

I. **TITLE:** Food Deserts in Chicago, IL

II. **INTRODUCTION/BUSINESS PROBLEM**

This is an investigation into the availability of fresh produce/groceries in Chicago's most impoverished areas and will analyze for improvement in these areas.

Many studies have shown that the lack of readily available access to fresh produce/groceries is directly detrimental to diet and health but can also indirectly impact education and career progression. The results of this study will assist civic leaders and urban planners in the strategic planning for the success of Chicago residents in impoverished areas, as well as provide a strategic analysis to potential national grocery chain stores.

A food desert is defined as "regions where people have limited access to healthful and affordable food. This may be due to having a low income or having to travel farther to find healthful food options." Source: [Medical News Today](#)

According to the same article in Medical News Today: *The United States Department of Agriculture (USDA) defines a food desert as an area that has either a poverty rate greater than or equal to 20% or a median family income not exceeding 80% of the median family income in urban areas, or 80% of the statewide median family income in nonurban areas.*

In order to qualify as a food desert, an area must also meet certain other criteria. In urban areas, at least 500 people or 33% of the population must live more than 1 mile from the nearest large grocery store. In rural areas, at least 500 people or 33% of the population must live more than 10 miles from the nearest large grocery store.

In this analysis we will focus in on the urban 1-mile radius but will let Data Science algorithms group Zip Codes by the K-Means squared algorithm.