

# DNP Project Thinking Inside the Food Pantry Box

ELIZABETH SHOAF, RN, MSN, CNOR, CSSM, DNP STUDENT MELISSA MCNEILLY, EDD, MSN, RN, CNE, PROJECT CHAIR

### **Problem Recognition**

- Food insecurity (access to food)
  - Davidson County, NC 14%
  - North Carolina 14%
  - United States 9%
- •Association with Adult Obesity (over the age of 20)
  - Davidson County, NC 36% of adults
  - North Carolina 32% of adults
  - United States 26% of adults
- Food Insecurity related to Adult Health
  - Hypertension/Heart Disease 45%
  - Diabetes 11%
  - Obesity 11%





West Davidson Food Pantry



SECOND HARVEST FOOD BANK

### **OUR VISION**

A healthy, hunger-free Northwest North Carolina.

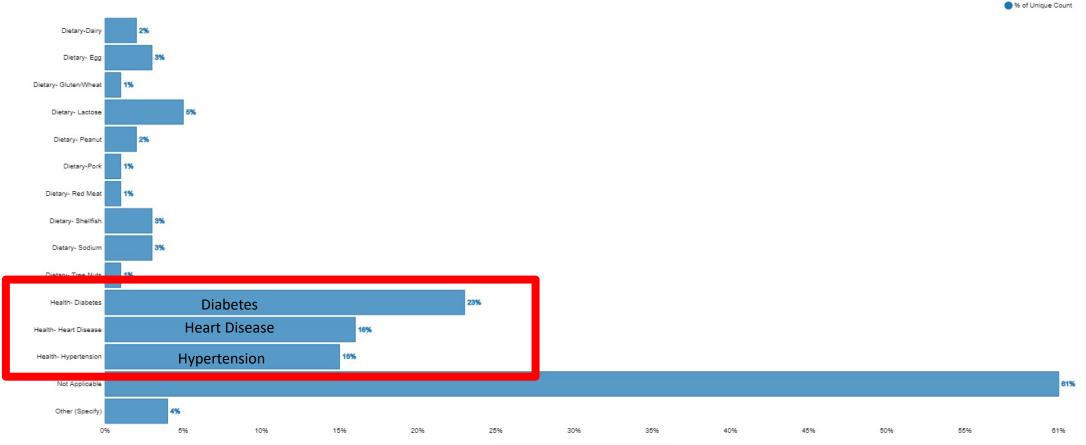
### Regular Box







### Food Pantry - Dietary Considerations



The % of the Unique Count that have selected the option

# Nutritional Guidelines

High Blood Pressure <10% sodium for grains, meats, canned items

	Item	Sugar	Sugar Daily Value	Sodium	Sodium Daily Value	Carbs	Carbs Daily Value	Individual Serving	Total Servings
Canned V	eggies (qty: 3)	Jugar	- diac	oourum	Funde	carbo	- and -	Science	Scienzes
cunica	Canned sweet corn cream style	6g	6%	300 mg	13%	15g	5%	1/2 cup	3.5
	Canned whole kernel corn	5g	0%	200 mg	9%	12g	4%	1/2 cup	3.5
	Canned mixed veggies	3g	0%	210mg	9%	10g	4%	1/2 cup	3
	Canned cut green beans	2g	0%	290mg	13%	4g	1%	1/2 cup	3.5
	Canned cut green beans, no salt added	Og	0%	15mg	1%	3g	1%	1/2 cup	3.5
	Canned pinto beans, low sodium	Og	0%	100 mg	4%	30g	11%	1/2 cup	2
	Canned pinto beans, no salt added	Og	0%	20mg	1%	20g	7%	1/2 cup	3.5
	Canned pinto beans	Og	0%	450 mg	19%	18g	6%	1/2 cup	3.5
	Canned chili beans	1g	0%	500 mg	22%	22g	8%	1/2 cup	3.5
	Canned black beans, reduced sodium	Og	0%	210 mg	9%	20g	7%	1/2 cup	3
	Canned black beans, low sodium	Og	0%	75mg	3%	25g	9%	1/2 cup	2
	Canned pork & beans	7g	12%	390 mg	17%	23g	8%	1/2 cup	3.5
	Canned blackeye peas	Og	0%	490 mg	21%	18g	7%	1/2 cup	3.5
	Canned garbanzo beans / chick peas	1g	0%	310 mg	13%	16g	6%	1/2 cup	3.5
	Canned lima beans	1g	0%	330mg	14%	19g	7%	1/2 cup	3.5
	Canned kidney beans	4g	6%	450 mg	20%	24g	8%	1/2 cup	3.5
	Canned collard greens	Og	0%	15mg	1%	4g	1%	1/2 cup	3.5
	Canned sweet peas	5g	2%	300 mg	13%	11g	4%	1/2 cup	3.5
Tomato Sa	auce (qty: 1)								
	Pasta sauce, traditional, canned	6g	4%	550mg	24%	9g	3%	1/2 cup	5
	Pasta sauce, traditional, canned, low sodium	6g	7%	140 mg	6%	9g	3%	1/2 cup	3
Canned So	oup (qty: 2)								
	Chicken noodle soup	Og	0%	890 mg	39%	8g	3%	1/2 cup	2.5
	Chicken noodle soup, 25% less sodium	Og	0%	660 mg	29%	9g	3%	1/2 cup	2.5
	Homestyle chicken noodle soup	1g	0%	940 mg	41%	8g	3%	1/2 cup	2.5
	Homestyle chicken noodle soup, healthy request	1g	0%	410 mg	17%	10g	3%	1/2 cup	2.5
	Tomato condensed soup	12g	14%	480 mg	21%	20g	7%	1/2 cup	2.5
	Cream of celery soup	1g	0%	850 mg	37%	8g	3%	1/2 cup	2.5
	Cream of potato soup	2g	0%	750 mg	33%	16g	6%	1/2 cup	2.5
	Cream of mushroom soup	Og	0%	870 mg	38%	10g	4%	1/2 cup	2.5
	Cream of broccoli soup	3g	4%	790 mg	33%	9g	3%	1/2 cup	2.5
	Cream of chicken soup	Og	0%	870 mg	38%	10g	3%	1/2 cup	2.5
	Old fashioned vegetable soup	2g	0%	890 mg	39%	15g	5%	1/2 cup	2.5

# Nutritional Guidelines

#### Diabetic

<10% added sugar for grains, canned items

	Item	Sugar	Sugar Daily Value	Sodium	Sodium Daily Value	Carbs	Carbs Daily Value	Individual Serving	Total Servings
Cereal / Oat	neal (qty: 1)								
	Cereal (Honey Nut Tasteeos)	12g	23%	190 mg	8%	30g	11%	1 cup	9
	Cereal (Golden Grahams)	12g	24%	300 mg	13%	34g	12%	1 cup	8
	Cereal (Trix)	12g	24%	180 mg	8%	33g	12%	11/4 cup	8
	Cereal (Frosted Flakes)	14g	29%	200 mg	9%	34g	12%	1 cup	17
	Cereal (Cocoa Puffs)	12g	24%	130 mg	6%	31g	11%	1 cup	8
	Cereal (Rice Krispies)	4g	8%	200 mg	9%	36g	13%	11/2 cup	8
	Cereal (Reese's Puffs)	12g	24%	220 mg	9%	30g	11%	1 cup	8
	Cereal (Life Cinnamon)	10g	19%	200 mg	9%	33g	12%	1 cup	9
	Cereal (Cinammon Toast Crunch)	12g	24%	230 mg	10%	33g	12%	1 cup	8
	Cereal (Corn Flakes)	4g	8%	300 mg	13%	36g	13%	11/2 cup	8
	Cereal (Shredded Wheat)	Og	0%	0mg	0%	50g	18%	11/4 cup	8
Potato (qty:	1)								
	Mashed potato flakes, prepared	2g	0%	230 mg	10%	18g	7%	1/2 cup	20
Toliet Paper	(qty: 1)								
	n/a								
Cracker (qty:	1)								
	Saltine crackers	Og	0%	135 mg	6%	12g	4%	5 crackers	30
	Crackers, Ritz	1g	2%	130 mg	6%	10g	4%	5 crackers	24
Rice (qty: 1)									
	Rice, enriched	Og	0%	0mg	0%	36g	12%	1/4 cup	20
	Rice, long grain brown rice	Og	0%	Omg	0%	32g	12%	1/4 cup	10
Spaghetti / F	Pasta (qty: 1)								
	Noodles	Og	0%	0mg	0%	40g	15%	2 oz	8
Mac & Chees	se (qty: 2)			1.00		1.5			
	Macaroni & Cheese, prepared	5g	0%	800 mg	35%	48g	18%	1 cup	4
Jelly (qty: 1)		0							
	Jelly, concord grape	9g	16%	5mg	0%	13g	5%	1 tbsp	42
Peanut Butte		0				0			
	Peanut Butter	3g	4%	125 mg	6%	7g	3%	2 tbsp	14
Sugar (qty: 1		-0		0		. 0			
0	Sugar (4lb bag)	8g	16%	0mg	0%	8g	3%	2 tsp	227

### **Diabetic Box**



### High Blood Pressure Box



### Implementing ...

- IRB approved Jan 27<sup>th</sup>
- Data collection began Feb 3rd (for 60 days) with a prequestionnaire
- Post-survey

#### Gardner-Webb University Pre-Questionnaire

1. Which food box would you like today?

**Regular Box** 





**High Blood Pressure Box** 



### Current data state (30 of 60 days)

#### Data

- ✓ 23 clients surveyed
- ✓ All have said they know how to cook/prepare
- ✓ 17 selected "cost" as the reason for difficulty obtaining healthy food
- ✓12 have chosen a specialty box
- ✓11 should "lose weight"
- ✓ 16 have hypertension (11 of these eat a low sodium diet)
- ✓11 have diabetes (7 of these eat a low sugar diet)

#### Lessons Learned / Challenges

- Not all food pantry volunteers want to change processes
- Obtaining specialty box components relies on donations and shoppers
- Not all those with health issues want to eat healthy
- Credibility of client answers due to perceived "correct" answers
- The opportunity for education seems abundant!
- Food pantries need partnerships with healthcare profressionals

### What they are saying ....



# It takes a village (pantry) ... to provide healthy food security to a community



### What do you donate to a food drive?

Feed hunger with health!

### References

Bemker, M.A. & Ralyea, C. (2018). Population health and it's integration into advanced nursing practice. DEStech Publications

Coleman-Jensen, A., & Gregory, C. (2017). Food insecurity, chronic disease, and health among working-age adults. SSRN Electronic Journal.

Davidson County Health Department. (2019). State of the county health report 2019. https://www.co.davidson.nc.us/DocumentCenter/View/3746/2019-State-of-the-County-Health-Report

Dossey, B.M., & Keegan, L. (2016). Holistic nursing: A handbook for practice (7th ed.). Jones & Bartlett Learning.

Farrell, P., Thow, A., Abimbola, S., Faruqui, N. & Negin, J. (2017). How food insecurity could lead to obesity in LMICs. Health Promotion International, 33(5), 812-826. https://doi.org/10.1093/heapro/dax026

Harris, T.F. (2021), Do SNAP work requirements work?. Economic Inquiry, 59: 72-94. https://doi.org/10.1111/ecin.12948

How healthy is your county? County health rankings. (2020). County Health Rankings & Roadmaps. Retrieved June 7, 2021, from https://www.countyhealthrankings.org/

Knight, E. (2015). The definitive guide to population health management. HCPro.

Lexington Food Assistance. (2021, August 4th). Food-Banks.org. Retrieved August 4th, 2021 from https://food-banks.org/assistance/lexington nc.html

Martin, K. S., Wu, R., Wolff, M., Colantonio, A. G., & Grady, J. (2013). A novel food pantry program: Food security, self-sufficiency, and diet-quality outcomes. American Journal of Preventive Medicine, 45(5), 569-575. https://doi-

#### org.ezproxy.gardner-webb.edu/10.1016/j.amepre.2013.06.012

Robaina, K. A., & Martin, K. S. (2013). Food insecurity, poor diet quality, and obesity among food pantry participants in Hartford, CT. Journal of Nutrition Education and Behavior, 45(2), 159-164. https://doi.org/10.1016/j.jneb.2012.07.001

Taylor, E. A., Foster, J. S., & Mobley, A. R. (2021). Examining factors related to the food insecurity–obesity paradox in low-income mothers and fathers. *Food and Nutrition Bulletin*.

Testa, A., & Jackson, D.B. (2019). Food insecurity, food deserts, and waist-to-height ratio: Variation by sex and race/ethnicity. Journal of Community Health, 44(3), 444-450. https://doi.org/10.1007/s10900-018-00601-w

Zaccagnini, M. & Pechacek, J.M. (2021). The Doctor of Nursing Practice Essentials: A new model for advanced practice nursing (4th ed.). Jones and Bartlett Publishing.