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### The Disproportionate Effect of Diet-Sensitive Chronic Diseases on Food Insecure Individuals in the Northern Tier of Binghamton

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# THE DISPROPORTIONATE EFFECT OF DIET-RELATED CHRONIC DISEASES ON FOOD INSECURE INDIVIDUALS OF BINGHAMTON, NY

PRESENTER: MAKENNA MOORE

## INTRODUCTION

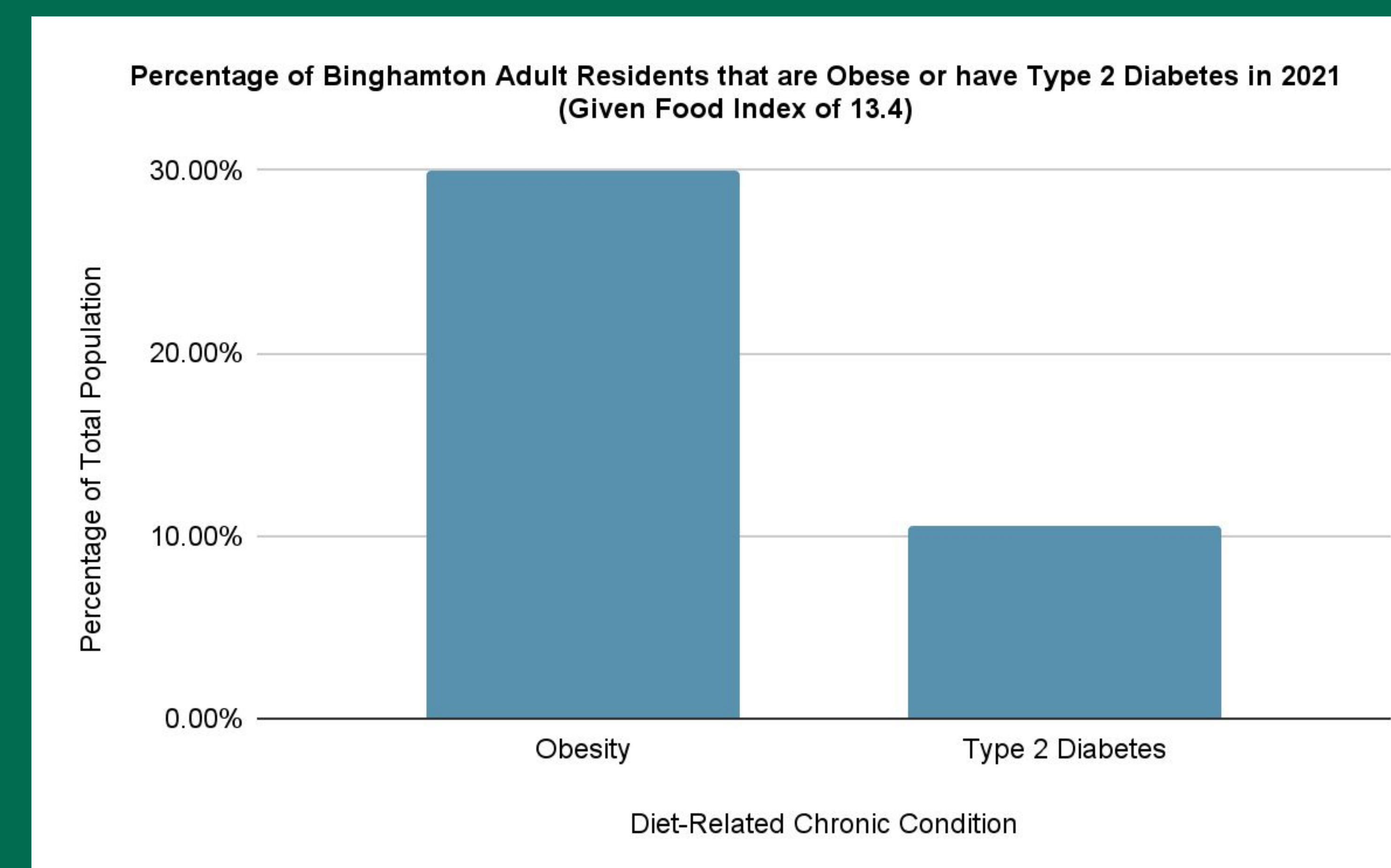
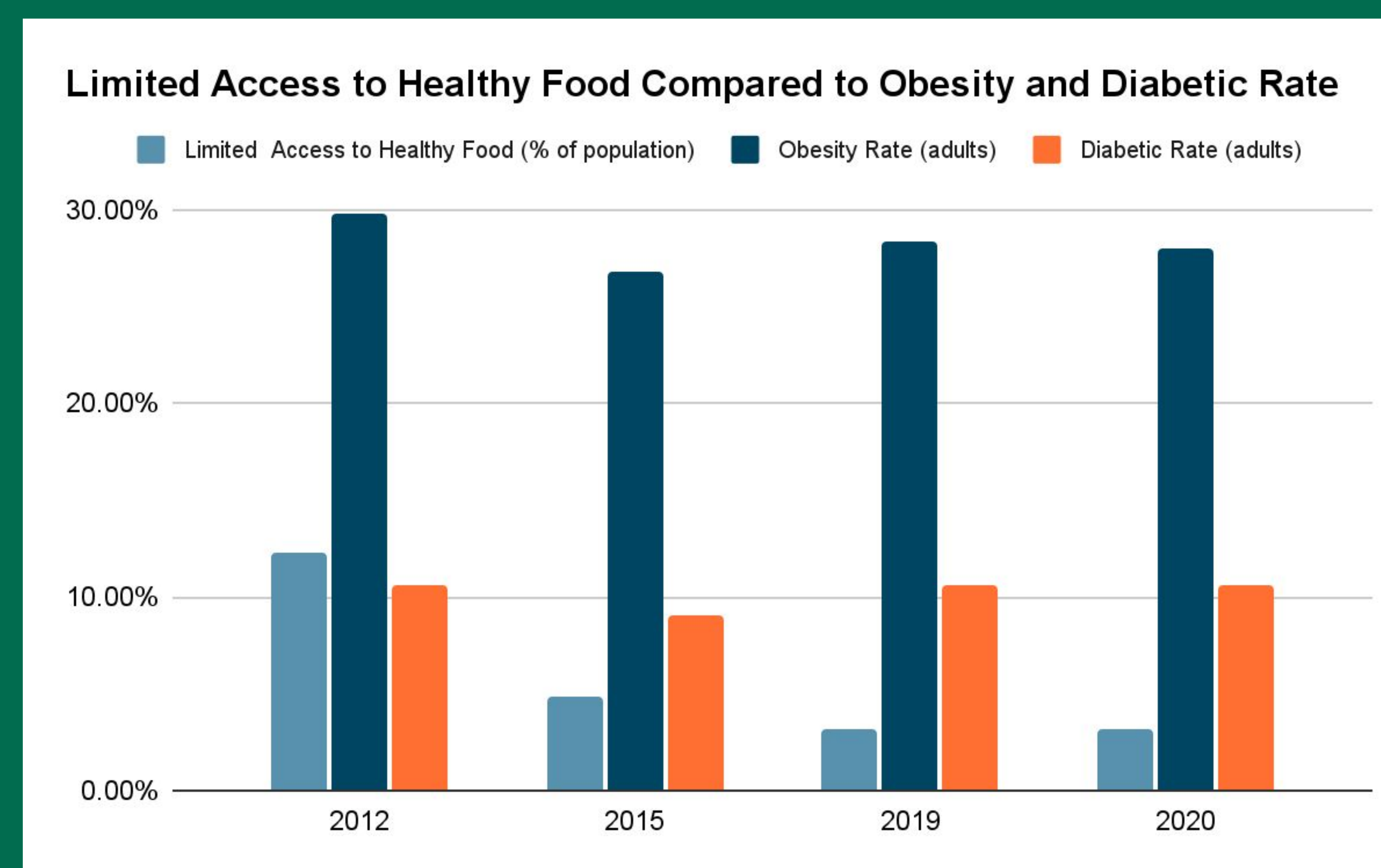
With the intent of discovering the relationship between health-related chronic diseases and food insecurity, this study attempts to correlate cardiovascular health, obesity, and type 2 diabetes with the lack of accessibility to nutritious, affordable food for adult residents in Binghamton, NY.

National statistics are striking, and Binghamton is no exception. The apparent and detrimental functional limitation resulting from food insecurity draws upon critical issues of social inequality throughout the city, calling for necessary change and imperative initiatives. While strides are being made, the health discrepancy stands and the gathered data from this study proves this claim.

## METHODS

- Qualitative Analysis:
  - Interview with the Director of CHOW of Broome County, Les Aylesworth
  - Interview with the Director of Urban Farm Management at VINES, Cynthia Averett
- Quantitative Analysis:
  - Using both national statistics and local census data:
    - Correlated health statistics data with the situation around food insecurity gathered from interviews
- Trends can be recognized from the representational components

# Food insecure adults of Binghamton are significantly more likely to have conditions such as type 2 diabetes, cardiovascular diseases, and obesity



## DISCUSSION

- The Social Explorer Database was used to evaluate the health conditions of food insecure individuals during the years 2012, 2015, 2019, 2020. More recent and consistent data is unavailable
- Figure 1: As the access to affordable, healthy food increased over the years, obesity rates decreased. Though the rate fluctuates, correlations can be noticed
- Figure 2: Given the food index of Binghamton in 2021 to be 13.4, the obesity and diabetes rates for that year are displayed. This proves that a high rate for both conditions correlated with a high food index percentage

## CONCLUSION

- “It is more difficult to distribute healthy food because it is more expensive”--Les Aylesworth*
- “The VINES Wagon Wheel provides people with accessibility to healthier food sources”--Cynthia Averett*
- Evidently, the trends of the graph prove that diet-related chronic diseases are more likely to be present for a food insecure individual in Binghamton versus a food secure individual
- Though the disparity is closing throughout the years, the situation is still present and must be addressed
- Local initiatives have made strides in closing the inequality gap
- Concludingly, this research supports correlation, yet lacks enough evidence to identify a causation of chronic diseases for food insecure adults

## REFERENCES & ACKNOWLEDGEMENTS

- Executive Director of CHOW Broome County, Les Aylesworth
- Director of Urban Farm Management at VINES, Cynthia Averett
- Social Explorer Database



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