# Type 2 Diabetes in the

# Latino Population

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## Background

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

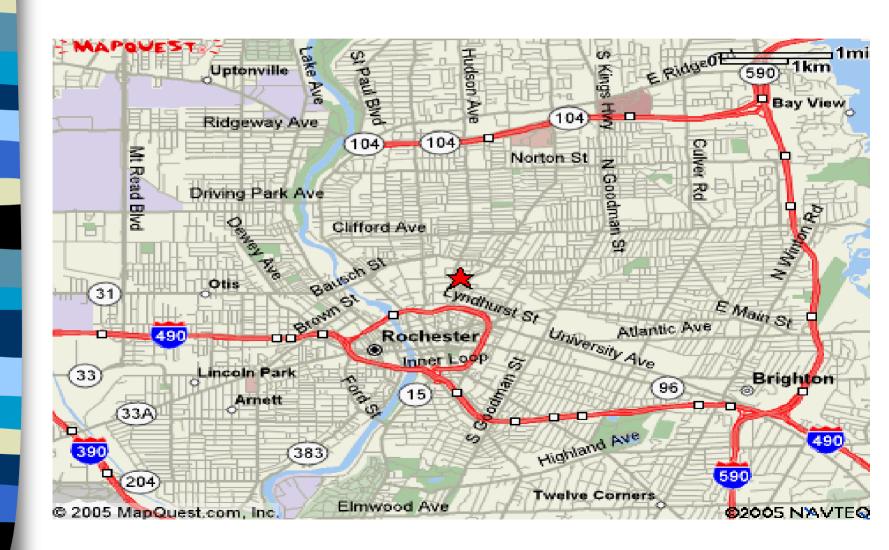
#### Problem Statement

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.

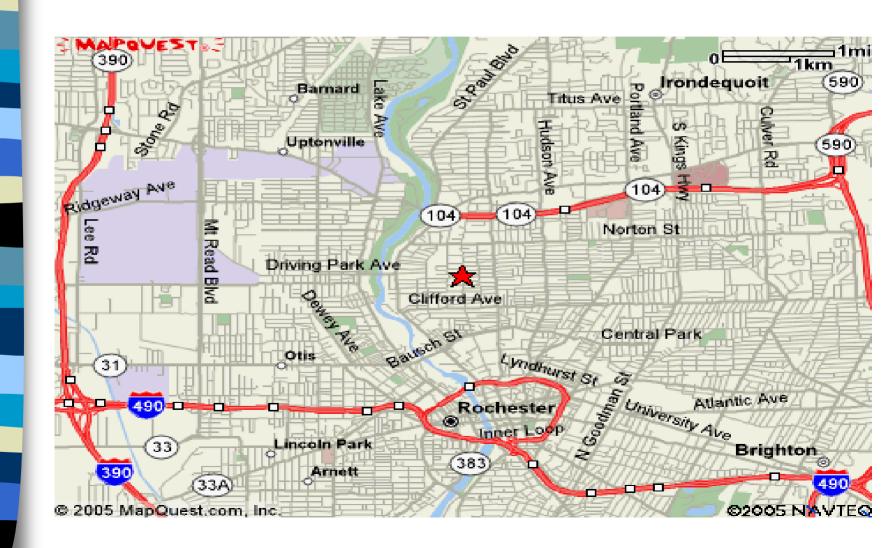
## Purpose/Objectives

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

- Wheat
- Corn
- Beans
- Tortillas
- High-fat organ meats
- Rice
- Lard

# 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
- ½ 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
- ½ cup Olive oil (1/4 cup total after drained)
- 3 hard boiled eggs with one yolk.
- ½ 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

	Studies/ Intervention Strategy	Starr County Border Health Initiative	Project Dulce	Agurs-Collins
	Intervention Mechanisms	Instructional and support group intervention for 52 contact hours over 12 months. Included 3 months of weekly 2-hour instructional sessions on nutrition, self-monitoring of blood glucose levels, exercise, and various other topics. Included 6 months of biweekly plus 3 months of weekly 2-hour support group session. Support group sessions were informal and were to promote behavior change through problem-solving and food preparation demonstrations. Provided opportunities for patients to ask questions, review material previously learned, and express feelings.	12 week program which contained 2 components, clinical care, and health promotion and education. Clinical care provided clinical care led by a nursing team of an RN/CDE and a dietitian. Patients also participated in diabetes selfmanagement classes. The health promotion and education component provided comprehensive diabetes instruction.	First 3 months consisted of weekly groups sessions including 60 minutes of nutrition education followed by 30 minutes of exercising, and one individual diet counseling session. The following 3 months consisted of biweekly sessions providing additional information, problem solving, and support. Each patient received an individualized weight reduction diet, exercise program, and advice on meal planning. Nutrition classes covering food shopping, meal planning, glucose levels, weight reduction, label reading, and recipe modification were also included.

#### Conclusion

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