



ROBERTS ACADEMY FIT KIT INITIATIVE

Service and Advocacy Elective

Alejandra Dumenigo



COMMUNITY PARTNER BACKGROUND



CCHMC HEALTHWORKS



- Helps children with overweight/ obesity associated health conditions to set realistic goals while considering health disparities that may act as barriers to creating healthier eating habits or increasing physical activity.
- Patients see a physician, dietician, and exercise physiologist during each visit
- Once a month the HealthWorks providers volunteer at a clinic held on the Roberts Academy campus to facilitate access.

ROBERTS ACADEMY

- Roberts Academy is a public school for Pre-K through 8th grade students in Price Hill.
- The students are primarily from lower socioeconomic homes and a wide range of backgrounds including 20 different countries, with a majority from Latin America.



THE TEAM



Robert M. Siegel, MD, FAAP



Catherine Anthony, RD, LD

PROJECT BACKGROUND

- **Issues Identified:**

- Portion sizes
 - Tortilla vs rice
 - Skipping meals at school
- Knowledge of food groups
- Sugary drinks
- Increased screen time
- Decreased physical activity

- **Objectives:**

- Provide basic nutrition education that was simple and culturally appropriate

METHODS



FIT KITS

- 2019-2020 Fit Kits: A Fit Kit included a shelf-stable, low-cost, healthy meal for a family of four, a portioned plate, and a soccer beach ball. Families also received monthly educational materials, healthy meal recipes, information about community food and exercise resources, and were invited to attend a culturally adapted cooking experience.
- Two prior 2 fresh food distributions at Roberts where an estimated 8000 meals were distributed.
- My Project:
 - Pre-education survey
 - 10 minute education based on problem areas identified
 - Post-education survey
 - Bag of fresh groceries

PRE/ POST-EDUCATION SURVEY

Child Name: _____ Age: _____

Please fill in the space with a number in response to the questions below:

How many cups of vegetables should your child have each meal? _____

How many cups of protein should your child have each meal? _____

How many cups of rice (if not eating tortillas) should your child have each meal? _____

How many tortillas (if not eating rice) should your child have each meal? _____

How many cups of juice, soda, Kool-Aid or punch should your child drink/day? _____

How many hours of screen time should your child get each day at home? _____

How many minutes of physical activity should your child get per day? _____

EDUCATION MATERIALS

How Should My Plate Look?



Protein

- 1 cup of protein

Grain/Starch

- 1 cup of rice
- OR
- ½ cup of rice and 1 tortilla
- OR
- 2 tortillas

Vegetables

- 2 cups of vegetables



To approximate measurements, remember 1 cup is ~ the size of your fist

¿Cómo debe verse mi plato?



Carne/ Proteína

- 1 taza de proteína

Cereales/Almidón

- 1 taza de arroz
- O
- ½ taza de arroz y 1 tortilla
- O
- 2 tortillas

Verduras

- 2 tazas de vegetales

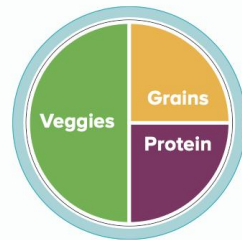


para aproximar las medidas recuerda que 1 taza es ~ el tamaño de tu puño

EDUCATION MATERIALS

Build-A-Meal

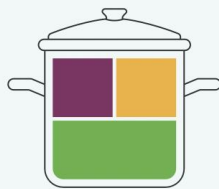
CREATING HEALTHY AND BALANCED MIXED DISHES



Create mixed dishes that are:

- $\frac{1}{2}$ vegetables
- $\frac{1}{4}$ meat/protein
- $\frac{1}{4}$ grain/starch

MyPlate for Mixed Dishes



soup pot



bowl



casserole

Sources of Protein

These foods and drinks provide protein. Protein is one part of a balanced diet. Work with your dietitian on the right size portion for your meals and snacks.

Low-fat/Low-sugar Greek Yogurt	Low-fat Cheese (soft)	Shrimp
Low-fat/Unswtnd. Milk/Milk Alternative	Beans	Tuna
Low-fat Shredded Cheese	Lentils	Fish
Low-fat Cottage Cheese	Nuts or Seeds	Lean Beef or Pork
Low-fat/Low-sugar Yogurt	Peanut Butter	Chicken
Low-fat Cheese	Eggs	Lean Breakfast Meat

EDUCATION MATERIALS

Platillos Latinos ¡Sabrosos y Saludables! Delicious Heart Healthy Latino Recipes



U.S. Department of Health and Human Services
National Institutes of Health
National Heart, Lung, and Blood Institute

Picadillo de pollo

- 1 libra de pechuga de pollo, en cubitos, cortada en tiras
- 2 cucharadas de aceite de oliva
- 1 cebolla picada grande
- 1 pimiento verde fresco
- 1 pimiento rojo mediano, en trocitos grande
- 2 tomates de agua, picados en trocitos
- 1/2 taza de salsa de tomate hecho en casa
- 1/2 taza de queso mozzarella

Para aderezar:
1 taza de aceite de oliva
1 cucharadita de ajo picado
1 cucharadita de comino molido
1 cucharadita de pimienta negra

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1 taza de aceite de oliva
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Ingredientes	Porción	Calorías
Carne de res magra	200 g	200
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Carne de res magra	200 g	200

Platillos Latinos (Latino and Subtotal) Platillos principales 22

Pastel chileno de maíz (choclo) con carne y pollo

Refinado de carne

- 1/2 libra de carne de res magra
- 1/2 taza de agua
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Pasta de maíz

- 1/2 taza de maíz
- 1/2 taza de agua
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
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Platillos Latinos (Latino and Subtotal) Platillos principales 23

Ensalada de quinoa con frijoles negros

- 1/2 taza de quinoa cruda
- 1/2 taza de agua
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
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Platillos Latinos (Latino and Subtotal) Platillos principales 24

Pupusas reueltas

- 1/2 taza de masa de pupusa
- 1/2 taza de agua
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
Carne de res magra	200 g	200
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Platillos Latinos (Latino and Subtotal) Platillos principales 25

Encurrido salvadoreño

- 1/2 taza de masa de pupusa
- 1/2 taza de agua
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
Carne de res magra	200 g	200
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Carne de res magra	200 g	200

Platillos Latinos (Latino and Subtotal) Platillos principales 26

Pozole a la mexicana

- 1/2 taza de masa de pupusa
- 1/2 taza de agua
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
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Carne de res magra	200 g	200

Platillos Latinos (Latino and Subtotal) Platillos principales 27

Ensalada de repollo (col) y tomate

- 1/2 taza de repollo
- 1/2 taza de tomate
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
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Carne de res magra	200 g	200
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Carne de res magra	200 g	200
Carne de res magra	200 g	200

Platillos Latinos (Latino and Subtotal) Acompañamiento 28

Pinchos de vegetales a la parrilla

- 1/2 taza de vegetales
- 1/2 taza de aceite de oliva
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
Carne de res magra	200 g	200
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Carne de res magra	200 g	200
Carne de res magra	200 g	200
Carne de res magra	200 g	200

Platillos Latinos (Latino and Subtotal) Acompañamiento 29

Ensalada de chayote en salsa picante de limón

- 1/2 taza de chayote
- 1/2 taza de salsa picante
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
Carne de res magra	200 g	200
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Carne de res magra	200 g	200
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Carne de res magra	200 g	200
Carne de res magra	200 g	200

Platillos Latinos (Latino and Subtotal) Acompañamiento 30

Sopa de lentejas

- 1/2 taza de lentejas
- 1/2 taza de agua
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
Carne de res magra	200 g	200
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Carne de res magra	200 g	200
Carne de res magra	200 g	200
Carne de res magra	200 g	200
Carne de res magra	200 g	200

Platillos Latinos (Latino and Subtotal) Acompañamiento 31

Cazuela de carne en un dos por tres

- 1/2 taza de carne
- 1/2 taza de agua
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
Carne de res magra	200 g	200
Carne de res magra	200 g	200
Carne de res magra	200 g	200
Carne de res magra	200 g	200
Carne de res magra	200 g	200
Carne de res magra	200 g	200

Platillos Latinos (Latino and Subtotal) Platillos principales 32

Pastelón puertorriqueño de plátanos con carne molida

- 1/2 taza de carne molida
- 1/2 taza de plátano
- 1 cucharadita de comino molido
- 1 cucharadita de pimienta negra
- 1 cucharadita de ajo picado

Ingredientes	Porción	Calorías
Carne de res magra	200 g	200
Carne de res magra	200 g	200
Carne de res magra	200 g	200
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Carne de res magra	200 g	200
Carne de res magra	200 g	200

Platillos Latinos (Latino and Subtotal) Platillos principales 33

GROCERY BAGS!

- ✓ Carrots
- ✓ Bell peppers
- ✓ Limes
- ✓ Lemons
- ✓ Garlic
- ✓ Onion
- ✓ Corn tortillas
- ✓ Dried black beans
- ✓ Dried pinto beans
- ✓ Long grain rice



RESULTS



	Clinic Date	# of Bags Distributed	Patient #	Pre-Education Score	Post-Education Score
	11-Nov	5	1	28.57%	71.43%
			2	57.14%	100%
			3	57.14%	100%
			4	28.57%	85.71%
	9-Dec	6			
	13-Jan	6	5	71.43%	85.71%
			6	71.43%	85.71%
			7	57.14%	100%
	10-Feb	4			
	9-Mar	5	8	57.14%	100%
			9	42.86%	42.86%
			10	71.43%	100%
			11	85.71%	100%
			12	42.86%	100%
Total		26	12		

Statistical Analysis: Paired Wilcoxon Signed Rank Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-education	55.9517	12	17.71553	5.11403
	Post-education	89.2850	12	17.36271	5.01218

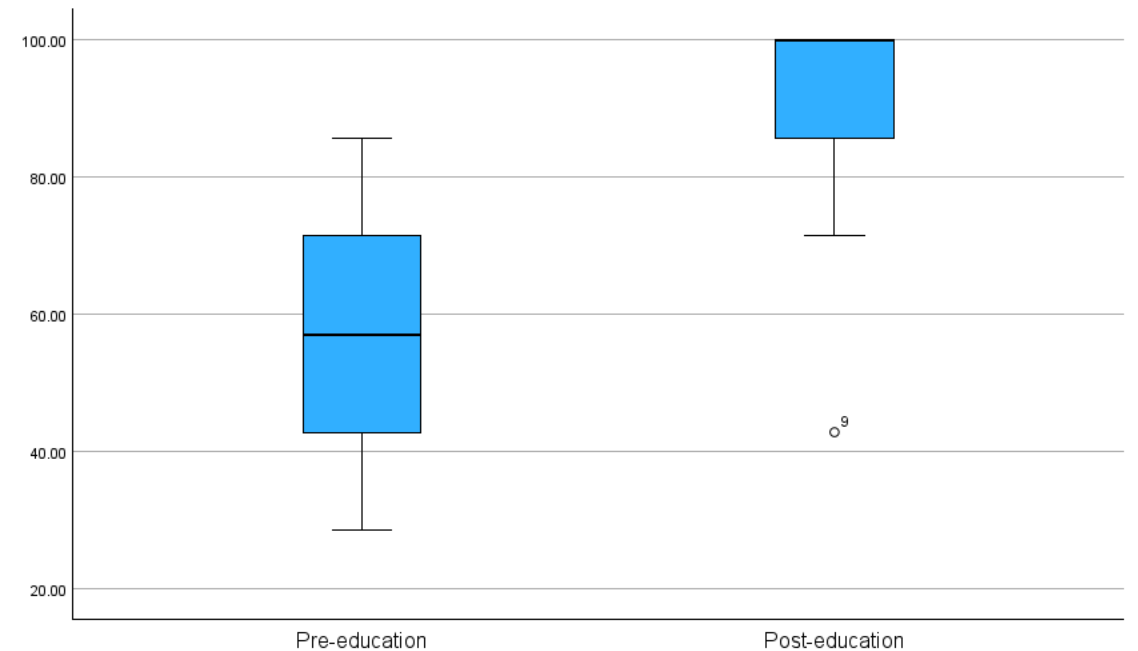
Hypothesis Test Summary

	Null Hypothesis	Test	Sig. ^{a,b}	Decision
1	The median of differences between Pre-education and Post-education equals 0.	Related-Samples Wilcoxon Signed Rank Test	.003	Reject the null hypothesis.

a. The significance level is .050.


b. Asymptotic significance is displayed.

Pre and post-education Survey Scores



COURSE REFLECTION





I feel I now have a better understanding of the the health disparities that Cincinnati's Hispanic population faces including but not limited to nutrition education, food insecurity, language and literacy barriers, access to parks. While I have participated in service experiences with this community in the past, I appreciate that this course provided me with the structure necessary to have lasting impacts. In the future as a resident at CCHMC I hope to continue working on a version of this project so that I can may be able to have more continuity and collect more data.