

Linking Type 2 Diabetes Patients to Inland Valley Resources

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<http://iediabetes.org>



Abstract

Type 2 diabetes is one of the leading causes of death in the US and nearly half of Riverside and San Bernardino County residents are prediabetic. In this project, we assessed the challenges of the Inland Valley diabetic community and what resources could best serve them through a survey. 52 people completed our survey; the top 3 challenges of living with diabetes were controlling diet, taking medications, and exercising. Top resources where respondents are interested but lack access are personal trainer (38%), nutritional advice (37%), group exercise classes (35%), and counseling (35%). To provide access and awareness of local diabetes resources addressing those needs, we created a web site, <http://iediabetes.org>, on topics in which our survey participants expressed interest. We also established partnerships with local organizations that could provide free resources to diabetics in the community. We feel our project has helped mold a healthier Inland Valley, but it is crucial that the entire community works together to break down the identified risk factors.

Introduction

29.1 million people in the US have diabetes; 1 out of every 11 people.¹ Out of the 29.1 million, only about 5% have type 1 diabetes. The remaining 27.6 million people have type 2 diabetes. In Riverside County alone, 48% of residents are pre-diabetic with numbers expected to rise in the near future.³

Through a community survey, we asked what resources the community might need in order to both manage and prevent challenges that come with diabetes. This county needs as much investment as possible from the community to achieve solidarity in working on these challenges. Our goal was to identify resources needed and what we could do as students to scout out these resources through important, sustainable, county connections.

Methods

Our project provided health education to 52 community members. We collected surveys from both male and female individuals, ranging from 18-88 years of age.

Strategies:

- attending Riverside Community Diabetes Collaborative (RCDC) events and presenting our surveys to the public
- communicating/recruiting diabetic friends and family to participate
- creating an informational website: <http://iediabetes.org>

Survey: understand challenges faced by diabetics and the resources needed to meet those challenges. Our English and Spanish surveys were distributed through online use or hard copy. It included basic demographics questions as well as questions to assess challenges living with diabetes and resources needed to meet those challenges.

Partnerships: local healthy food places and gyms gave a collection and free gym trial passes. Gift cards incentivised people to take the survey and let those with diabetes know they have support.

Website: Inland Empire Diabetes Resources (iediabetes.org), provides quick access to important diabetes information in a simple way.

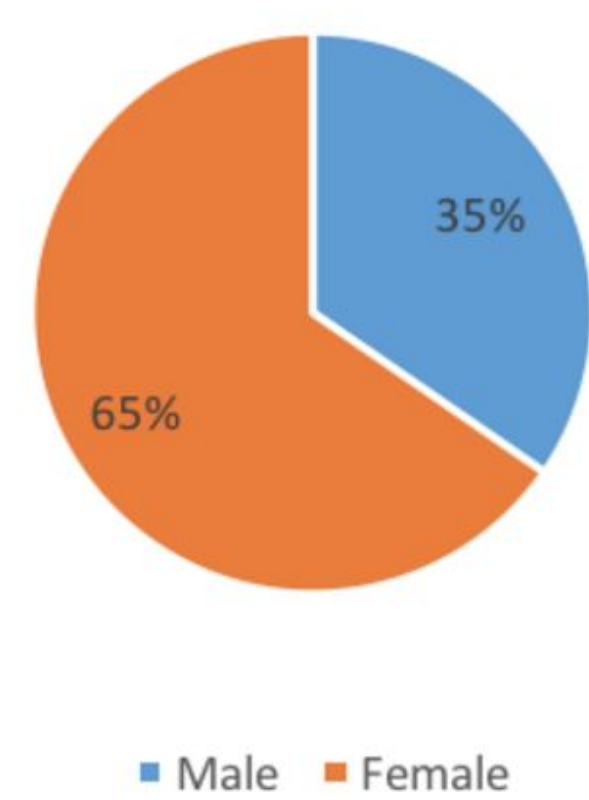
Our website covers:

- Basic knowledge about different types of diabetes and screening.
- Nutrition guides, local healthy food places, healthy recipes, and opportunity for questions to be answered by a local nutritionist.
- Various Home Exercises with household items, and inexpensive exercise options including parks, trail maps, and community centers for different cities.
- Programs: health coaches, support groups, free classes, mental health organizations.

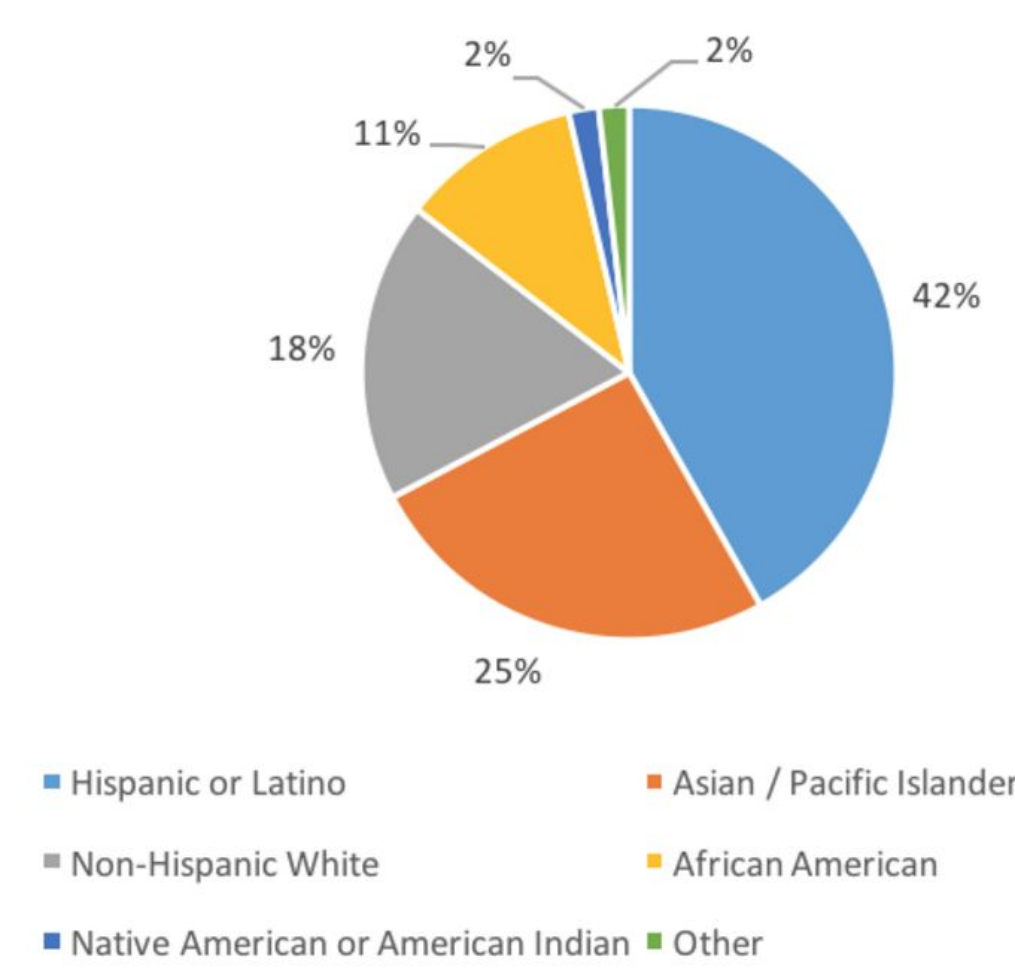
Results

Fifty-two individuals with diabetes responded to our survey. The average age and average age of diagnosis are 52 and 43, respectively. Below are figures of participant demographics.

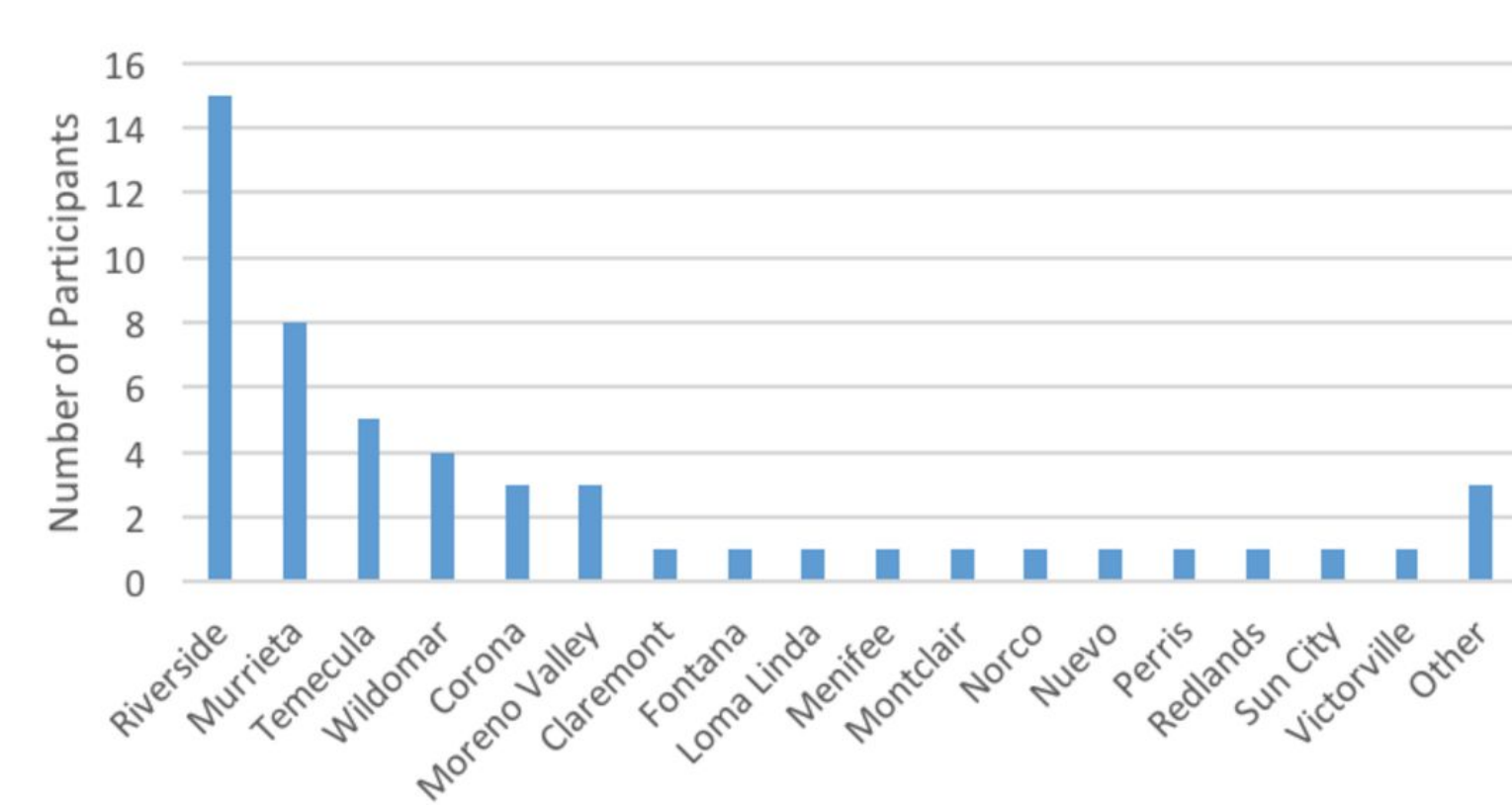
Gender



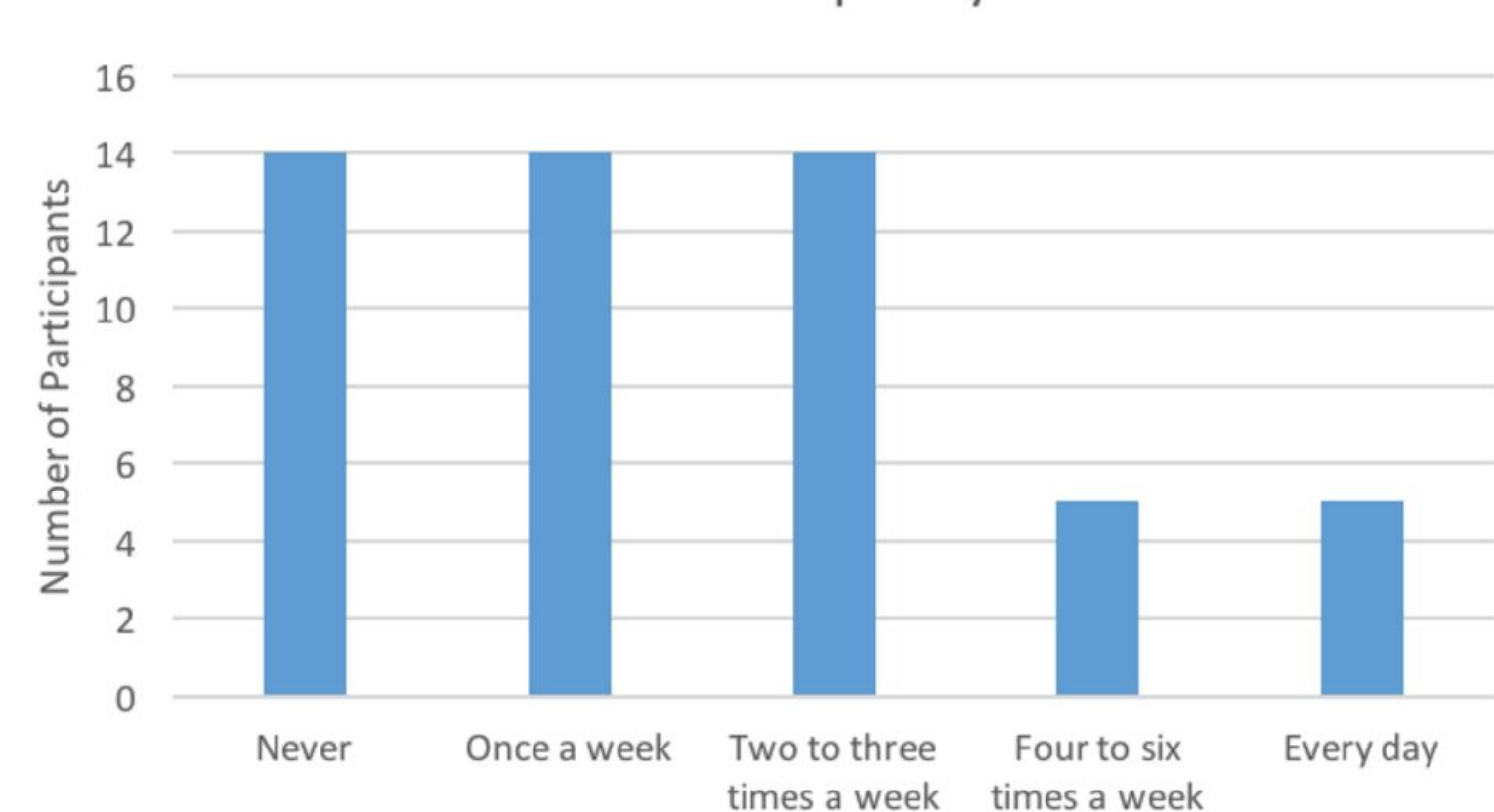
Race / Ethnicity



City of Residence



Exercise Frequency

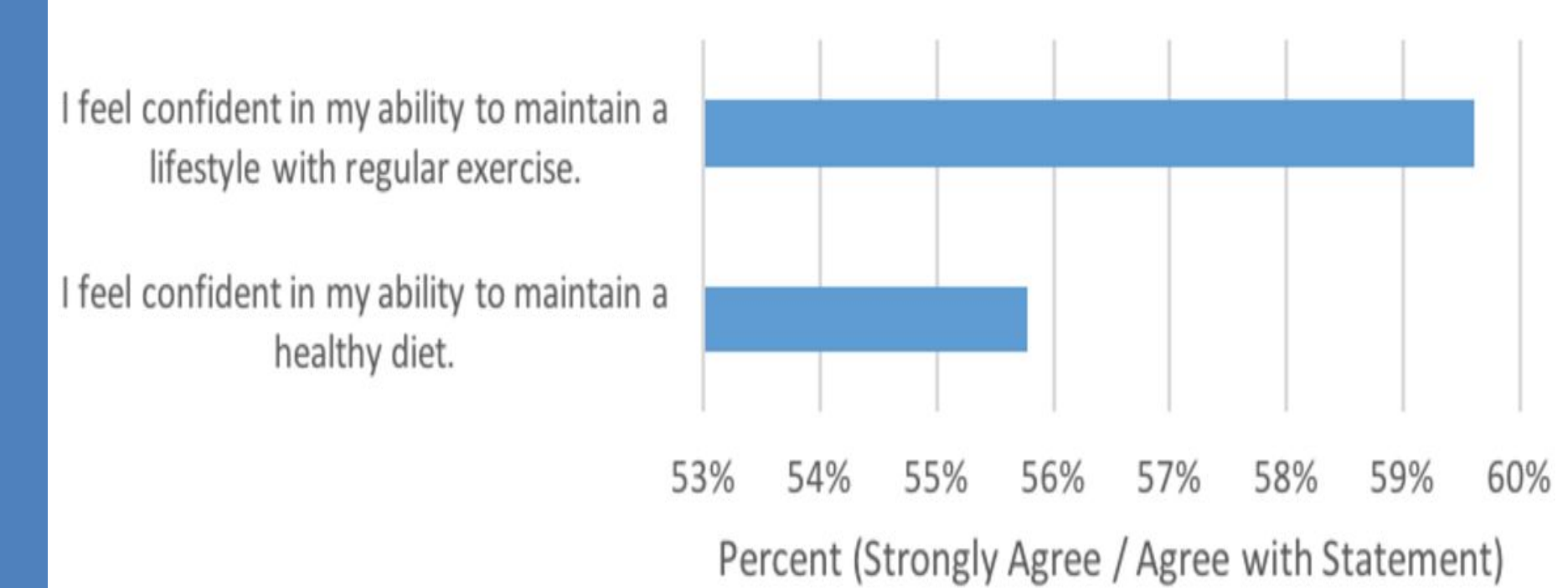


Our survey included an open-ended question about the greatest challenges of living with diabetes. The responses included the following main themes (number of respondents in parentheses):

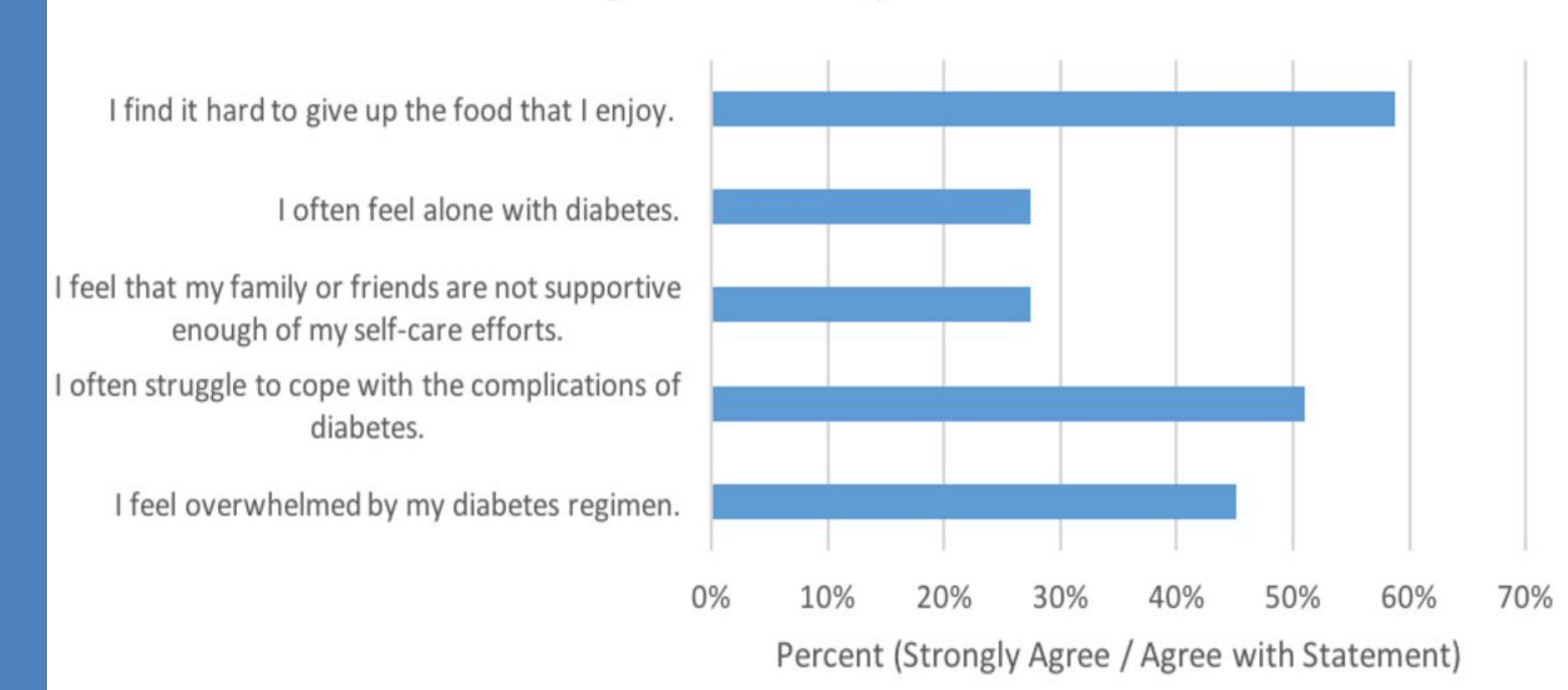
- Controlling diet / Giving up one's favorite food (17)
- Taking medications / Insulin injections (5)
- Exercising (4)
- Maintaining a normal blood sugar level (3)
- Weight control (2)
- Dealing with co-occurring illnesses (2)
- Worry / Pain (2)

Our survey included a set of statements that were intended to assess the emotional well-being of diabetics. For each statement, the respondent rated it using a Likert scale ("Strongly Agree", "Agree", "Neutral", "Disagree", "Strongly Disagree").

Confidence in Maintaining Healthy Diet and Lifestyle



Challenges with Living with Diabetes

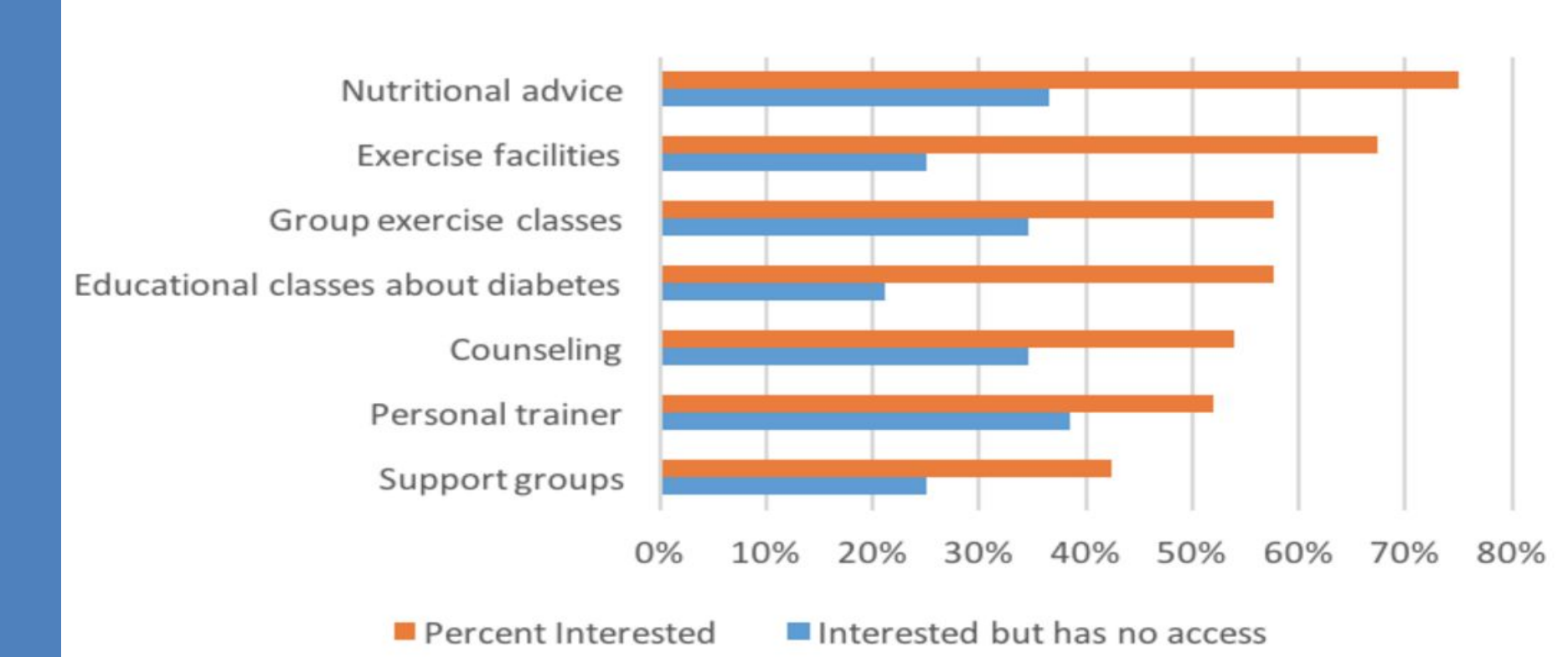


Of the 59% of respondents who expressed difficulty in giving up the food that they enjoy, a number of them listed the specific types of food (number of respondents in parentheses):

- Sweets / Desserts (13)
- Pasta, Pizza, Rice, Bread, Tortillas (8)
- Fried Food (3)
- Fast food (3)
- Ethnic dishes (2)
- Soda (2)
- Meat (2)

The final question of our survey asked the respondents to indicate resources in which they are interested and for each interested resource to indicate whether they have access to it. The top resources in which respondents are interested but lack access are personal trainer (38%), nutritional advice (37%), group exercise classes (35%), and counseling (35%), followed by exercise facilities (25%), support groups (25%), and educational classes (21%).

Interest and Access to Resources



Other resources in which the survey participants expressed interest include:

- Riding stationary bike every day for 30 mins - 1 hour
- Walking 30 mins every day
- Gym membership
- Motivation
- Meal plans
- Gastric bypass
- Personal guidance
- Nutritionist who is familiar with one's cultural food
- How to cope both kidney disease and diabetes and how to control diabetes in order to control heart attack and stroke

Summary of Results

Fifty-two individuals with diabetes responded to our survey. The average of the participants is 52. 27% of participants reported to exercise "never", and 27% "once a week".

Challenges:

- 59% of our participants reported finding it hard to give up the food that they enjoy.
- 51% indicated that they often struggle to cope with the complications of diabetes.
- 45% reported feeling overwhelmed by their diabetes regimen.
- 27% expressed the lack of support from family and friends.
- 27% expressed feeling alone with diabetes.

Resources: The top resources in which respondents are interested but lack access are

- personal trainer (38%)
- nutritional advice (37%)
- group exercise classes (35%)
- counseling (35%)

Analysis of Results

Our project focused on helping us gain an understanding about the challenges facing people living with type 2 diabetes and the resources needed for managing diabetes. We then used this data to help guide us in acquiring and aggregating resources and in the development of a comprehensive website providing resources and information about diabetes.

Considering that diabetes is the 7th leading cause of death in Riverside County, this area sits at the brink of a major health crisis.² Type 2 diabetes has clear correlations with a diverse set of environmental stressors. Riverside County has had a hard time addressing many diabetic factors including the physician shortage, poor built environment, and lack of support systems for those dealing with the disease.

Beyond physical issues, diabetes carries with it overlooked emotional and mental challenges. Many people responded that they feel alone with their disease and that their family members and friends were not as supportive as they would have hoped. Our health education website hopes to address both the physical and mental health challenges indicated on our survey responses. We hope that resources like our partnerships with gyms will help the community get started on the path to a better, more healthy life.

Acknowledgements

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