

FOOD INSECURITY & OBESITY

SAN JOAQUIN VALLEY

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SUMMARY

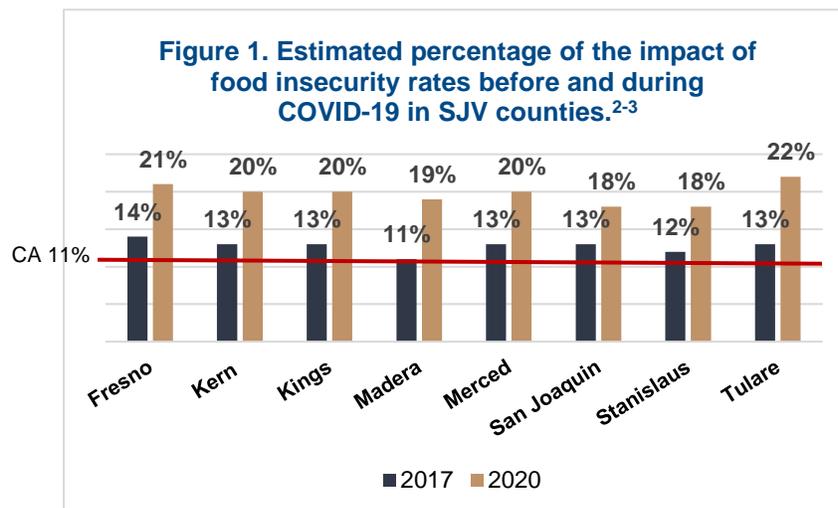
The United States (U.S.) population has experienced a rise in adult and childhood obesity rates that may be due to food insecurity. Food insecurity occurs when households have limited access to affordable and nutritious foods.¹ Approximately 11% of California² experienced food insecurity before COVID-19; these numbers have been expected to rise.³ Food insecure families may resort to accessing food through emergency food outlets, such as food banks and/or food pantries. Food distribution centers have been around for many years with the mission of alleviating hunger among impoverished individuals and families. However, many of the foods that are being distributed are mostly emergency foods which have low nutritional value.⁴ This research brief will touch upon challenges families in the San Joaquin Valley (SJV) have faced amid COVID-19 and the impacts on food insecurity and obesity rates.

STUDY APPROACH

The CARE-UC Innovation Fellowship program granted me the opportunity to work on a food insecurity project over the Summer. My research aims were: **(1)** To explore if food distribution centers were offering healthy options to the community, **(2)** To explore the challenges food distribution centers are facing amid the COVID-19 pandemic, and **(3)** to provide policy and program recommendations to improve access and availability of healthy foods. Participating distributions were assessed using an adapted version of the Nutritional Environment Food Pantry Assessment Tool (NEFPAT). The study is still ongoing but preliminary results have emphasized the importance of food insecurity work and interventions. Read more about what can be done to create healthier options in our communities under “Policy and Program Recommendations”.

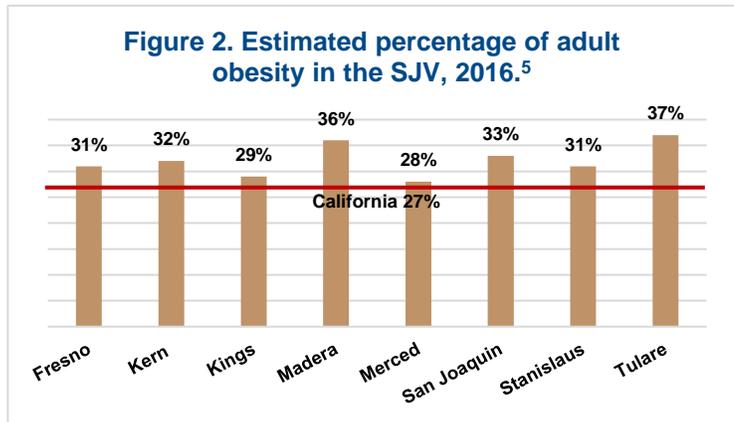
FOOD INSECURITY SJV

The San Joaquin Valley (SJV) is a predominantly low-income area known for its high agricultural productivity. The SJV is also recognized as the breadbasket of the nation, however, although it is the breadbasket of the nation, there is still plenty of food insecure families. Food insecurity rate in the SJV surpasses the overall rate in California (See Figure 1).² Food insecurity rates are also expected to have a significant rise because of COVID-19.³



CHALLENGES OF ACCESSING HEALTHY FOODS

Similar to food insecurity rates, the rate of obesity in the SJV are much higher than the overall rate of obesity in California.⁵ Obesity has become a continuing public health problem since they may lead to higher rates of chronic diseases in the future, such as high blood pressure⁶⁻⁹ and diabetes.⁶⁻⁹ A factor that may contribute to the increase in obesity rates are the accessibility and affordability of high saturated, high-sodium, and calorie-dense foods compared to that of healthier options.¹⁰



CHALLENGES OF ACCESSING HEALTHY FOODS

COVID-19 is exacerbating health disparities, especially among low-income, minority communities and will continue to impact them for many years to come. Some of the many challenges that low-income families are facing may include the closure of schools, low access to grocery stores, loss of economic support, and food hoarding.



Closure of schools. About 73% of children in the SJV are eligible to receive free or reduced-price school meals compared to 60% of California.² However, with school closures and family members working, students are missing out on the opportunity of healthy school meals.²⁰⁻²²



Access to grocery stores. The location of low-income communities also contributes to the difficulty of accessing healthy foods. In the SJV, 18% of families live half a mile away or more from a grocery store,¹¹⁻¹⁸ thus adding the extra barrier of traveling long distances to acquire affordable products.²¹ Usually low-income communities are mostly surrounded by food swamps. Food swamps are the agglomeration of unhealthy foods (i.e., fast-food restaurants) in the community.¹⁹



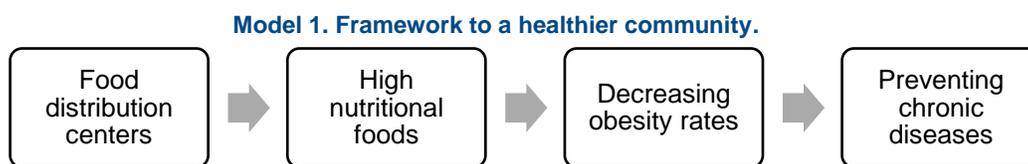
Loss of economic support. The loss of economic support has been one of the major barriers in accessing healthy foods.²³ Long before COVID-19, the high prices on healthy foods made it difficult for families to be able to afford fresh fruits and vegetables. COVID-19 presented low-income families additional economic barriers such as family loss, medical bills, and unexpected loss of income thus hindering the ability of purchasing affordable healthy foods.



Food hoarding. Towards the beginning of the pandemic, the media broadcasted images of empty grocery store shelves. Families began to hoard food products and as a result, it made it difficult for low-income families to feed their families.²¹ Families relying on government assistance programs (e.g., SNAP and WIC) were also at a greater disadvantage.

FOOD DISTRIBUTION CENTERS

To make ends meet, food insecure families may resort to government assistance programs as well as food distribution centers (i.e., food banks and food pantries). The main purpose of food distribution centers is to alleviate communities from hunger.⁴ However, these distribution centers do not assess the nutrition value of food.⁴ Distributing high nutritional foods to the community may help decrease obesity rates within low-income communities, which are mostly composed of minorities, which in return, may help prevent chronic diseases (See Model 1.). The COVID-19 pandemic has highlighted that **food is a health equity issue** that needs to be addressed.



POLICY & PROGRAM RECOMMENDATIONS

Increasing the availability of healthy foods within our low-income communities is important for alleviating hunger, decreasing obesity rates, and preventing chronic diseases. Preliminary results of my study identified that smaller organizations (e.g., churches) did not offer fresh fruits and vegetables to the community compared to larger organizations (e.g., government offices and food banks). Challenges faced during COVID-19 included a decrease in staff and volunteers as well as low availability or no cold storage. With such preliminary results in mind, the following will outline policy and program recommendations for creating healthier options within communities.

Policy Recommendations

(1) Assess the quality of food being distributed.

Using the updated NEFPAT Tool will help identify challenges of food distribution centers.

(2) Assess the quality of programs offered at distribution sites.

Assessing the quality of nutrition education (e.g., SNAP-ed) offered at distribution sites, can help improve health literacy among their staff, volunteers, and their communities.

Program Recommendations

(1) Start Community Fridges in the community.

These are public refrigerators where members of the community can drop off excess fruits and vegetables from their backyards or they can also grab free produce.²⁴

(2) Fund Community Supported Agriculture (CSA) boxes for low-income communities.

CSA boxes deliver fresh produce to families straight from local farms and may include healthy resources such as recipes, cooking tips, farm activities, and more.²⁵

(3) Help fund refrigerators for smaller organizations.

Preliminary results found that smaller organizations expressed having difficulty with providing families fresh fruits and vegetables because they lacked a fridge for cold storage.

(4) Creating a Digital Outreach.

Families can sign up via text to get alerts on free food resources around their community.

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REFERENCES

1. Walsemann, K. M., Ro, A., & Gee, G. C. (2017). Trends in food insecurity among California residents from 2001 to 2011: inequities at the intersection of immigration status and ethnicity. *Preventive medicine, 105*, 142-148.
2. County Health Rankings. (2020). California. *County Health Rankings & Roadmaps*. Retrieved from https://www.countyhealthrankings.org/app/california/2020/compare/additional?counties=06_019%2B06_029%2B06_031%2B06_039%2B06_047%2B06_077%2B06_099%2B06_107
3. Feeding America. (2020). The impact of coronavirus on food insecurity. *Feeding America*. Retrieved from <https://www.feedingamericaaction.org/the-impact-of-coronavirus-on-food-insecurity/>
4. Handforth, B., Hennink, M., & Schwartz, M. B. (2013). A qualitative study of nutrition-based initiatives at selected food banks in the feeding America network. *Journal of the Academy of Nutrition and Dietetics, 113*(3), 411-415.
5. CHIS Data-Obesity
6. Flores, G., Fuentes-Afflick, E., Barbot, O., Carter-Pokras, O., Claudio, L., Lara, M., ... & Valdez, R. B. (2002). The health of Latino children: urgent priorities, unanswered questions, and a research agenda. *Jama, 288*(1), 82-90.
7. Estrada, E., Eneli, I., Hampl, S., Mietus-Snyder, M., Mirza, N., Rhodes, E., ... & Pont, S. J. (2014). Children's Hospital Association consensus statements for comorbidities of childhood obesity. *Childhood obesity, 10*(4), 304-317.
8. Baker, J. L., Olsen, L. W., & Sørensen, T. I. (2008). Childhood body mass index and the risk of coronary heart disease in adulthood. *Ugeskrift for laeger, 170*(33), 2434-2437.
9. Yates, K. F., Larr, A. S., Sweat, V., Maayan, L., Siegel, C., & Convit, A. (2014). Hispanic Youth With Excess Weight Display Psychological Distress: Do the Youth Self-Report Norms Accurately Capture This Phenomenon?. *Hispanic Journal of Behavioral Sciences, 36*(2), 195-210.
10. Ochoa, A., & Berge, J. M. (2017). Home environmental influences on childhood obesity in the Latino population: a decade review of literature. *Journal of immigrant and minority health, 19*(2), 430-447.
11. Salud America. (2020). Health equity report card: Fresno County, CA. *Salud es America*. Retrieved from <https://salud-america.org/health-equity-report-card/?geoid=05000US06019>
12. Salud America. (2020). Health equity report card: Kern County, CA. *Salud es America*. Retrieved from <https://salud-america.org/health-equity-report-card/?geoid=05000US06029>
13. Salud America. (2020). Health equity report card: Kings County, CA. *Salud es America*. Retrieved from <https://salud-america.org/health-equity-report-card/?geoid=05000US06031>
14. Salud America. (2020). Health equity report card: Madera County, CA. *Salud es America*. Retrieved from <https://salud-america.org/health-equity-report-card/?geoid=05000US06039>
15. Salud America. (2020). Health equity report card: Merced County, CA. *Salud es America*. Retrieved from <https://salud-america.org/health-equity-report-card/?geoid=05000US06047>
16. Salud America. (2020). Health equity report card: San Joaquin County, CA. *Salud es America*. Retrieved from <https://salud-america.org/health-equity-report-card/?geoid=05000US06077>
17. Salud America. (2020). Health equity report card: Stanislaus County, CA. *Salud es America*. Retrieved from <https://salud-america.org/health-equity-report-card/?geoid=05000US06099>
18. Salud America. (2020). Health equity report card: Tulare County, CA. *Salud es America*. Retrieved from <https://salud-america.org/health-equity-report-card/?geoid=05000US06107>
19. Colón-Ramos, U., Monge-Rojas, R., Cremm, E., Rivera, I. M., Andrade, E. L., & Edberg, M. C. (2017). How Latina mothers navigate a 'food swamp' to feed their children: a photovoice approach. *Public Health Nutrition, 20*(11), 1941-1952.

20. Bonilla-Silva, E. (2020). Color-Blind Racism in Pandemic Times. *Sociology of Race and Ethnicity*, 2332649220941024.
21. Kinsey, E. W., Kinsey, D., & Rundle, A. G. (2020). COVID-19 and Food Insecurity: an Uneven Patchwork of Responses. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 1.
22. Nittle, N. (2020). With schools closed, some districts are feeding more people than food banks. *Civil Eats*. Retrieved from <https://civileats.com/2020/04/07/with-schools-closed-some-districts-are-feeding-more-people-than-food-banks/>
23. Dmitrieva, K. (2020). Job losses deepen in pandemic with U.S. tally topping 30 million. *Bloomberg*. Retrieved from <https://www.bloomberg.com/news/articles/2020-04-30/another-3-8-million-in-u-s-filed-for-jobless-benefits-last-week>
24. www.freeedge.org
25. <https://www.csacoalition.org/about-csa>