### Appendix D

# WHITE PAPER DOCUMENT Type 2 Diabetes in the Latino Population By Erin Hynes

#### **ABSTRACT**

Type 2 diabetes is become an emergent problem in the Latino population in Rochester, NY. Rochester Institute of Technology's Dietetics Program has subcontracted the nutrition component of a grant, with the Rochester Diabetes Network (RDN), that is funded by the Center for Disease Control (CDC) and is administered by the NYS Department of Health (NYSDOH). The purpose of the grant is to help improve the health of those individuals who have type 2 diabetes or who are pre-diabetic in the Latino population, which are 200% or more below the poverty level. The outcome of this nutritional component is to provide research about type 2 diabetes, select strategies for intervention to improve nutritional outcomes for the targeted population including recipe development that will help type 2 diabetic Latinos manage their disease in a culturally specific manner. These intervention strategies are specific to Latinos with low-income and will facilitate nutritional compliance among these individuals.

#### OUTCOME OF ANALYSIS

The author selected three out of eight nutritional intervention strategies for further analysis and selection by the RDN for use in the second phase of the grant. Attached is a summary comparison indicating the terms and conditions of each nutritional strategies. The RDN will select the one for use, which most closely reflects the needs of the Rochester based Latino Population the grant is for.

Figure 3: Chart of selected intervention strategies

Studies/ Intervention Strategies	Starr County Border Health Initiative	Project Dulce	Agurs-Collins
Race/ Ethnicity	Mexican American	Latino	African American
Duration of Intervention	One Year	12 Weeks	12 Weeks
Number of Participants	256	210 high risk 346 lower risk	64
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 and an additional 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 self-management 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.
Cultural Competence	Culturally competent in terms of language, diet, social emphasis, family participation, and cultural health beliefs.	Program is bilingual and delivered by culturally sensitive community health workers.	Intervention given by an RD with experience in working with an older African-Americans, and an exercise physiologist. Both were African-American.
Outcome Measures	Significantly lower levels of HgA1C and fasting blood glucose at 6 and 12 months and higher diabetes knowledge scores.	HgA1C was significantly lowered at the completion of the 12-week educational classes in 194 pts whose results were available. On 177 patients whose total cholesterol and triglycerides were available, their levels also decreased significantly.	Significantly lower levels of HgA1C that were sustained at 6 months.

(Brown, 2002; Philis-Tsimikas, 2001; Agurs-Collins, 1997)

## CONCLUSION

Results included three intervention strategies that would be appropriate for the specified population. The grant committee will later choose the best intervention strategy for the grant.