

Diabetes and Nutrition Education in the Cincinnati Latino Community

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Background

- Cincinnati's population is 2.8% Hispanic. Carthage's population, where Su Casa is located, is 17.8% Hispanic.^{1,5}
- 50% of Hispanic youth born in the U.S. will develop diabetes.^{4,5}
- In a study, diabetes literacy among Hispanics is 58.7%. For patients with type two diabetes, poor health literacy is associated with worse diabetes management and higher rates of retinopathy.⁶
- 2002 Diabetes Prevention Program study of 3,234 pre-diabetic patients found lifestyle intervention reduced the incidence of diabetes by 58% and metformin by 31% compared to the placebo.² CDC created "Prevent T2" national diabetes literacy program based on the results.³

Objectives

- Conduct a pre-survey at Su Casa's annual health fair.
- Analysis of pre-survey.
- Learn about barriers and difficulties affecting the Su Casa community in order to better assist them.
- Implement an educational diabetes awareness program.
- Increase diabetic health literacy.

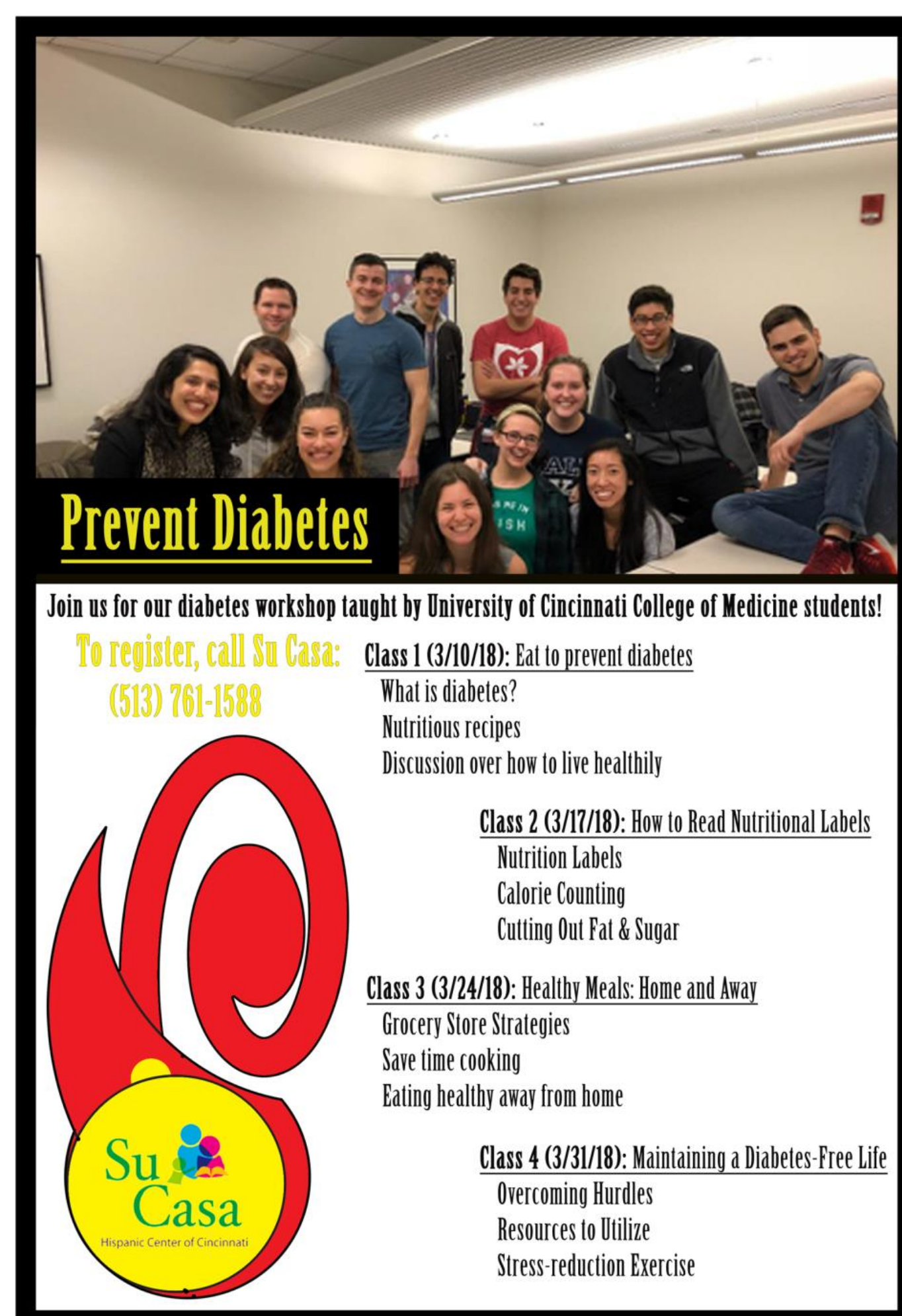


Figure 1: Promotional material for the diabetes awareness program

Methods

Identification of problems related to diabetes and nutrition literacy:

- Focus group was conducted with 10 women in the Cincinnati Latino community after a Su Casa sponsored exercise class to identify problems related to diabetes and nutrition literacy. Knowledge deficits were identified and this information was used to design the Su Casa health fair survey.
- Su Casa health fair survey was administered at the Su Casa health fair to willing participants and provided quantitative data about knowledge deficits in the Su Casa community.
- Data was analyzed with Microsoft Excel and used to determine possible health barriers in the community.

Implementation of diabetes education and prevention classes:

- Learning objectives included defining and classifying diabetes, making lifestyle changes to prevent diabetes, and eating to prevent Type II Diabetes.
 - Class 1: an introduction to diabetes (what it is and how it can present) and instruction on the best ways to prevent diabetes.
 - Class 2: reading nutrition labels, counting calories, and reducing sugar intake.
 - Class 3: gestational diabetes and making healthy food choices when grocery shopping
 - Class 4: strategies on how to maintain a healthy lifestyle, the importance of exercise, and reducing stress.
- Each class started with a pre-quiz and ended with a post-quiz to assess comprehension and knowledge acquisition for the content covered during the class. Data was analyzed in Microsoft Excel.



Figure 2: Survey administration at the Su Casa Health Fair

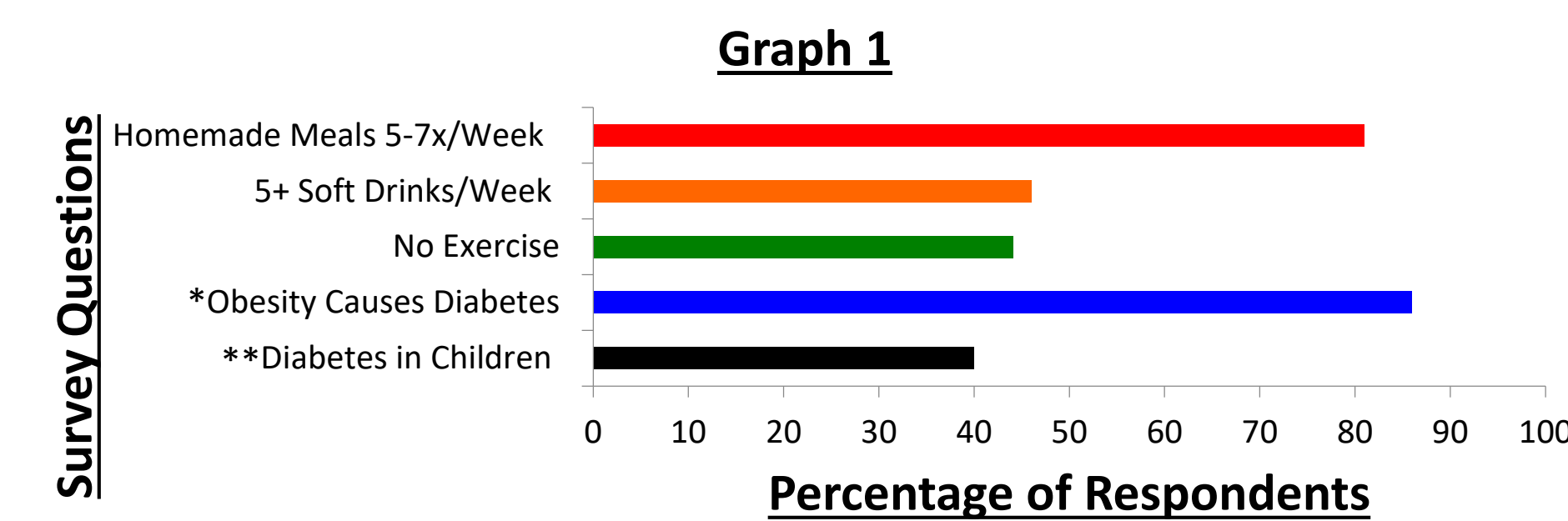


Figure 3: Food used to teach calorie counting, portion control, and nutrition label in class 2

Results

- Focus group:** Demonstrated people in the Hispanic community in Cincinnati have a general idea of what diabetes is and who it can affect, but lack specific knowledge that might be useful to combat its onset.

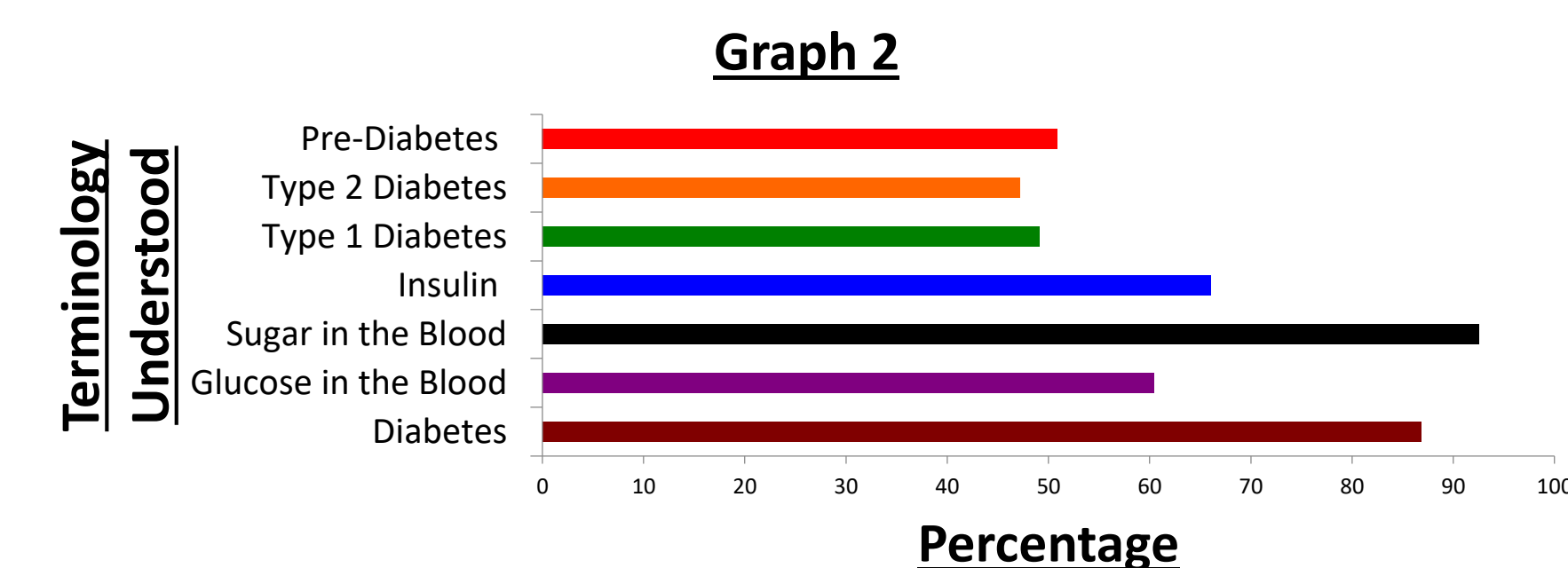
Su Casa Health Fair Survey Key Findings



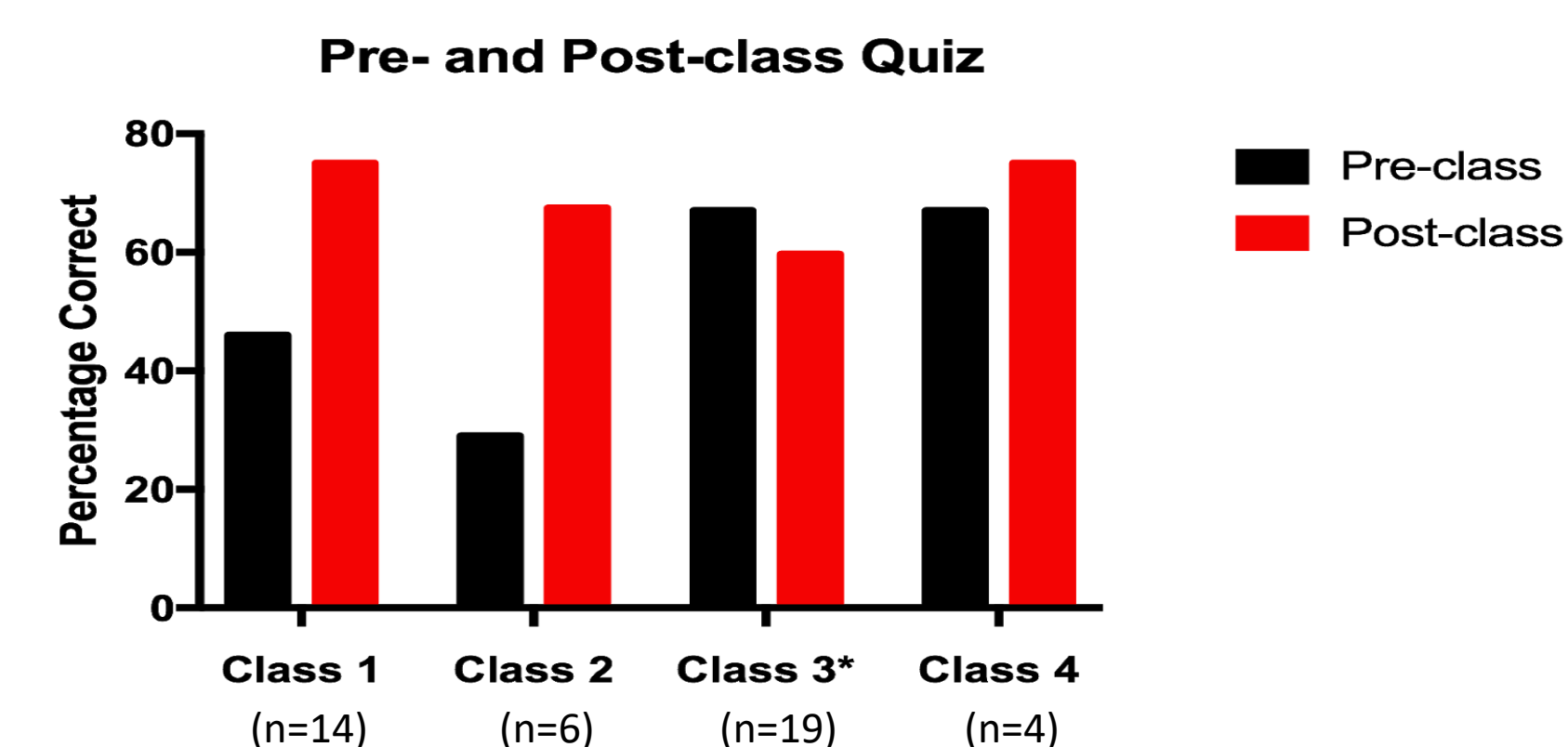
Legend Graph 1

*Percentage of individuals who believe obesity can causes diabetes

**Percentage of people who believe children can get diabetes



Class Results



*The decrease in score was attributed to a lecture focus on a particular response

Legend Pre- and Post-class Quiz

Class 1: Cardiovascular and DM risk factors & management

Class 2: Dietary knowledge

Class 3: Gestational DM & healthy food options

Class 4: Stress and daily exercise requirements

Conclusion

- We successfully conducted a survey at Su Casa's annual health fair to better assess and learn about the target community.
- From that, we developed a diabetes and nutrition class curriculum that aimed to increase health literacy among participants, especially regarding diabetes and healthy lifestyle choices.
- Analyzing the pre and post class surveys revealed an increase in knowledge, and therefore an increase in health literacy within the target community.
- We concede that there is possibility for error which may come from the predominance of women in attendance and the discrepancy in the number of people who took the pre- and post- quizzes for each class which was not taken into consideration on analysis.
- We hypothesize that this program would have continued positive results in Latino health literacy if implemented in the future.

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