## Obesity in Chicago and its relation with its venues

## 1. Introduction

There is a public concern regarding with overweight and obesity all around the world. Nowadays, there is a huge percentage of americans suffering with obesity and children are also in danger. Factors such as bad eating habits, sedentarism, and the fast living pace are increasing the junk food consume and decreasing physical activity.

In this project we will try to analyze similarities between community areas in the city of Chicago, according with their percentage of population suffering from obesity, in terms of the most popular venues in each area. The main objective is to verify whether the venues are affecting people's weight. This report will be targeted to the Government (Specially Health Area), as well as to the owners of this venues so that they can also take corrective actions. This information is also very useful for Centers for Desease Control and Prevention (CDC), which is an entity in charge of protect community health. They are developing a project called *Communities Putting Prevention to Work (CPPW)*, which is an initiative designed to "make healthy living easier by promoting environmental changes at the local level".

For the CDC, it would be interesting to have an analysis that allows them to take decisions regarding venues that are affecting positively or negatively the population's weight. If it is possible to verify whether there exists a relationship between the venues and the amount of obese people, some action plans can be taken to improve food quality in determined zones and create incentives for people so that they can make exercise actively. It would be cheaper to prevent this behavior from the source, rather than spending money in gastric bypassing, surgeries and heart diseases treatments needed because of obesity.

The main idea with this project would be to compare venues in the community areas and by using clustering verify if there is a pattern in data that can be related with high/low obesity levels in each area, so that the Government can take any action e.g. giving rewards for restaurants to control portions and food quality, subsidize gym subscriptions for people, and so on.

.

1