



# Type 2 Diabetes in the Latino Population

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# Background

- RIT's Dietetic Program is sub-contracted for a grant to provide research and intervention strategies for type 2 diabetics in the Latino population in Rochester, NY.



# Problem Statement

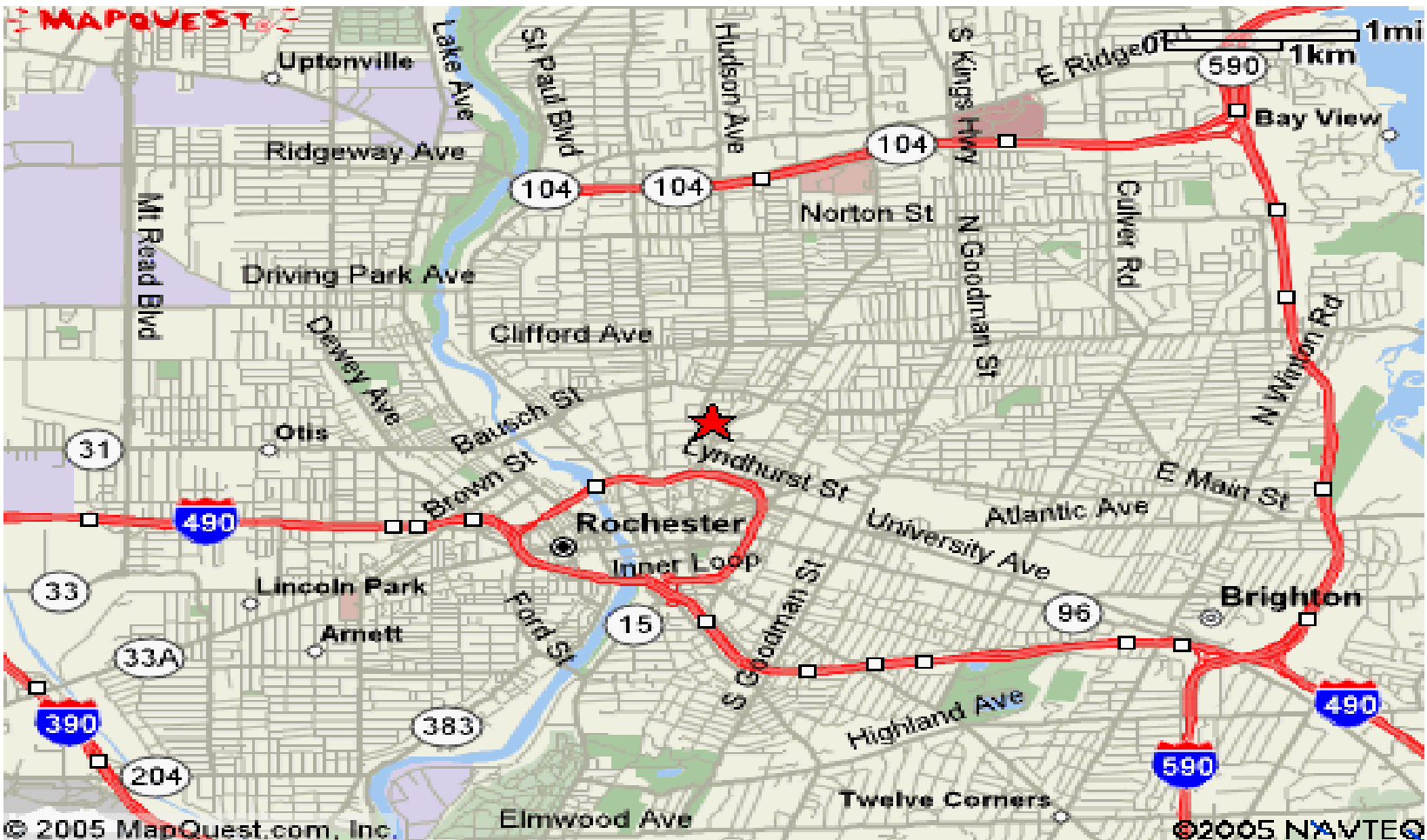
- There are not enough sources of information or interventions to help the low-income Latinos, which are 200% or more below poverty level, treat or manage their disease.



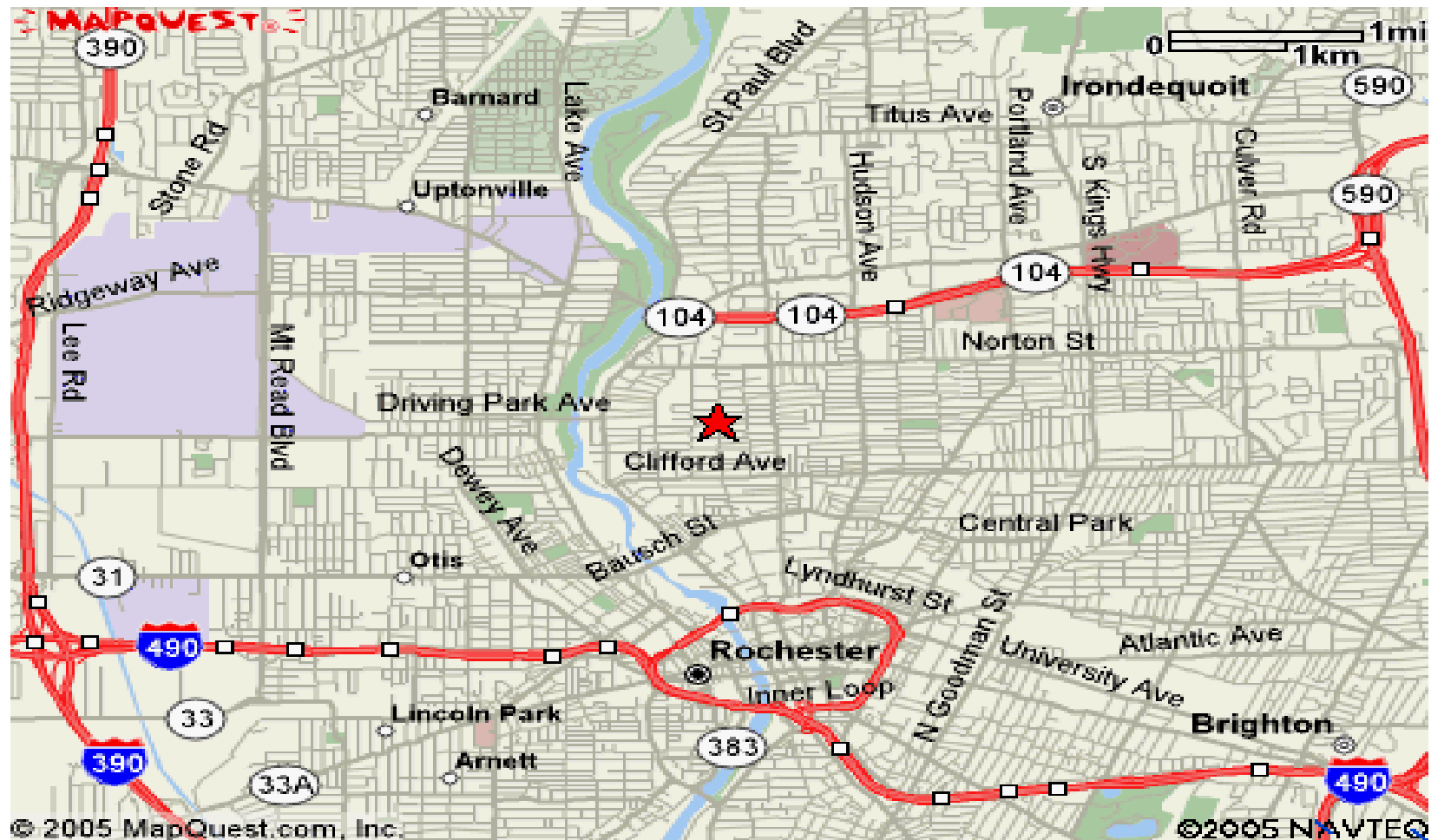
# Purpose/Objectives

- The purpose of this nutritional component is to provide research about type 2 diabetes, select strategies for intervention, and recipe development that will all help type 2 diabetic Latinos manage their disease in a culturally specific manner.

# Map of zip code 14605



# Map of zip code 14621





# Methodologies

- Met with grant committee
- Literature Review
- Recipe development
- Consultation with ethnic advisor regarding target population



# What is Type 2 Diabetes?

- Type 2 diabetes is caused by the decreased insulin production and an increased insulin resistance by the peripheral tissues.





# Prevalence

- Most common form of diabetes.
- 18.2 million people in the U.S. have diabetes.



# Risk Factors for Developing type 2 diabetes

- Being overweight or obese
- Family history
- Being African American, Latino, Native American, Asian American, or a Pacific Islander
- Age (over 60 years old)
- High triglyceride levels, or low HDL cholesterol levels.



# Complications

- Retinopathy
- Nephropathy
- Neuropathy
- Hypertension
- Coronary Artery Disease
- Hyperlipidemia





# Common Foods in the Latino Diet...continued

- Sausage
- Dried codfish
- Salt
- Beef
- Poultry
- Dairy



# Americanization of Diets

- Puerto Rican diets are highly Americanized since many foods are imported from the U.S. Their diet tends to be high in pizza, fast and processed foods.
- Mexicans are continuing to fry meals and are adding the poor food habits of the West to their diet.



# Prevalence of Type 2 Diabetes in the Latino Population

- 2 million or 8.2% of all Latinos have type 2 diabetes
- Prevalence is 1.5 times higher in Latinos than non-Latino whites
- Approximately 24% of Mexican Americans, 16% of Cubans, and 26% of Puerto Ricans in the U.S. between the ages of 45-74 have diabetes.



# Risk Factors Latinos Have for Developing Type 2 Diabetes

- Diet high in fat, sodium, and calories
- Being in a minority population
  - 300% greater risk of developing diabetes than the general population
- Lack of physical exercise
- Lifestyles
- Possible attitudes





# Treatment

- Exercise
- Nutrition
- Tools



# Treatment

- Tools
  - “Rate Your Plate”



# Treatment Tools Continued

- Carbohydrate Counters or Exchange Lists
- Activities Count
  - Suggestions: Park farther away, walk at the mall, take the stairs, do exercises in front of the television.
- Read Food Labels



# Ensalada de Bacalao...Cod Fish Salad

- 1 lb cod fish
- 1 white onion
- Black Pepper to taste
- ½ cup Olive oil
- 2 hard boiled eggs
- ¼ cup of white vinegar
- Adobo to taste



# Nutrient Content of Cod Fish Salad

- Calories...390
- Total Fat...31g...48% of the RDA
- Saturated Fat...4.5g...24% of the RDA
- Sodium...730mg...30% of the RDA



# Modified Cod Fish Recipe

- 1 lb cod fish
- Half Red onion
- Half of Red and Green Peppers
- 1 carrot
- 2 cloves of garlic
- Black Pepper to taste
- $\frac{1}{2}$  cup Olive oil ( $\frac{1}{4}$  cup total after drained)
- 3 hard boiled eggs with one yolk.
- $\frac{1}{4}$  cup of white vinegar
- Adobo to taste



# Nutrient Content of Modified Cod Fish Salad

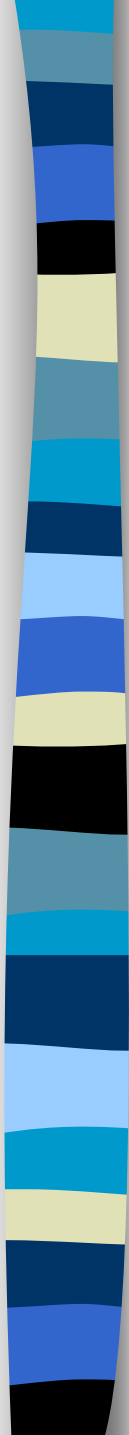
- 180 Calories
- 11g Total Fat and 1.5g Saturated Fat
- 500mg Sodium
- **Compared to *Original***
- 390 Calories
- 31g Total Fat and 4.5g Saturated Fat
- 730mg Sodium



# Intervention Strategies

- Starr County Border Health Initiative
- Project Dulce
- Agurs-Collins
- Gilden et al
- Falkenberg et al
- Mazzuca et al
- Brown et al
- Corkery et al







# Conclusion

- We are recommending one of these intervention strategies be chosen for implementation during the next phase of the grant, nutrition intervention.