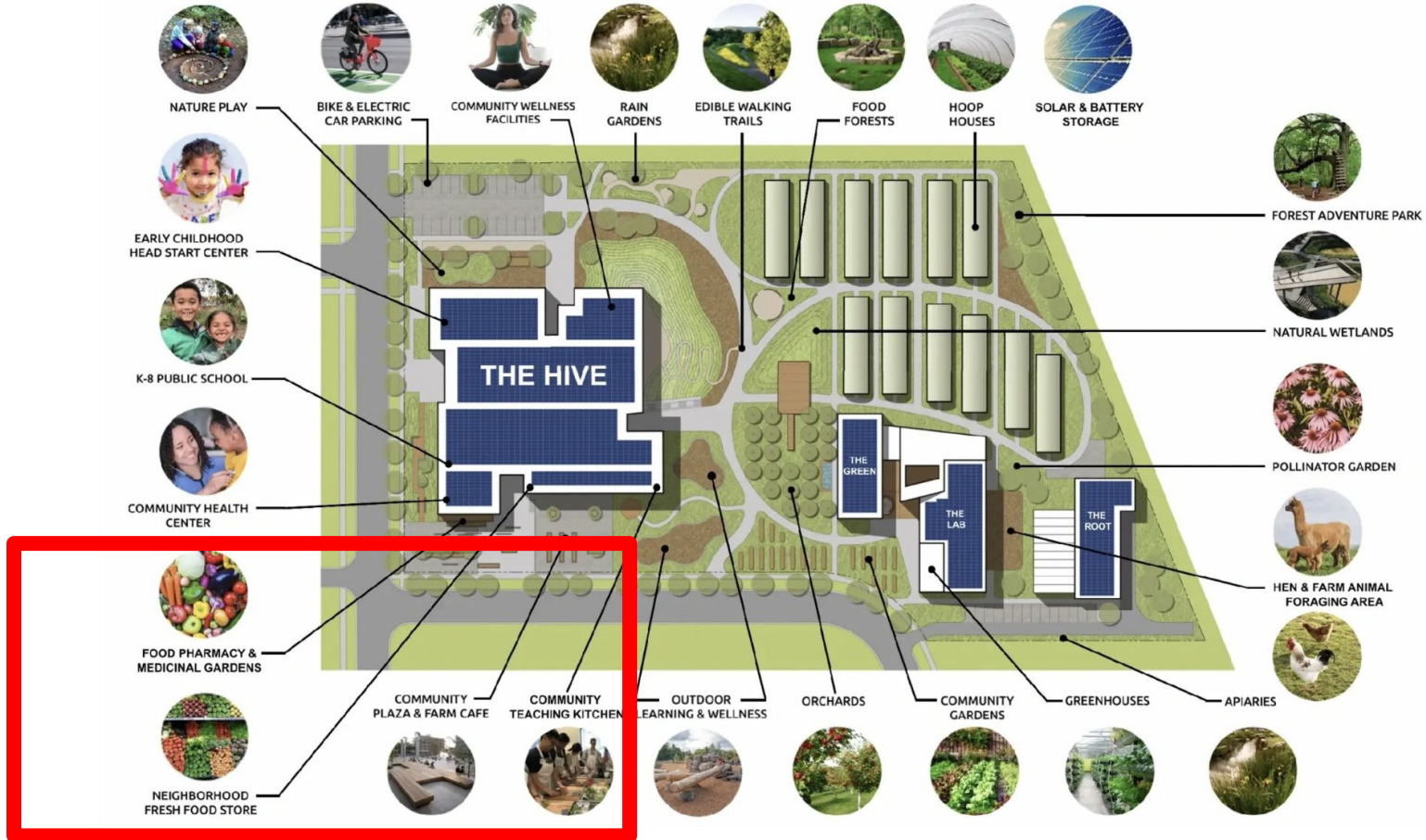
Food security is racial justice.

Nature, parks and clean air is racial justice.

Economic investment is racial justice.

We were born *from* the community, *for* the community, to catalyze systemic **racial justice.**

The Cultivate Collective Community Wellness & Sustainability Hub





Community - Campus Partnerships for Health

Advancing Health Equity & Social Justice
Through Partnerships for 25 Years

Elements of an Authentic Partnership



<https://ccphealth.org/partnering/principles-of-partnering/>
CCPH Board of Directors.
Position Statement on Authentic Partnerships.
Community-Campus Partnerships for Health, 2013.

Identifying specific community partners & beginning relationships

Who and how do you want to engage?

- Who are the groups or people you want to engage?
- How are you centering people that have lived experience with the focus issue?
- Do you already have relationships, or do you need to find partner(s)?
- What info about you/your team will you want to share with possible partners?
- What info will you want to know about possible partners?



Getting Started

- Take time to get to know each other
- Decide if & how you want to work together
- Who is missing from the table?
- Keep working on & paying attention to trust & healthy relationships
- Discuss/document how you want partnership to work
- Set up partnership structures & processes

- **Do not rush through phase of getting to know each other, building personal connections and relationships**
 - Investing early will reap benefits later
 - Lays foundation for every aspect of research collaboration
- **Approach engagement/partnership deeply**
 - Top leadership in an organization bring expertise/experience, & frontline staff bring different but equally valuable expertise/experience. Need both.
 - Community members or clients bring another type of expertise/experience. E.g. youth serving as advisors or youth advisory board will give different insights in improving youth survey than staff of youth-serving organization

Academic-Community: Moving from partners to partnership

- **Build trust-** get to know each other, socialize, sweat equity, humor
- **Communicate early, well, & often-** which methods work, what language is being used
- **Discussing, Setting, Documenting expectations (MOUs).** Clear understanding of everyone's roles, responsibilities, & deliverables.
- **Allow time & discuss process for decision making**

| Table 1. Actions associated with completion of Aim 1. | Start/Due Date | |
|--|----------------|------|
| | 7/1/2016 | 8/1/ |
| Aim 1: Develop Partnership | | |
| A. Strengthen relationships among existing partners through quarterly meetings. | | |
| Review principles of academic-community partnerships | | |
| Write list of shared goals | | |
| Create plan to assess partner capacity | | |
| Conduct capacity assessment | | |
| Write governance rules | | |
| Prepare memoranda of understanding | | |
| B. Hold seminars to co-educate partners | | |
| Introduction to Common Threads | | |
| Overview of Osher Center for Integrative Medicine | | |
| Curriculum sharing workshop: CT and OCIM current state | | |
| Research sharing workshop | | |
| C. Outreach to community partners | | |
| Engage Chicago Public Schools | | |
| Engage out-of-school time providers | | |
| Engage Feinberg School of Medicine students | | |

Challenges

- Trust & respect (or lack of), power differentials
- Relationship building process
- Time-consuming/Effort
- Compromise/conflict
- Community research not always understood/supported by community or university leaders
- Services vs research
- Ethical issues unique to engaged/partnered research

RESOURCES curated by Alliance for Research in Chicagoland Communities: www.ARCCresources.net

All For Community Partners For Healthcare Providers **For Academic Partners** For Partnerships

Filter tabbed audience(s) by resource categories:

- Building Research Capacity
- Research Education
- Relationship Development
- Dissemination & Communication
- Sample Proposals & Case Studies
- Partnership Evaluation

For Academic Partners

Building Research Capacity

| BUILDING RESEARCH CAPACITY
[Anti-Racist Community-Academic Research Reflective Practice Tool](#)

Aims to support researchers and community-academic research partnerships in learning and implementing strategies to integrate racial equity and anti-racism into their partnerships and research design, conduct, leadership, and impact.

[VIEW THIS RESOURCE](#)

| BUILDING RESEARCH CAPACITY
[Applying Racial Equity Lens to Research Engagement: Resource Catalog](#)

We are working to gather resources and tools to help scientists and community partners apply a racial equity lens to their research engagement. Please send relevant resources to us at ARCC@northwestern.edu.

[VIEW THIS RESOURCE](#)

| BUILDING RESEARCH CAPACITY
[Building New Partnerships \(Video\)](#)

This short 13-minute video presented by ARCC community & academic seed grantees provides their insights on what works and challenges in beginning a new community-academic research partnership.

[VIEW THIS RESOURCE](#)

| BUILDING RESEARCH CAPACITY
[Collaborative Data Analysis](#) (PDF)

Strategies for involving partners in the interpretation of research findings and how to use a community-

| BUILDING RESEARCH CAPACITY
[Collaborative Research Dissemination Examples](#) (PDF)

Examples of dissemination products and activities for

| BUILDING RESEARCH CAPACITY
[Community Guidelines for Academic Researchers](#) (PDF)

Tips and guidelines for academic researchers who are

[↑](#)

*Advocate Good Shepherd Hospital
Center for Health & Integrative Medicine
Connecting Smart Farm to Human Health*



The Center for Health and Integrative Medicine

Created through a shared vision that IMAGINED that there could be a place within the hospital where all could go to build a foundation of health and to meet challenges: mind, body and spirit.

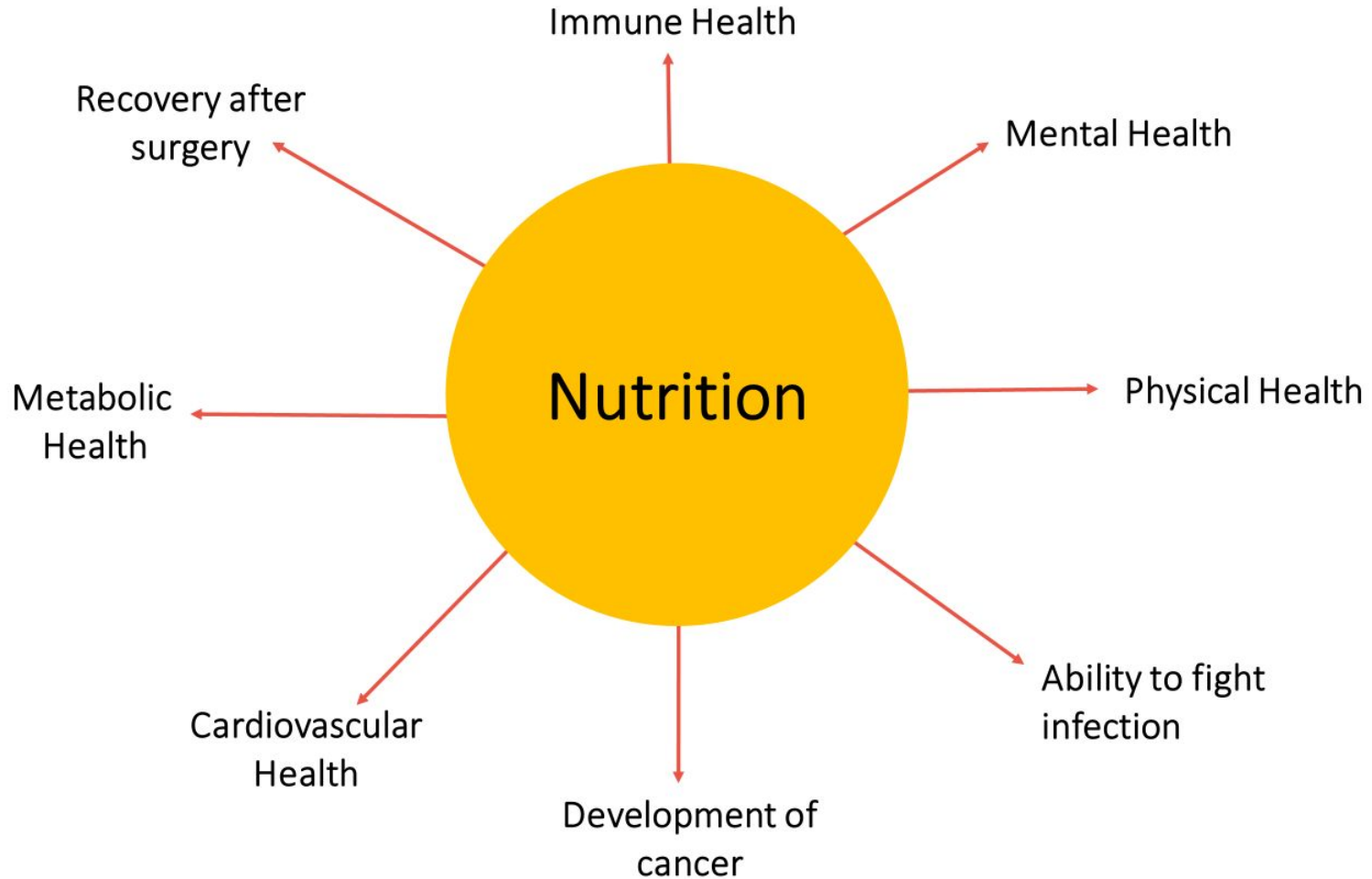


Opportunity for Alignment : Community Health Needs Assessment

Community health improvement is an effective tool for creating a shared vision and supporting a planned and integrated approach to improving health outcomes.

Tax-exempt hospitals are required to conduct a community health needs assessment (CHNA) and develop an implementation strategy to document how the hospital will address prioritized community health needs.

Two areas of focus through 2025: Mental Health & Obesity



Societal Effects of Nutrition

Healthcare costs

Economic factors

Productivity




Health Equity

U.S. National Security

The Planet

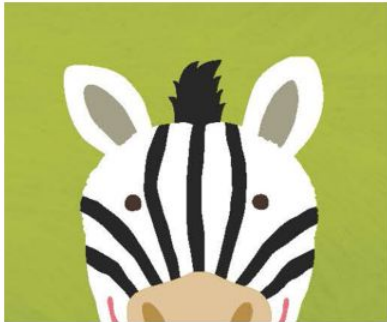
Overall wellbeing



The field of Culinary Medicine teaches nutrition and skill-based learning to make quick, inexpensive meals that boost health and vitality. It encourages the use of local foods of the season, grown in soil rich with nutrients and flavored with herbs and spices that are targeted to cultural background.



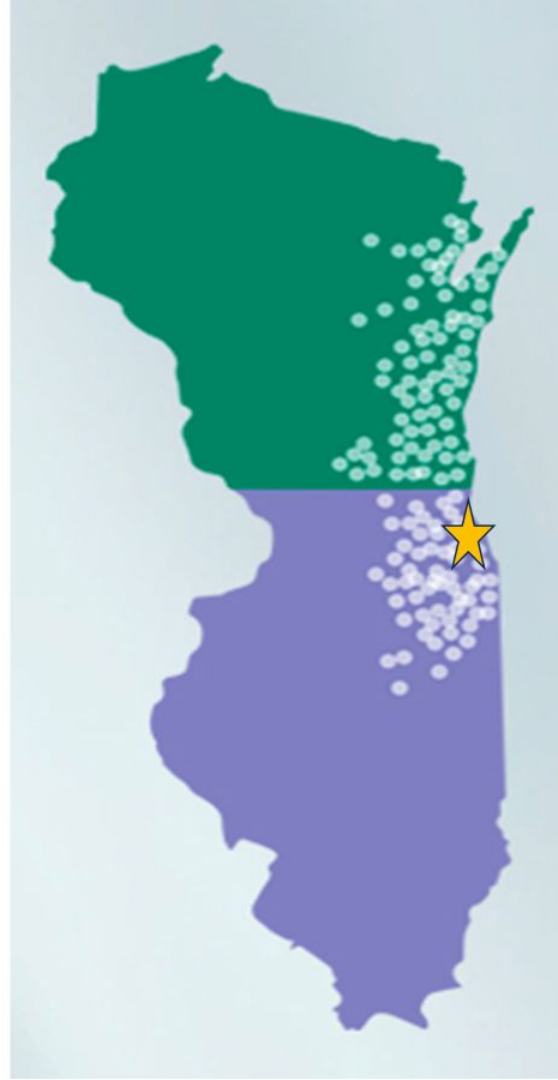
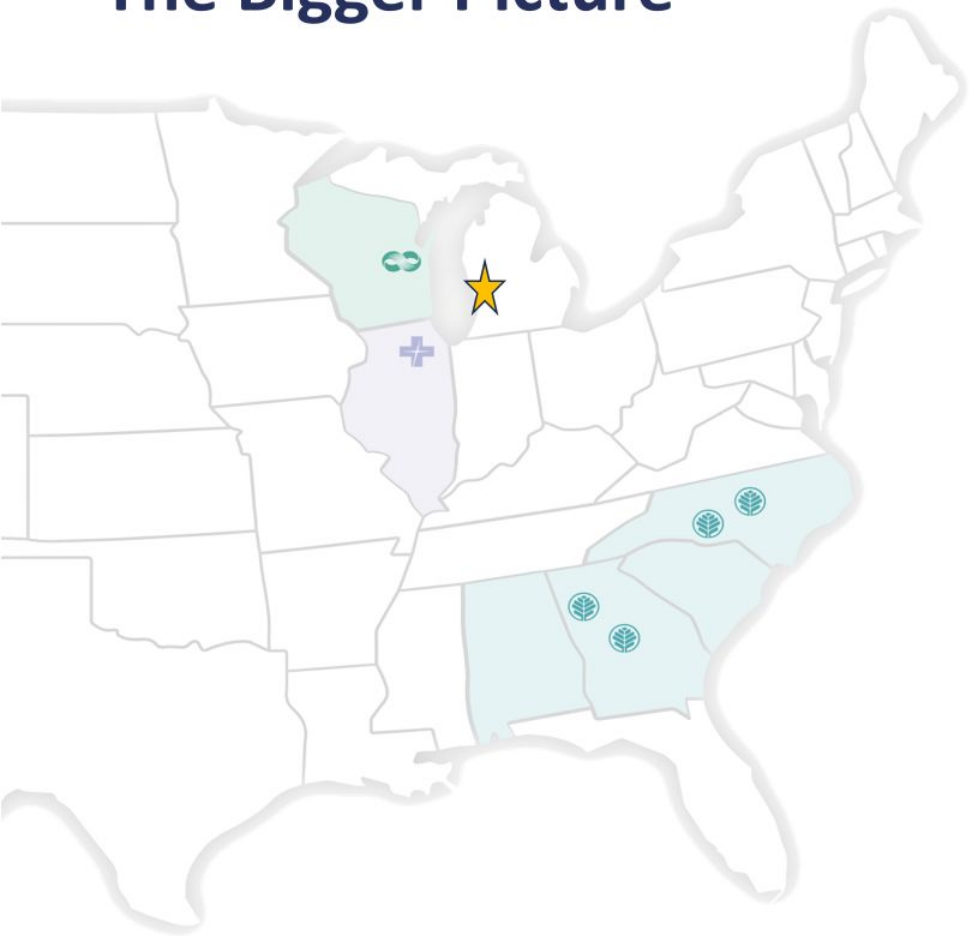
The Healthy Active Living (HAL) program is a multidisciplinary program for kids **ages 2-18** who struggle with excess weight gain. With a personalized focus on a family's needs, HAL helps patients establish and achieve specific goals for creating healthy habits.





**REAL FOOD
GROWS**

The Bigger Picture



Farm to Hospital Locations





Smart Farm
Swiss Chard
\$2.00/bunch

Smart Farm
Fresh Carrots
\$3.00/bunch



Smart Farm?

Our Mission:

To provide high-quality produce to our communities and those in need who are at risk of food insecurities, while being an educational resource on sustainable gardening and farming practices, healthy eating and strategies to help people Live Well.

In partnership with our Integrative Medicine Medical Director and team, our goal is to improve chronic disease management and utilize food as a preventative tool to decrease the prevalence of chronic disease. We will engage patients, community members as well as our clinicians and hospital team members.



Produce Grown

Produced 8 tons or 16,800 lbs. of produce or about 14,500 meals.



Community Impact

Produce was donated to 4 local food pantries, hospital food pharmacy, and sold at our farm and hospital stands.



Farm Future

Aim to expand our 2-acre operation to 10-15 acres in the next 3-5 years.



Expand Partnerships

Develop partnerships with external and internal organizations to expand impact to our patients and greater community.

Why Smart Farm?



Industry Wide Shift

- 80% of health outcomes determined by non-direct medical care
- 40% influenced by Social Determinants of Health (SDoH)
- Food insecurity impacting more than 50 million people since COVID-19



Chronic Disease Management – Diabetes, Heart Disease, and Cancer

- Role of food in managing chronic disease
- Fewer than 1 in 10 adolescents and adults eat enough fruits and vegetables



Addressing Food Insecurity

- 9.5% of residents are food insecure in state of IL
- 10% of residents in North IL PSA experience food insecurity
- 13% of residents in South Chicagoland PSA experience food insecurity
- Adds \$53B annually in healthcare costs



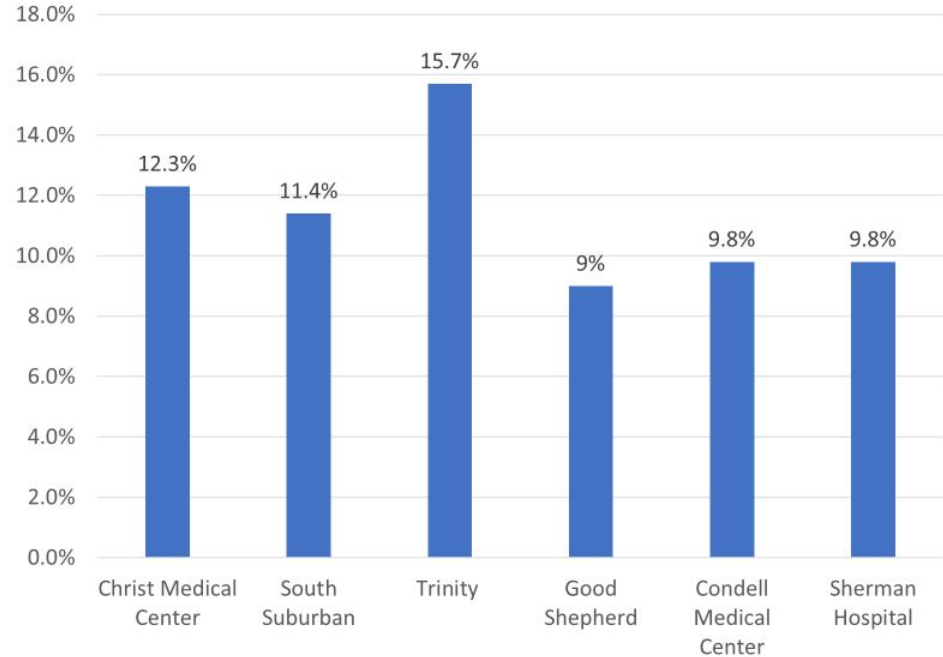
Advocate Health 6 Areas of Impact

- Advance Health Equity
- Lead Environmental Sustainability

Food Insecurity

- Rate of food insecurity continues to rise
- 9.5% of Illinois residents are food insecure
- Food pantries need support
- Not enough produce available
- Community members waiting in lines 2+ hours long

Food Insecurity Rate by Advocate Hospital



Food Insecurity

| Christ Medical Center | | South Suburban | | Trinity | |
|---|---------------------------|-------------------------|---------------------------|------------------------|---------------------------|
| Food Insecurity rate | 12.3 percent of residents | Food Insecurity Rate | 11.4 percent of residents | Food Insecurity Rate | 15.7 percent of residents |
| The Zip codes within the hospital geography with the highest food insecurity rate | | | | | |
| Neighborhood | Food Insecurity Rate | Neighborhood | Food Insecurity Rate | Neighborhood | Food Insecurity Rate |
| West Englewood (60636) | 18.7 percent of residents | Harvey (60426) | 17.0 percent of residents | South Shore (60649) | 20.4 percent of residents |
| Justice (60458) | 16.8 percent of residents | Chicago Heights (60411) | 14.7 percent of residents | Grand Crossing (60619) | 17.0 percent of residents |
| Chicago Ridge (60415) | 16.2 percent of residents | Dolton (60419) | 12.8 percent of residents | Auburn Gresham (60620) | 16.1 percent of residents |

Trinity Food Pharmacy Pilot



Trinity Hospital

Highest rate of food insecurity at 15.7% of residents



Healthy Living Food Pharmacy

Bringing fresh produce to food insecure patients



Pilot Goal

Provide 10-20% of Smart Farm produce



Benefit to Organization

Opportunity to test the distribution process, expand impact, and track success



“Healthy Soil,
Healthy Food,
Healthy People.”
-J Rodale



Soil vs The Cereal Box





An aerial photograph of a vibrant green agricultural field, likely a rice paddy, showing a complex grid of furrows and small structures. The field is divided into numerous rectangular plots, with some areas appearing slightly more yellowish-green, possibly due to different crop stages or soil conditions. A small white structure is visible in the upper right quadrant, and another smaller structure is in the lower right quadrant. The overall scene is a dense, organized pattern of green vegetation.

Regenerative Agriculture

Least Disturbance: No-Till

Plant perennial crops along with annuals

Natural fertilizers and pesticides

Composting

Cover crops

Manage livestock grazing

Biodiversity



Rodale Institute
Regenerative Health
Care Conference
September 2024

BARRINGTON

health & wellness summit

A curated group of experts bringing
the health & wellness movement to
Barrington



3-5 Year Growth Plan

| Objectives | Year 0 (2022-23) | Year 1 (2024) | Year 2 (2025) | Year 3 (2026) | Year 4 & 5 (2027-2028) |
|------------------|---|--|---|---|---------------------------------|
| Acreage Total | 2 acres (Current State) | 5-6 acres | 8-9 acres | 10-12 acres | 15+ acres |
| Produce | 16,800+ or 14,500+ meals | 49,000lbs or 29,000 meals | 98,000 lbs. or 81,600+ meals | 126,000 lbs. or 105,000 meals | 180,000lbs. or 150,000 meals |
| Community Impact | Partner with local community orgs Food pantries AH Hospital partnership – Trinity Food Farmacy HMC Chronic illness pilot Farm and hospital stands | Incorporate Culinary Medicine & Educational Programming Cooking demonstrations Increase # of food farmacy sites Partner with AMG clinics and hospital depts to identify food insecure pts | Pilot education programming with schools in GS community Continue tracking clinical outcomes Residency partnerships | Explore FQHC collaborations Partner with EAP resources Continue tracking clinical outcomes Expand educational programming with schools within community Expand to AH community partners for continued education – Mindful Waste | |

Smart Farm Food Voucher Pilot Program Health Manager Center

- Multidisciplinary chronic disease management center
- Services include:
 - Anticoagulation clinic
 - Bariatric Surgery
 - Diabetes Education
 - Diabetes Medication Management
 - Medical Weight Management
 - Nutrition counseling
 - Wound clinic
- Screening process:
 - Clinician screens pt for food insecurity using questionnaire in Epic
 - Provides food resources and voucher to pts identified as food insecure



Food Farmacy Ingredient Spotlight

Collard Greens



RECIPE

Ingredients

- 2 cloves garlic
- 1 bunch collard greens
- 1 large yellow onion
- 1 teaspoon dried herbs
- 2 tablespoons vegetable oil
- ½ cup stock or water
- 1 can diced tomatoes
- 1 teaspoon salt
- 3 cups cooked brown rice
- 2 cups cooked beans
- 1 lime



Steps

1. Dice the onion and garlic. Chop or tear the greens into bite-sized pieces.
2. Heat the saucepan on medium-high heat for 1 minute and add 1 tablespoon oil, half the garlic, and the greens. Sauté until tender, about 4 minutes. Remove the greens from the pan and set aside.
3. In the same pan, heat the remaining 1 tablespoon of oil. Add the chopped onion and the remaining garlic and sauté until brown, stirring occasionally with a spoon or spatula. Add the stock a couple tablespoons at a time. Continue to cook to reduce the liquid until the onions are soft and caramelized, about 10 to 15 minutes.
4. Add the can of tomatoes and its juices to the pan. Heat the mixture to a simmer, with small bubbles coming up to the surface gently. Allow to cook at this heat for 8 to 10 minutes.
5. Add cooked greens, herbs, and 1 teaspoon of salt. Continue to simmer, stirring occasionally, for 3- 5 minutes.
6. Fold the cooked rice and beans into the pan and heat through. Garnish with a squeeze of lime juice and extra herbs, if desired.

Lessons Learned

