

# Mexican American Cohort Study

THE UNIVERSITY OF TEXAS  
MD Anderson  
~~Cancer~~ Center  
Making Cancer History®



*Your future health ...*  
*Su salud de mañana ...*

*in your hands today*  
*en sus manos hoy*



# Mexican American Cohort Study

## I. STUDY HIGHLIGHTS

- The three risk factors that contribute up to a 60% of possibility of developing cancer are:
  - ✓ Smoking
  - ✓ Poor diet, and
  - ✓ Physical inactivity
- The Mexican American Cohort Study has made great strides in understanding not only this three factors but additional ones in our community



# Mexican American Cohort Study

## 1. ACCULTURATION

- It's the process of learning about a new culture and incorporating some of its aspects (language, food, etc.) into the background culture
- Our study has demonstrated that among Mexican-born participants, a higher level of acculturation
  - ✓ not only predicted **history of**, but also **resulted in a higher prevalence of smoking**
  - ✓ Was directly associated with **risk of obesity** in US-born Mexican Americans
- Our study actively collaborates with other research groups developing interventions aimed at providing health education and promoting healthy behaviors taking into account the cultural beliefs of our community



# Mexican American Cohort Study

## 2. SMOKING

- Smoking continues to be the number one cause of preventable deaths in the US. One out of three cancer deaths in the United States is caused by smoking. Longer duration and greater intensity of smoking increase the risk of lung cancer significantly.
- Our study has shown that smoking-susceptible Mexican-American adolescents were more likely to :
  - ✓ hold more positive expectations about smoking
  - ✓ have a parent, brother, or friend who smoked
  - ✓ believe their peers approve of their smoking
  - ✓ report more temptations to try smoking
  - ✓ report lower subjective social status at school
  - ✓ have had a detention during the school year
- Our study actively collaborates with other research groups developing interventions aimed at providing health education and promoting healthy behaviors taking into account the cultural beliefs of our community



# Mexican American Cohort Study

## Baseline questionnaire sections

- I. DEMOGRAPHICS
- II. PAST MEDICAL HISTORY
- III. ACCESS TO HEALTH CARE AND SCREENING PRACTICES
- IV. REPRODUCTIVE HISTORY – WOMEN ONLY
- V. ACCULTURATION
- VI. PHYSICAL ACTIVITIES
- VII. WORK HISTORY - EXPOSURES
- VIII. LIFESTYLE HABITS
- IX. COMMUNITY INFORMATION - RESIDENCE
- X. MEDIA USAGE
- XI. CONTACTS
- XII. FAMILY HISTORY

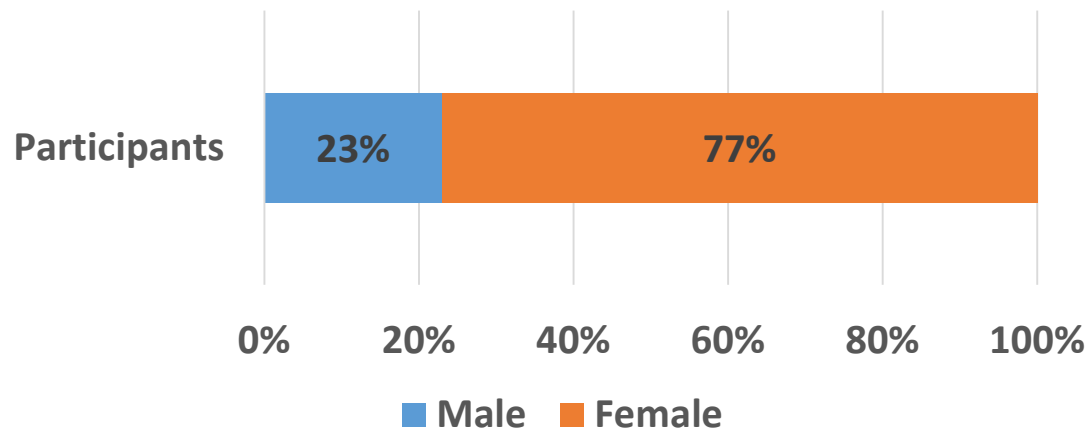


# Mexican American Cohort Study

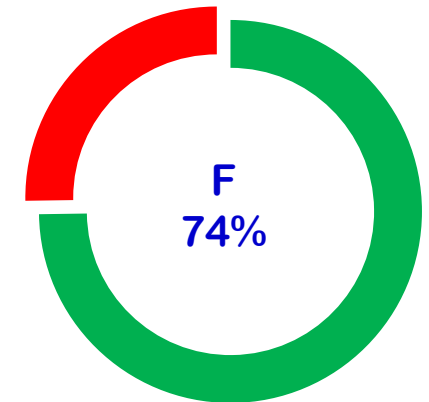
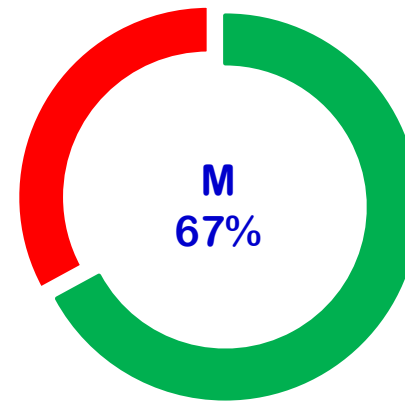
## I. DEMOGRAPHICS

This page covers basic demographics for the participants of the cohort study. The percentage born in Mexico by gender. As well as education level broken down by gender.

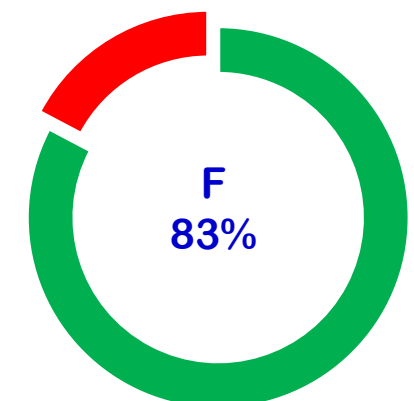
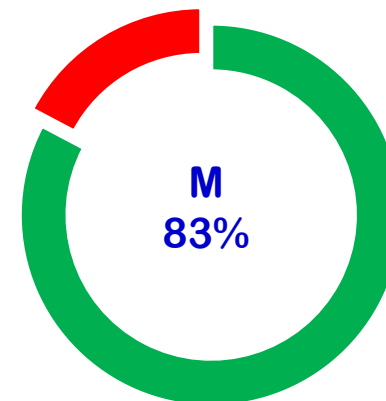
Total households: 18,962  
Total Participants: 26,672  
FU rate: ~ 78%



### Participants Born in Mexico



### Education Level: HS



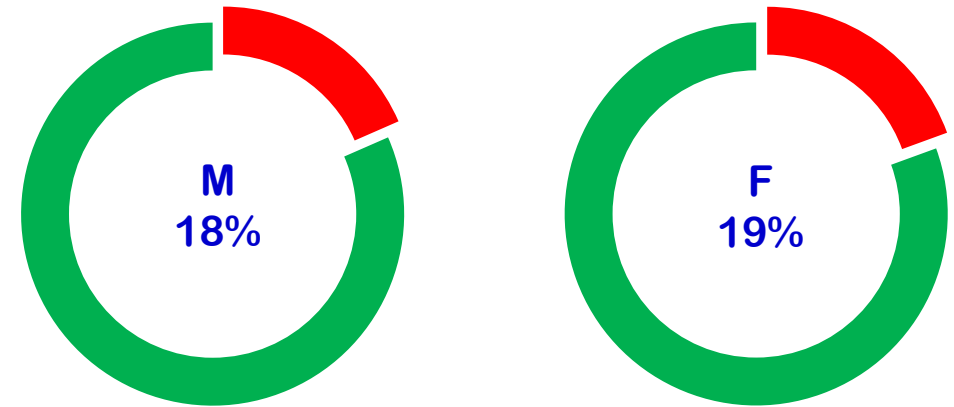


# Mexican American Cohort Study

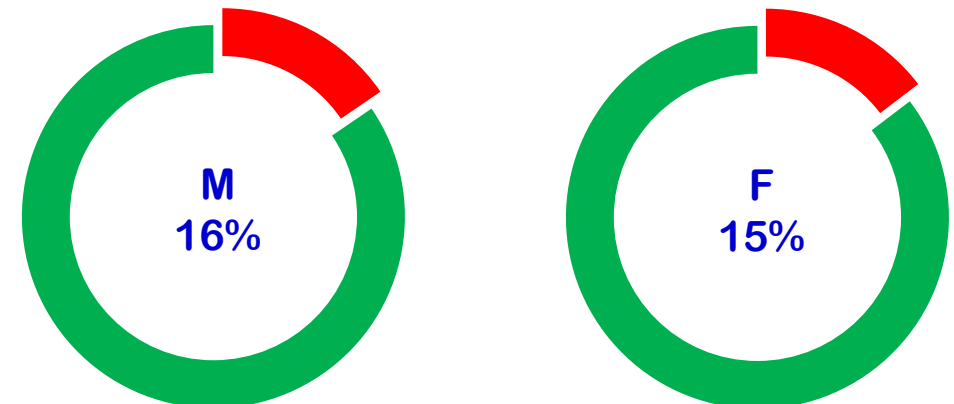
## II. PAST MEDICAL HISTORY

- In the past medical history, we collect information from participants detailing any medically diagnosed conditions
- Hypertension and Diabetes are two that are high in the Mexican American community.
- The following slide has cancer cases reported to the cohort. Prevalence is the number of cases while incidence is the number of new cases.

### Hypertension



### Diabetes





# Mexican American Cohort Study

## II. PAST MEDICAL HISTORY - CANCER CASES (UNTIL JUNE 30<sup>TH</sup>, 2018)

TYPE OF PRIMARY CANCER CONFIRMED FROM TCR AND MR	PREVALENT (38.7%)			INCIDENT (61.3%)			TOTAL		
	Female	Male	TOTAL	Female	Male	TOTAL	Female	Male	TOTAL
<b>ALL CANCERS</b>	425	134	<b>559</b>	651	234	<b>885</b>	1,076	368	<b>1,444</b>
Breast	176	0	<b>176</b>	214	0	<b>214</b>	390	0	<b>390</b>
Digestive System	35	28	<b>63</b>	123	62	<b>185</b>	158	90	<b>248</b>
Female Reproductive System	89		<b>89</b>	89		<b>89</b>	178		<b>178</b>
Lymphatic and hematopoietic tissue	35	15	<b>50</b>	42	29	<b>71</b>	77	44	<b>121</b>
Male Reproductive System		45	<b>45</b>		60	<b>60</b>		105	<b>105</b>
Endocrine	32	1	<b>33</b>	45	6	<b>51</b>	77	7	<b>84</b>
Urinary System	13	16	<b>29</b>	32	18	<b>50</b>	45	34	<b>79</b>
Lungs	8	5	<b>13</b>	34	26	<b>60</b>	42	31	<b>73</b>
Other & unspecified sites	37	24	<b>61</b>	72	33	<b>105</b>	109	57	<b>166</b>





# Mexican American Cohort Study

## III. ACCESS TO HEALTH CARE AND SCREENINGS

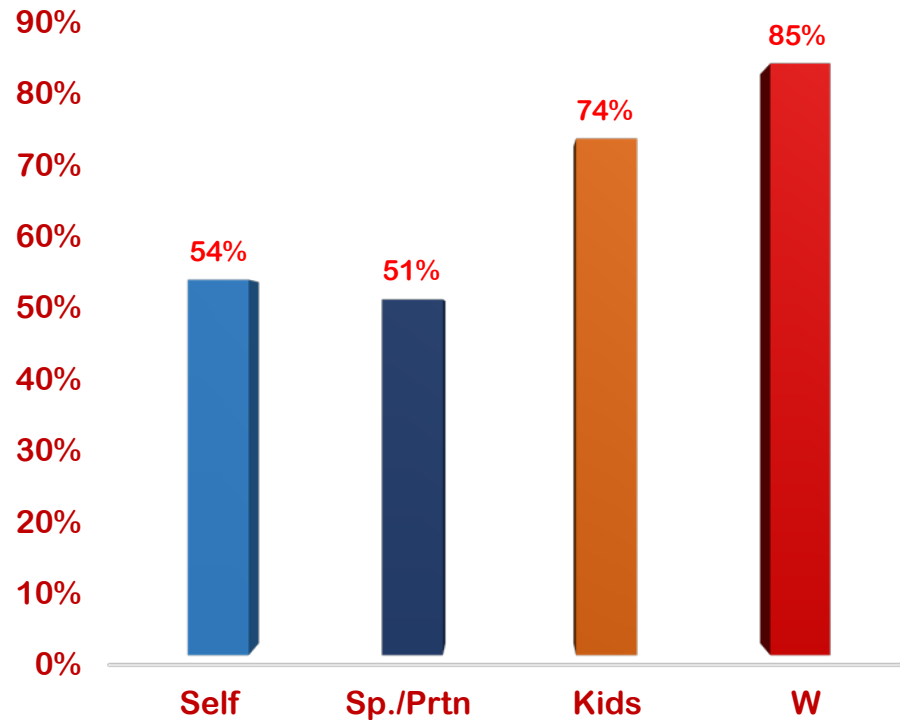
- The following slides show data on participant access to health care. If they have access, what kind of insurance provider do they have.
- Also a slide on how often the participants frequent their health care provider. As well as how the participant would rate their own health on a scale from 1-5, 1 being poor and 5 being excellent.
- The screening slide has statistical information about how many of our participants have not colonoscopy, mammograms, or PAP tests performed in the past.



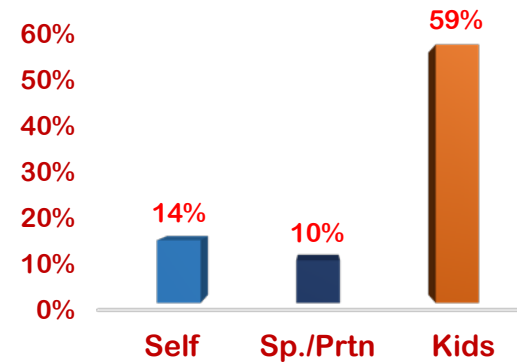
# Mexican American Cohort Study

## III. ACCESS TO HEALTH CARE

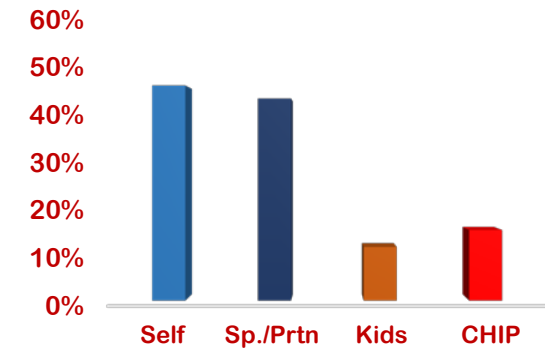
### Health Insurance



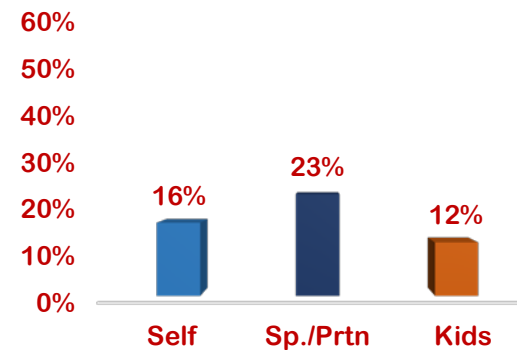
### Medicare / Medicaid



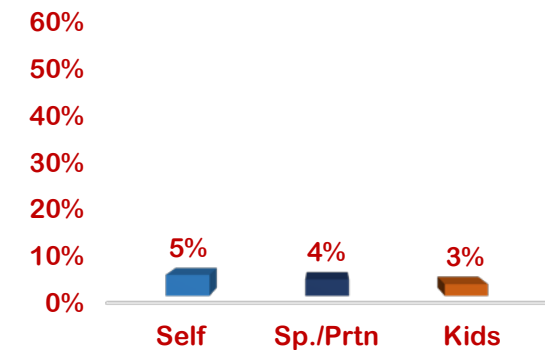
### Gold Card - CHIP



### Job



### Private

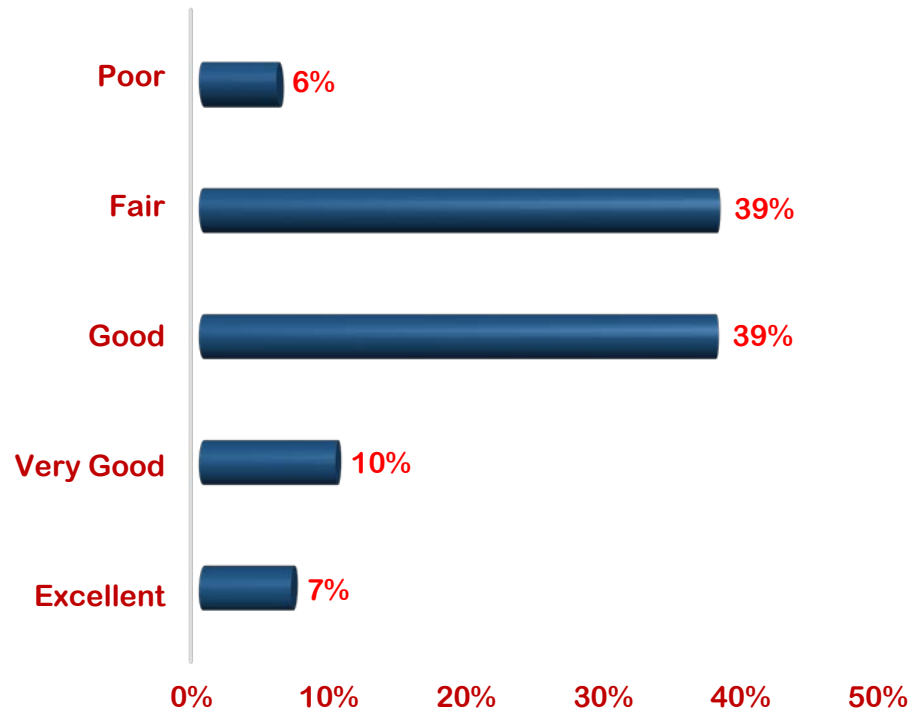




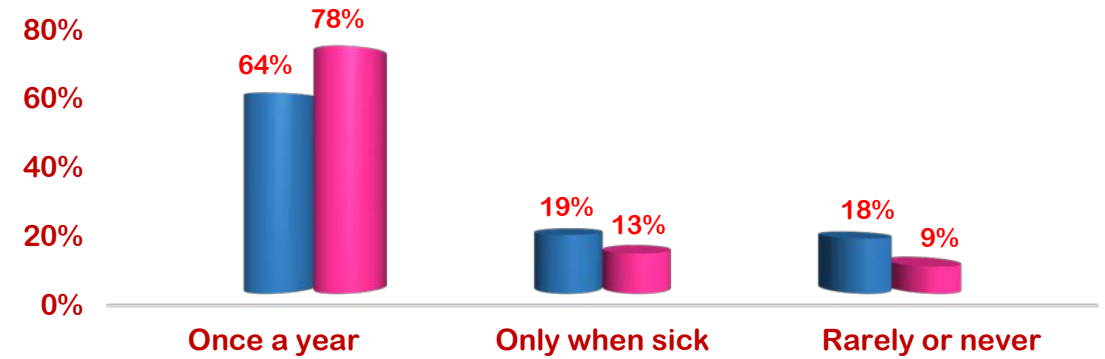
# Mexican American Cohort Study

## III. ACCESS TO HEALTH CARE

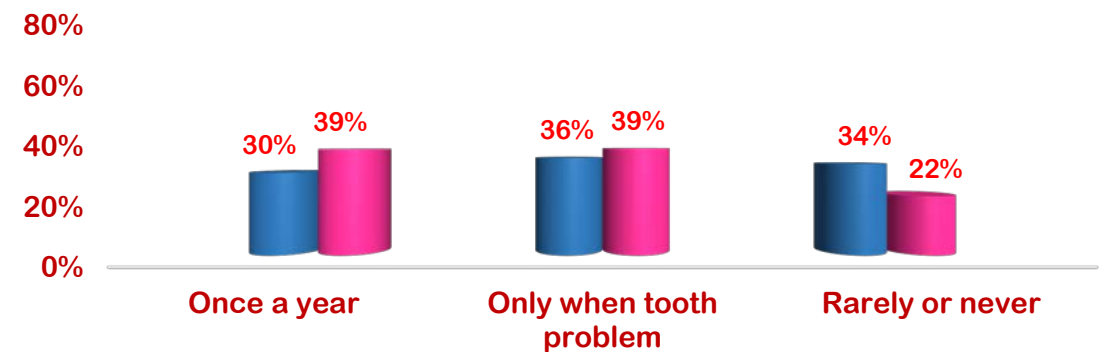
### Health Score



### Frequency – Medical Checkup



### Frequency – Dental Checkup



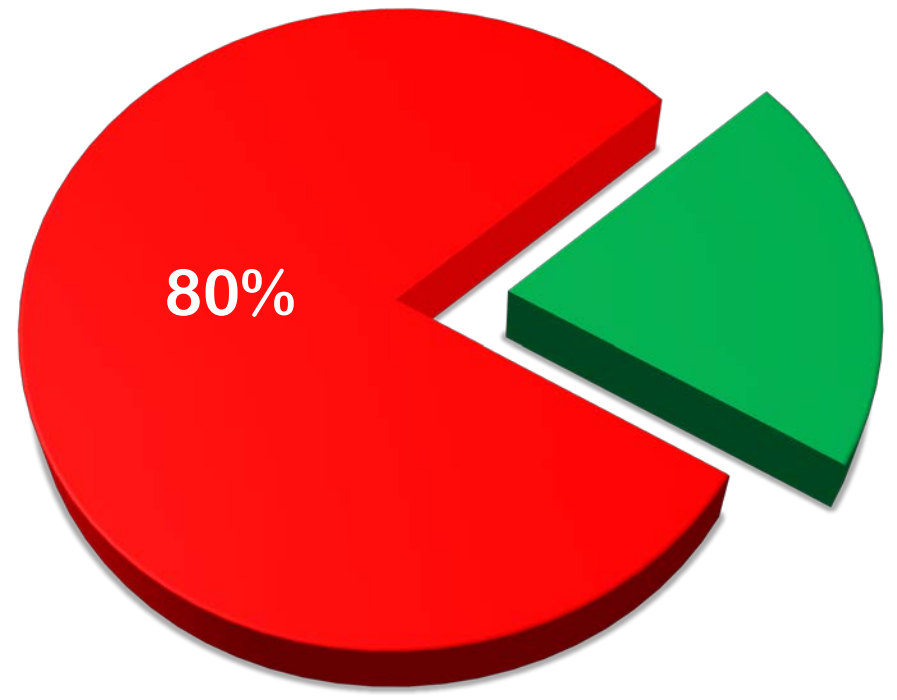


# Mexican American Cohort Study

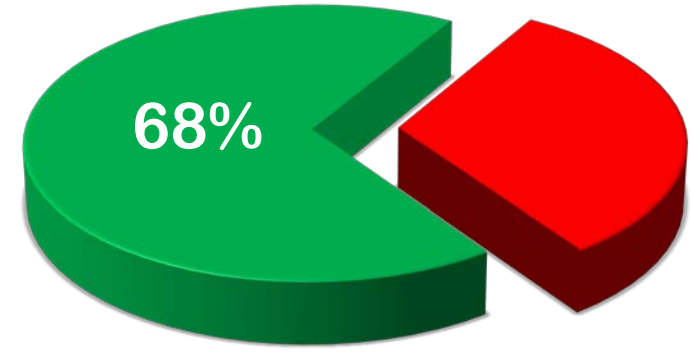
## IV. SCREENING

**RED** denotes “never had” while **GREEN** denotes “have had”

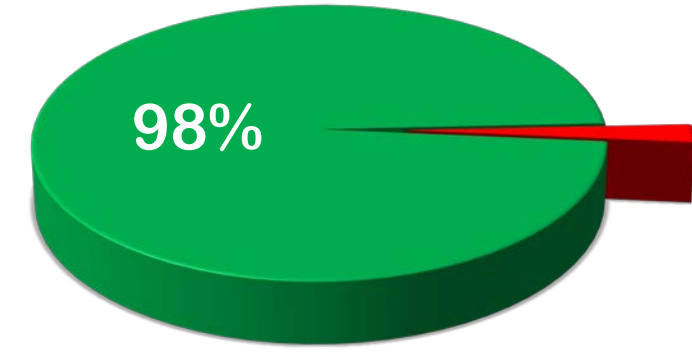
Never had a colonoscopy



Ever had a mammogram



Ever had a PAP test





# Mexican American Cohort Study

## V. ACCULTURATION

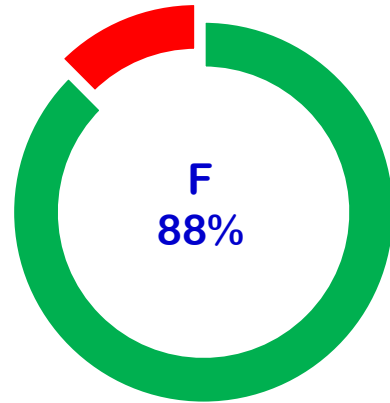
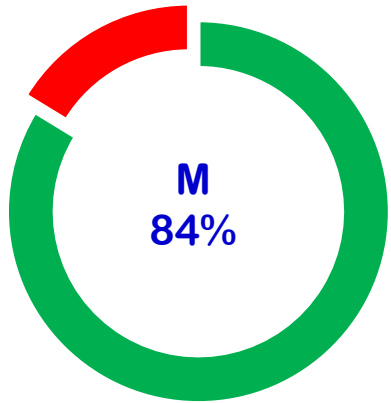
- Acculturation is defined as a cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture
- This is important because as a new member of society changes to adapt to their new environment they often change their social structure as well as their eating habits.
- In the following slide we have data for four acculturation aspects. The percentage of participants which speak Spanish at home, watch Spanish TV, eat a primarily Mexican diet, and have mostly Mexican friends.



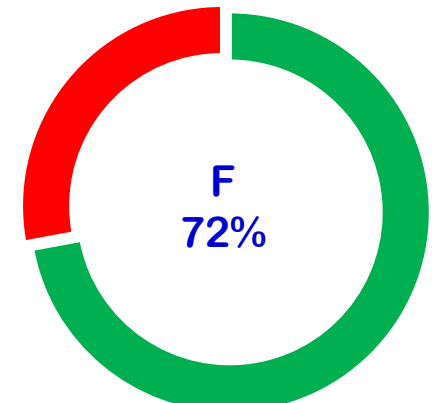
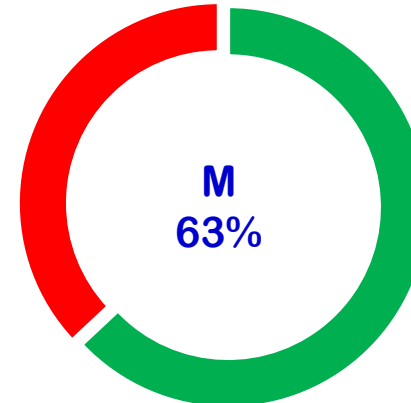
# Mexican American Cohort Study

## V. ACCULTURATION

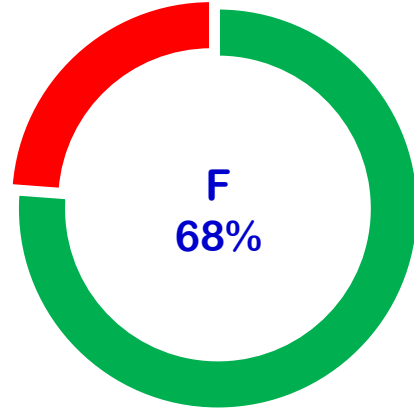
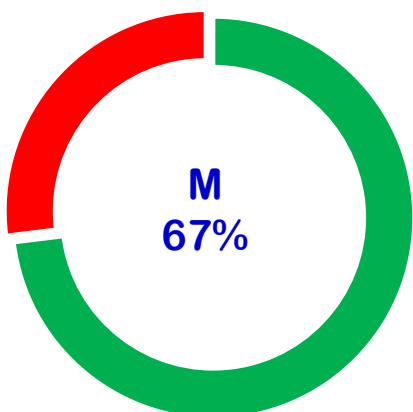
Speak Spanish at home



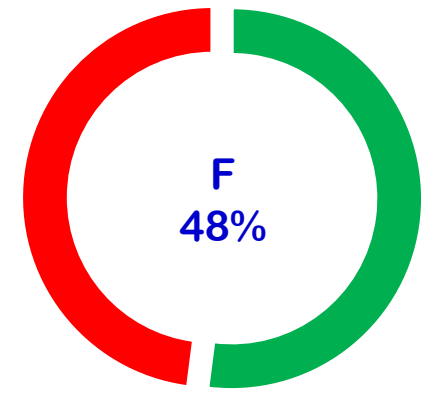
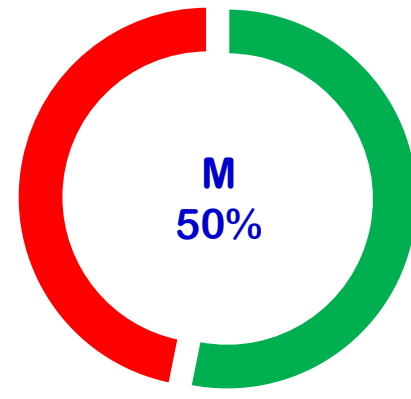
Watch Spanish TV



Have Mexican friends



Mexican diet





# Mexican American Cohort Study

## VI. PHYSICAL ACTIVITY

- Physical activity is a key lifestyle factor for maintaining a healthy balance. The data below shows that of all the participants, female participants reported spending more time sitting and less time achieving recommended physical activity.

Physical Activity				
Born in	México		EEUU	
	M 3,237	F 12,542	M 1,470	F 4,271
Does NOT meet the recommendations for physical activity	55%	81%	58%	77%
Sitting more than 3 hours every day	21%	79%	26%	74%

Chrisman et al. Acculturation, sociodemographic and lifestyle factors associated with compliance with physical activity recommendations in the Mexican-American Mano A Mano cohort. *BMJ Open*. 2015. 5: 1-9

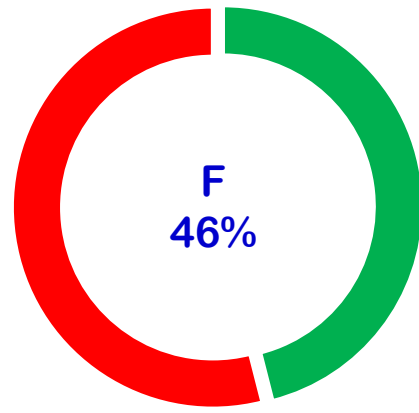
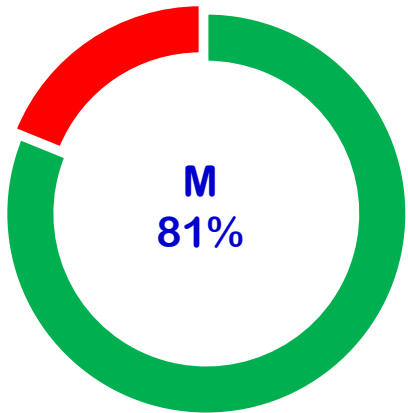


# Mexican American Cohort Study

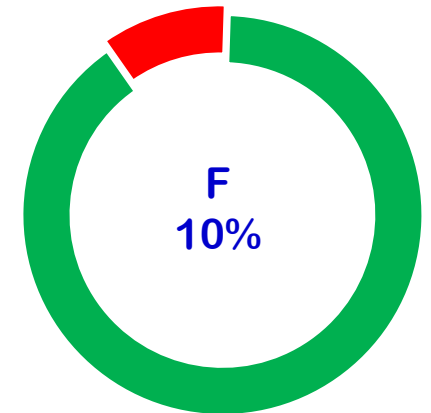
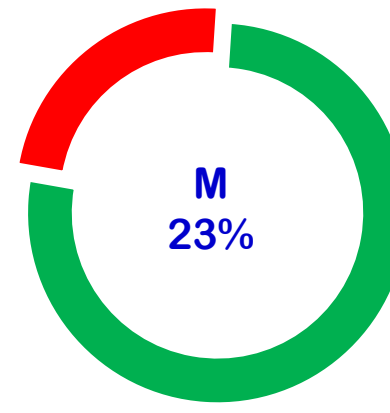
## VII. WORK HISTORY

Below are the percentage of male and females in the work force and some of the key exposures they face in the workplace.

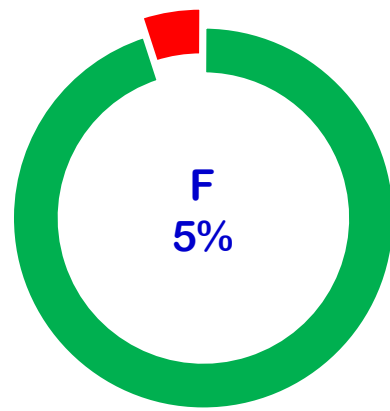
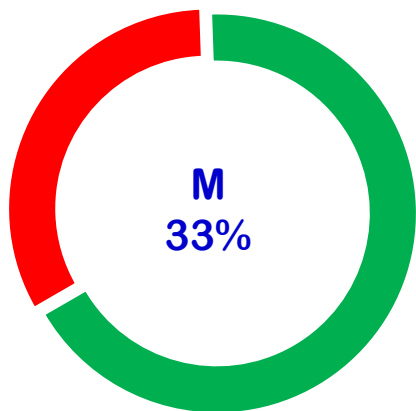
### Currently Work



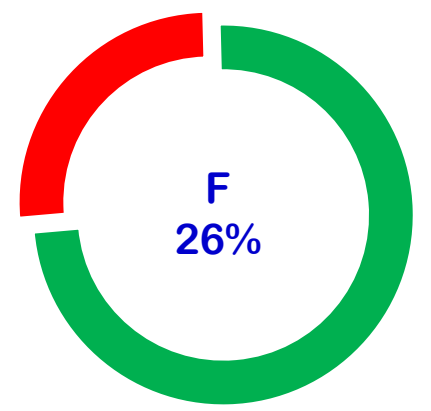
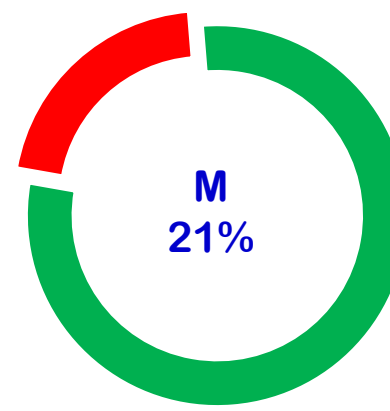
### Exposure to Pesticides



### Exposure to Paint / Solvents



### Exposure to Cleaning Chemicals





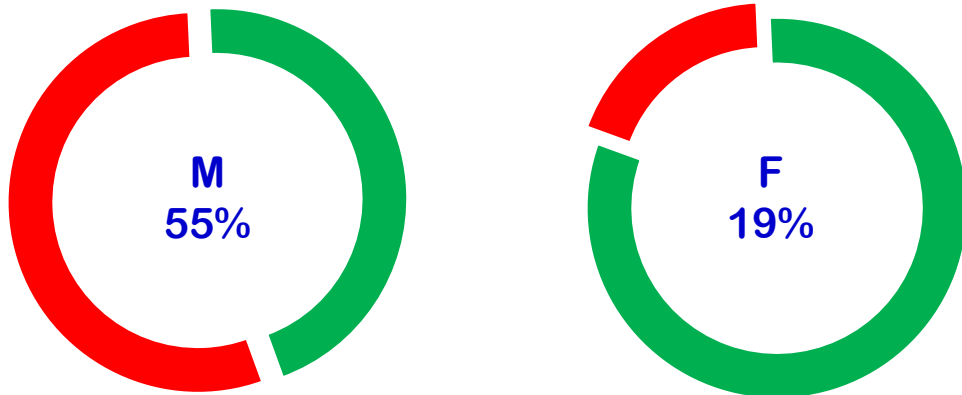


# Mexican American Cohort Study

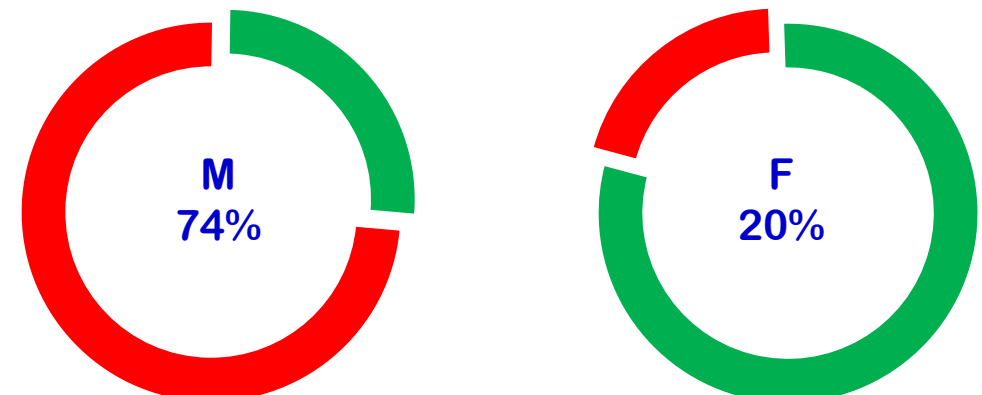
## VIII. LIFESTYLE HABITS

- There are certain lifestyle habits that raise the risk of developing different diseases, mainly smoking and alcohol.
- These happen to be the most notable set of behaviors with our participants, 55% of males are smoking or quit and 19% of females are smoking or quit. While 74% of our male participants drink alcohol or have quit and 20% of females drink alcohol or quit.

Smoking (currently or quit)



Alcohol (currently or quit)



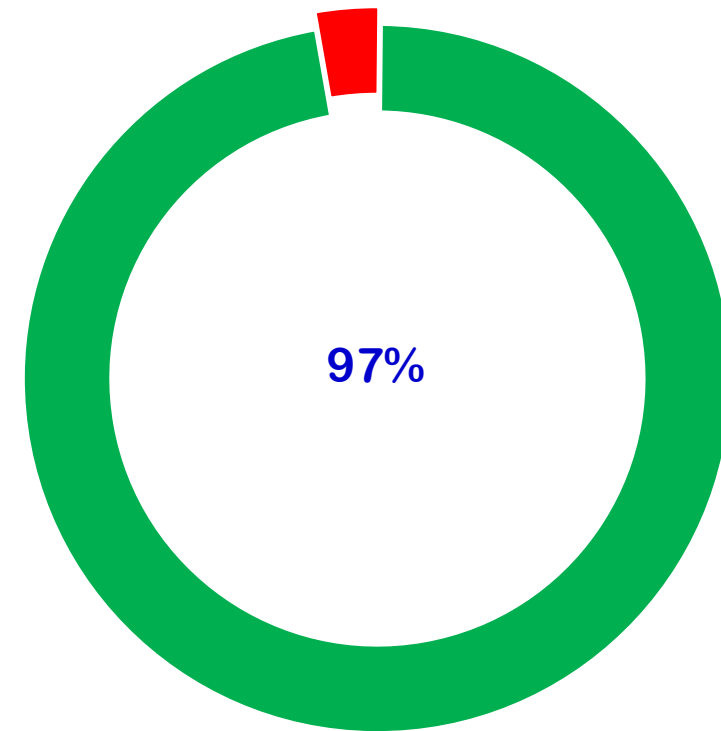


# Mexican American Cohort Study

## X. MEDIA USAGE

- A key usage of communication technology in the population of the Mano a Mano Cohort is Facebook.
- It is noted that 97 % of participants has daily use of the social media platform.

Daily Use - Facebook





# Mexican American Cohort Study

# Thank You!

to the **26,672** participants  
that have become  
members of our Cohort  
and make this research  
possible



*"We decided to participate in this important study because we believe that with the information that gets collected, researchers will be able in the future to prevent disease among the Hispanic population"*