



How Do the Characteristics and Concentration of SNAP Approved Stores Affect Community Health?

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Supplemental Nutrition Assistance Program

- Goal: To improve nutrition in low income households and strengthen the agricultural economy.¹
- About half of all children, and 90% of African-American children,² receive benefits from SNAP at some time during their childhood.
- Entitlement
- Electronic Benefit Transfer
- Meant to be used at grocery stores³

¹<http://www.fns.usda.gov/snap/rules/Legislation/about.htm>

²Rank MR, Hirschl TA. Estimating the risk of food stamp use and impoverishment during childhood. *Arch Pediatr Adolesc Med.* Nov 2009;163(11):994-999.

³<http://www.ers.usda.gov/publications/eib29/eib29-4/eib29-4.pdf>



SNAP's a big program....

SNAP's 2014 budget compared to other government programs

- Social Security¹: \$848 Billion
- Military¹: \$572 Billion
- Medicare¹: \$505 Billion
- SNAP²: \$78 Billion
- NIH¹: \$30 Billion
- National School Lunch Program¹: \$19.5 Billion
- Head Start¹: \$8.5 Billion
- WIC²: \$7 Billion
- CDC¹: \$7 Billion



Size of SNAP--2013

	South Carolina	North Carolina	USA
Population ¹	4,774,839	9,848,060	316,128,839
SNAP Recipients ²	875,866	1,703,700	47,636,084
SNAP Benefits ³	\$1,381,782,118	\$2,491,197,794	\$76,067,237,586
Average benefits per person ⁴	\$131.47	\$121.85	\$133.07
% of population on SNAP	18.3%	17.2%	15.1%

[1] <http://quickfacts.census.gov/qfd/states/37000.html>

[2] <http://www.fns.usda.gov/PD/15SNAPpartPP.htm>

[3] [http://www.fns.usda.gov/PD/17SNAPfyBEN\\$.htm](http://www.fns.usda.gov/PD/17SNAPfyBEN$.htm)

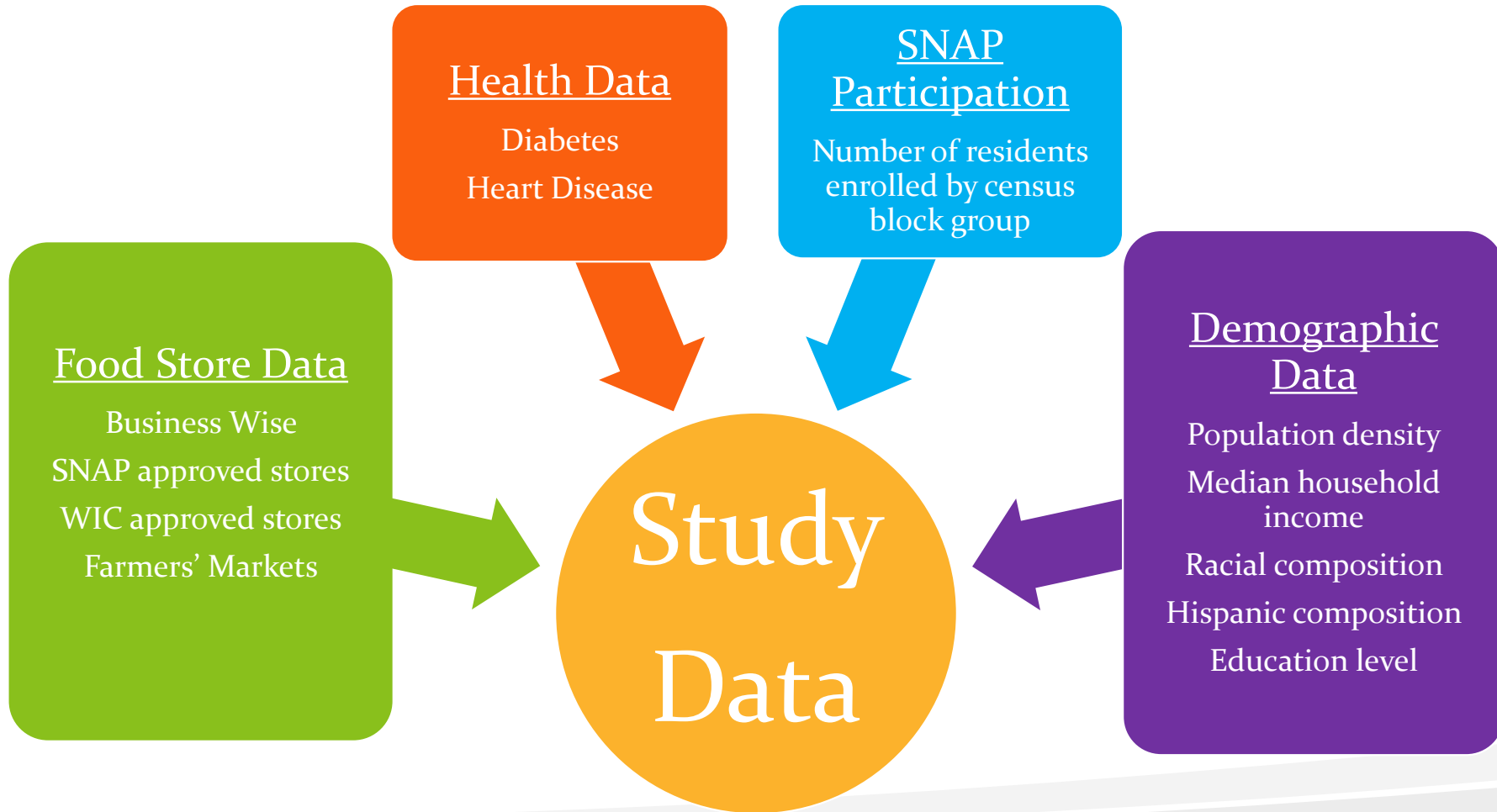
[4] [http://www.fns.usda.gov/PD/18SNAPavg\\$PP.htm](http://www.fns.usda.gov/PD/18SNAPavg$PP.htm)



Mecklenburg County Food Assessment-2010

- Commissioned by the Mecklenburg County Health Department
- Requested by the Charlotte-Mecklenburg Food Policy Council
- Purpose
 - Assess the food environment
 - Identify food deserts
 - Examine the relationship between food access and population size, race/ethnicity, income, and health

Mecklenburg County Food Assessment Data Sources





SNAP Approved Stores and Community Health

- Study Propose:
- To examine the types of foods available at and concentration of SNAP-approved food stores in communities in a Mecklenburg County, NC

Research Questions:

1. How are full-service and limited-service SNAP-approved stores concentrated throughout the county and what types of food are sold at these stores?
2. How is the presence of different types of food stores at the community level associated with 2 measures of community health?

	County	County Stratified by Income		
	373 CBGs	Low 93 CBGs	Middle 187 CBGs	High 93 CBGs
SNAP Food Stores				
Full Service	168	35	95	38
Limited Service	298	111	169	18
Ratio	1.8	3.2	1.8	0.5
Demographic characteristics				
Total Population	942,785	124,068	493,127	325,590
Median income	57,793	33,273	57,793	105,354
Average Percent White	55.7	28.2	58.8	76.8
Average Percent Black	31.8	57.4	27.6	14.8
Average Percent Hispanic	11.0	14.2	13.0	3.8
Average Percent receiving SNAP	14.3	31.7	11.9	1.8
Number of premature deaths to heart disease per 100,000 residents	137.0	225.0	130.3	63.5
Number of premature deaths to diabetes per 100,000 residents	26.0	46.1	25.3	7.6



Food Category	Full Service SNAP Stores n=168 n (%)	Limited Service SNAP Stores n=298 n (%)
Fresh Meat	168 (100)	21 (7)
Fresh Produce	168 (100)	2 (0.7)
Dairy	168 (100)	274 (92)
Processed	168 (100)	298 (100)
Store Description		
Grocery	146 (87)	31(10)
Convenience Store-Without Gasoline	0 (0)	73 (24)
Gasoline Station with Convenience Stores	0 (0)	44 (15)
Meat and Seafood Markets	4 (2)	15 (5)
Miscellaneous Food Stores	2 (1)	0 (0)
Miscellaneous General Merchandise Stores	15 (9)	80 (27)
Variety Stores	0 (0)	55 (18)
Fruit and Vegetable Market	1 (0.6)	0 (0)

How are the number of stores related to community health?

Number of SNAP Approved Stores in a CBG		Incidence of Premature Death			
		Heart Disease		Diabetes	
		Unadjusted	Adjusted	Unadjusted	Adjusted
Full Service	Exp. Coef. (Exp.SD)	1.18 (1.14)	1.06 (1.05)	1.27 (1.21)	1.18 (1.14)
	p-value	0.003	0.28	0.006	0.07
Limited Service	Exp. Coef. (Exp. SD)	1.27 (1.32)	1.23 (1.27)	1.23 (1.27)	1.09 (1.11)
	p-value	<0.001	<0.001	<0.001	0.16

Adjusted for population density, socioeconomic status, percent Hispanic, and percent Asian



Mecklenburg County SNAP Stats, 2010

- About 78% of eligible people in Mecklenburg participated
- Average monthly number of individual recipients – 117,593
- Total SNAP benefits issued in 2010 (January-December) – \$213,896,943
- Average monthly benefits per participant in NC--\$128.24



SNAP Redemptions¹-Mecklenburg County, 2010

	Redemptions (Millions)	%
Grocery Stores	111.9	52
Super Stores	86.4	40
Convenience Stores	5.2	2
Variety Stores	5.5	3
Other	6.7	3
Totals	215.7	100

¹Southeast Regional USDA Field Office



Questions to ponder...

What should SNAP stores sell?

Where should SNAP stores be?

Is the current placement of SNAP stores beneficial to SNAP recipients?

What's next?