

FOOD INSECURITY IN LOS ANGELES COUNTY

Before and During the COVID-19 Pandemic



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For additional information about the LA County Health Survey, visit: www.publichealth.lacounty.gov/ha



The Los Angeles County Health Survey is a periodic, population-based telephone survey that collects information on sociodemographic characteristics, health status, health behaviors, and access to health services among adults and children in the county. The 2018 survey was conducted for the Los Angeles County Department of Public Health by Abt SRBI Inc., and was supported by funding from Kaiser Permanente Southern California Community Benefit program, the Los Angeles County Department of Mental Health, and Department of Public Health programs including the Division of Chronic Disease and Injury Prevention, Children's Medical Services, Division of HIV and STD Programs, Oral Health Program, Substance Abuse Prevention and Control, and Environmental Health.



The United States Department of Agriculture (USDA) estimated that 13.8 million American households, or 10.5% of all households experienced food insecurity in 2020.¹

Of these, 3.9% (5.1 million households) had very low food security.¹

A study by Feeding America estimated that 4.29 million or 10.8% of households in California experienced food insecurity in 2020.²



According to the USDA, a household is food insecure if it

- reports a reduction in the quality, variety, or desirability of diet with little to no indication of reduced food intake (low food security), or
- reports multiple indications of disrupted eating patterns and reduced food intake (very low food security)³

1. Coleman-Jensen A, Rabbitt, MP, Gregory, CA, Singh, A. Household Food Security in the United States in 2020. United States Department of Agriculture, Economic Research Service. September 2021. Accessed September 30, 2021. <https://www.ers.usda.gov/webdocs/publications/99282/err-275.pdf?v=5490.9>

2. Map the Meal Gap 2020. Feeding America. Accessed February 18, 2021. <https://map.feedingamerica.org/>

3. Definitions of Food Security. United States Department of Agriculture. Economic Research Service. Updated September 8, 2021. Accessed October 1, 2021. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/>

INTRODUCTION

Food insecurity remains a growing problem across Los Angeles County.

Food insecurity can have devastating health consequences. It is associated with increased consumption of calorically dense foods, such as fast food, which are often more affordable or the most accessible option in communities with limited grocery stores or excessive fast food outlets.⁴

Food insecurity is a serious public health problem as food insecure individuals face barriers to consuming healthy food, and, due to excess intake of calories, saturated fats, salt, and added sugars, are at increased risk for many diet-related chronic conditions, including high blood pressure, obesity, type 2 diabetes, heart disease, stroke, and many forms of cancer.^{5, 6, 7}

In addition, when food insecurity occurs during childhood, it is associated with delayed development, inability to concentrate in school and thus, diminished academic performance, anxiety and depression, and early-onset obesity.^{8, 9} Food insecure adults are at increased risk for poor dietary intake, frequently leading to chronic conditions including type 2 diabetes, hypertension, hyperlipidemia, obesity, and psychological distress or depression.^{7, 10}

In the wake of the Coronavirus Disease 2019 (COVID-19) pandemic, emerging evidence suggests that food insecurity has worsened in Los Angeles County, as residents have faced unemployment and loss of income as a result of the recession caused by the pandemic.¹¹

This report summarizes the growing problem of food insecurity in Los Angeles County, before and during the early part of the COVID-19 pandemic. It first outlines trends in household food insecurity from 2005 to 2018 using data from the Los Angeles County Health Survey. It then describes the prevalence of food insecurity in 2018 by geographic location and sociodemographic characteristics, including age, race/ethnicity, and employment status. It concludes by presenting more recent findings from the Los Angeles County panel of the Understanding Coronavirus in America study, which showed increases in food insecurity across income levels in the population during 2020. The report closes with a discussion of policy and programmatic strategies for reducing food insecurity and improving food equity in Los Angeles County.

4. Mello AJ, Gans KM, Risica PM, Kirtania U, Strolla LO, Fournier L. How is food insecurity associated with dietary behaviors? An analysis with low-income, ethnically diverse participants in a nutrition intervention study. *J Am Diet Assoc.* 2010;110(12):1906-1911. doi: [10.1016/j.jada.2010.09.011](https://doi.org/10.1016/j.jada.2010.09.011)

5. Bauer UE, Briss PA, Goodman RA, Bowman BA. Prevention of chronic disease in the 21st century: elimination of the leading preventable causes of premature death and disability in the USA. *Lancet.* 2014;384(9937):45-52. doi: [10.1016/S0140-6736\(14\)60648-6](https://doi.org/10.1016/S0140-6736(14)60648-6)

6. Seligman HK, Laraia BA, Kushel MB. Food insecurity is associated with chronic disease among low-income NHANES participants. *J Nutr.* 2010;140(2):304-310. doi: [10.3945/jn.109.112573](https://doi.org/10.3945/jn.109.112573)

7. Roberts CK, Barnard RJ. Effects of exercise and diet on chronic disease. *J Appl Physiol.* 2005;98(1):3-30. doi: [10.1152/jappphysiol.00852.2004](https://doi.org/10.1152/jappphysiol.00852.2004)

8. Gundersen C, Ziliak JP. Food insecurity and health outcomes. *Health Affairs.* 2015;34(11):1830-1839. <https://doi.org/10.1377/hlthaff.2015.0645>

9. Jyoti DF, Frongillo EA, Jones SJ. Food insecurity affects school children's academic performance, weight gain, and social skills. *J Nutr.* 2005;135(12):2831-2839. doi: [10.1093/jn/135.12.2831](https://doi.org/10.1093/jn/135.12.2831)

10. Pruiett SL, Leonard T, Xuan L, Amory R, Higashi RT, Nguyen OK, et al. Who Is Food Insecure? Implications for Targeted Recruitment and Outreach, National Health and Nutrition Examination Survey, 2005–2010. *Prev Chronic Dis* 2016;13:160103. doi: <http://dx.doi.org/10.5888/pcd13.160103>

11. de la Haye K, Miller S, Livings M, Bruine de Bruin W, Wilson J, Weber K, Frazzini A. The Impact of COVID-19 on Food Insecurity in Los Angeles County: April to July 2020. Dornsife Public Exchange, University of Southern California. September 23, 2020. Accessed September 23, 2021. https://publicexchange.usc.edu/wp-content/uploads/2021/02/USC_LAC_Food_Insecurity_Report_April-July_2020.pdf

METHODS

The report draws from two primary data sources: the Los Angeles County Health Survey (LACHS) and the Los Angeles County panel of the Understanding Coronavirus in America study.

The LACHS is a cross-sectional, population-based, random-digit-dialed telephone survey of non-institutionalized residents in Los Angeles County. It is conducted by the Los Angeles County Department of Public Health Office of Health Assessment and Epidemiology. This report uses the version of the survey focused on residents 18 years and older from the LACHS 2005, 2011, 2015, and 2018 cycles. Sample sizes for the 2005, 2011, and 2015 cycles were about 8,000 adults. In 2018, the sample size was 6,966 adults.

For each year of survey administration, the sample was representative of the adult population in Los Angeles County. Interviews were conducted in English, Spanish, Chinese (Mandarin and Cantonese), Korean, and Vietnamese. In 2005, the survey cycle was conducted by landline only, but in 2011, participants were also interviewed on cell phones. This change, along with the survey's adoption of a new, complex weighting method in 2011, represented an upgrade to the overall sampling strategy. These changes may, however, have affected the estimates when compared to those generated using 2005 data. Details about the survey, including its full methodology, can be found at <http://www.publichealth.lacounty.gov/ha/>.

To assess food insecurity, LACHS participants with household incomes less than 300% of the Federal Poverty Level (FPL) were asked six questions from the USDA Short Form Food Insecurity Module.¹² This module inquired about household experiences in the past 12 months.

In the LACHS, the questions were only asked of low-income households (incomes less than 300% FPL) given the increased likelihood of experiencing food insecurity in this group. If participants gave affirmative responses to five or six of these questions, their household was classified as having very low food security. If participants gave affirmative responses to two, three, or four of the questions their households were classified as low food security. If participants gave affirmative responses to zero or one question only, their households were classified as food secure. Tables in this report include 95% confidence intervals (CI), which represent the variability in each of the estimates due to sampling – i.e., the actual prevalence in the population, 95 out of 100 times sampled, would fall within the CI provided.

12. U.S. Household Food Security Survey Module: Six-Item Short Form Economic Research Service, USDA September 2012. Accessed 30, 2021. <https://www.ers.usda.gov/media/8282/short2012.pdf>



Data from the Los Angeles County panel of the Understanding Coronavirus in America study, 2020 were used to complement the LACHS prevalence estimates.¹³ The study is part of the Understanding America Study (UAS), a nationally representative panel survey conducted by the University of Southern California (USC) Dornsife Center for Economic and Social Research (CESR). The UAS is a longitudinal survey of participants ages 18 years and older and is administered online in English and Spanish. The Los Angeles County subset of this panel is a representative sample of households in the county, and findings are based on a sample of 1,484 adults. Results are weighted to Current Population Survey benchmarks to further ensure representativeness. Details about the survey, including its methodology, can be found at <https://uasdata.usc.edu/index.php>.

Data from the Los Angeles County panel of the Understanding Coronavirus in America study were obtained from a previous analysis that was conducted and reported by the USC CESR team, under a strategic partnership arrangement (public exchange) with the Los Angeles County Emergency Food Security Branch.^{11, 14} These two reports were based on data collected from April to July 2020, and then updated during April to December of that same year. To assess food insecurity, participants were asked three questions from the validated Food Insecurity Experience Survey.¹⁵ Food insecurity was assessed during the past week or month, depending on the frequency of the survey. Households were classified as food insecure if they experienced moderate or severe levels of food insecurity.¹¹

It is important to note that the Los Angeles County panel of the Understanding Coronavirus in America study was a longitudinal, online survey which asked about food insecurity on a weekly or monthly basis, whereas the 2018 LACHS was a cross-sectional telephone survey that asked about experiences with food insecurity over the previous year (12 months). A direct comparison of the two sets of study results was not possible, as the two surveys included different question modules to capture food insecurity. In the case of the Los Angeles County panel, lack of computer literacy or access may have further limited the survey's ability to recruit and capture the experiences of the county's most vulnerable, low-income community members.

13. Understanding America Study. University of Southern California, Dornsife Center for Economic and Social Research. Accessed October 1, 2021. <https://uasdata.usc.edu/index.php>

14. De la Haye K, Bruine de Bruin W, Wilson J, Weber K, & Miller S. Understanding America Study. 2020. USC Dornsife. Available from: <https://covid19pulse.usc.edu/>

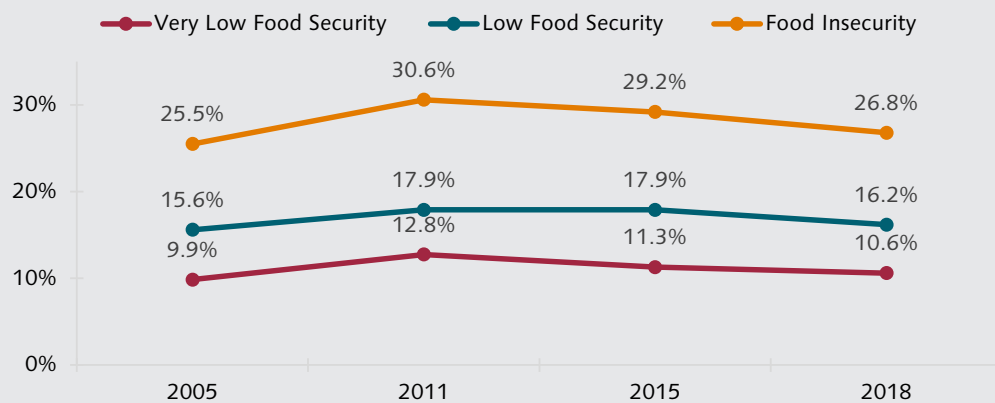
15. Cafiero C, Viviani S, & Nord M. 2018. Food security measurement in a global context: The food insecurity experience scale. *Measurement*, 116, 146-152.

HOUSEHOLD FOOD INSECURITY TRENDS BEFORE THE PANDEMIC

In households with incomes less than 300% FPL, food insecurity steadily increased from 25.5% in 2005 to 30.6% in 2011, leveling off from 2011 to 2015 (29.2%), and decreasing to 26.8% in 2018 (Figure 1).

Very low food security paralleled the overall food insecurity trend, from a high of 12.8% in 2011 to a lower prevalence of 10.6% in 2018 (Figure 1).

Figure 1: Food Insecurity Trends Among Households <300% FPL, LACHS 2005-2018

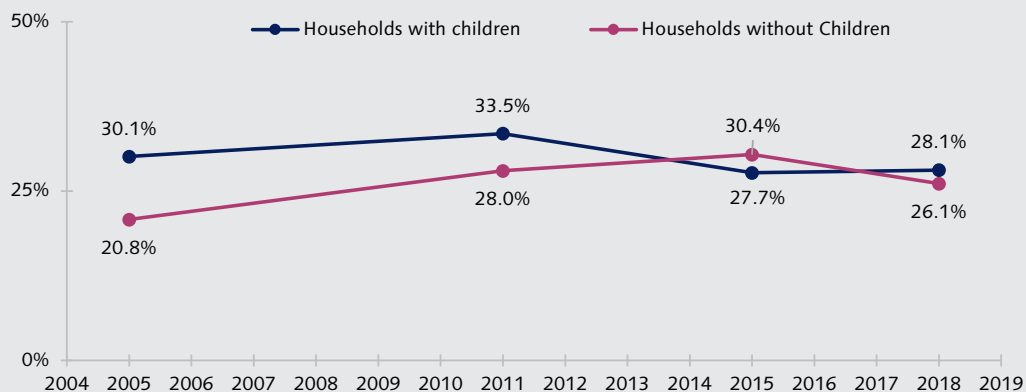


Note: the levels of food insecurity between 2015 and 2018 were not statistically different, suggesting that there may be no change in food insecurity prevalence from 2015 to 2018.

While food insecurity prevalence steadily increased among households with and without children from 2005 to 2011, overall prevalence dropped in 2018 (Figure 2).

In 2005, households with children had a higher prevalence of food insecurity than households without children; this gap narrowed in 2011 and reversed in 2015. However, in 2018, households with children once again had a higher prevalence of food insecurity when compared to households without children (Figure 2).

Figure 2: Food Insecurity Trends among Households < 300% FPL With and Without Children, LACHS 2005-2018





HOUSEHOLD FOOD INSECURITY IN 2018

In 2018, 26.8% or 516,000 Los Angeles County households with incomes less than 300% FPL experienced food insecurity, which includes households reporting low food security and very low food security. Of these, 203,000 households experienced very low food security (Table 1).

As household income decreased, the prevalence of food insecurity increased. Households living below 100% of the FPL were at the greatest risk of experiencing food insecurity (37.1%) and very low food security (16.4%). By comparison, of households with incomes between 100% and 199% FPL, 25.9% were food insecure, with 9% experiencing very low food security. Of households with incomes between 200% and 299% FPL, 13% were food insecure and 4.5% had very low food security (Table 1).

Food insecurity varied by Service Planning Area (SPA), with the highest prevalence in the South (35.1%) and the lowest prevalence in the West (18%). The prevalence of very low food security was highest in Metro (15.8%) and the South (14.4%), and lowest in San Gabriel (6.8%) (Table 1).

Table 1: Percent of Households <300% Federal Poverty Level That Have Overall Food Insecurity, Low Food Security, and Very Low Food Security, Los Angeles County Health Survey, 2018

	Food Insecurity			Low Food Security			Very Low Food Security		
	Percent	95% CI	Estimated #	Percent	95% CI	Estimated #	Percent	95% CI	Estimated #
LA County Households	26.8%	24.8 - 28.8	516,000	16.2%	14.6 - 17.9	312,000	10.6%	9.2 - 12.0	203,000
Federal Poverty Level*									
0-99% FPL	37.1%	33.5 - 40.8	252,000	20.7%	17.6 - 23.8	140,000	16.4%	13.6 - 19.3	111,000
100%-199% FPL	25.9%	22.8 - 29.0	204,000	16.9%	14.2 - 19.5	133,000	9.0%	7.0 - 11.1	71,000
200%-299% FPL	13.0%	10.0 - 16.0	59,000	8.5%	5.9 - 11.0	39,000	4.5%	2.9 - 6.2	21,000
Service Planning Area									
Antelope Valley	29.8%	22.4 - 37.2	24,000	17.6%	11.0 - 24.1	14,000	12.2%	7.4 - 17.0	10,000
San Fernando	24.4%	20.0 - 28.9	95,000	15.6%	11.7 - 19.6	61,000	8.8%	6.1 - 11.5	34,000
San Gabriel	21.6%	17.0 - 26.1	66,000	14.7%	10.7 - 18.7	45,000	6.8%	4.4 - 9.3	21,000
Metro	31.8%	26.0 - 37.5	89,000	15.9%	11.7 - 20.1	45,000	15.8%	10.8 - 20.8	44,000
West	18.0%	10.1 - 25.9	18,000	12.4%†	4.9 - 19.8	12,000	5.7%†	2.1 - 9.2	6,000
South	35.1%	29.6 - 40.7	78,000	20.7%	16.0 - 25.5	46,000	14.4%	10.1 - 18.7	32,000
East	25.9%	20.5 - 31.2	63,000	16.8%	12.1 - 21.5	41,000	9.1%	5.8 - 12.5	22,000
South Bay	27.5%	22.1 - 32.8	82,000	16.0%	11.6 - 20.3	47,000	11.5%	7.7 - 15.3	34,000

* Based on U.S. Census 2016 Federal Poverty Level (FPL) thresholds which for a family of four (2 adults, 2 dependents) correspond to annual incomes of \$24,339 (100% FPL), \$48,678 (200% FPL), and \$73,017 (300% FPL). These thresholds were the values at the time of survey interviewing.

† The estimate is statistically unstable (relative standard error >30%) and therefore may not be appropriate to use for planning or policy purposes.

2018 LACHS DATA BY HOUSEHOLD FOOD SECURITY STATUS

Sociodemographic Characteristics

This section describes the sociodemographic characteristics and food insecurity among adults in households with incomes less than 300% FPL.



Among those living in food insecure households, 40.1% were ages 30-49 compared to food secure households in which 34.7% were ages 30-49 (Table 2).



Among those living in food insecure households, 67.3% self-identified as Latino, 13.9% as White, 11.9% as African American, and 6.2% as Asian. Nearly three quarters of a million, or 746,000, Latino adults with household incomes less than 300% FPL in Los Angeles County were living in food insecure households (Table 2).



Among those living in food insecure households, 40.5% had less than a high school education compared to food secure households in which 29.6% had less than a high school education (Table 2).



Among adults living in food insecure households, nearly half (45.4%) were employed (Table 2).

Supplemental Nutrition Assistance Program (SNAP) Participation

This section describes SNAP participation and food insecurity among households with incomes less than 185% FPL.



Among adults living in food insecure households with household incomes less than 185% FPL, a third (33.6%) participated in SNAP. In California, this program is called CalFresh (Table 3).



In the 2018 survey, 48.1% of African American, 38.6% of White, and 31% of Latino adults living in food insecure households with incomes less than 185% FPL were participating in SNAP/CalFresh (Table 3).

Table 2: Sociodemographic Characteristics of Adults (Ages 18 Years and Older) in Households with Incomes <300% Federal Poverty Level by Household Food Security Status[‡], Los Angeles County Health Survey, 2018

Sociodemographic Characteristics	Food Insecure Household			Food Secure Household		
	Percent	95% CI	Estimated #	Percent	95% CI	Estimated #
Current Gender						
Male	40.0%	36.1-44.0	448,000	46.1%	43.6-48.6	1,644,000
Female	59.8%	55.8-63.7	669,000	53.5%	51.0-56.0	1,908,000
Age Group						
18-29	24.5%	20.6-28.3	275,000	28.1%	25.8-30.5	1,005,000
30-49	40.1%	36.1-44.1	451,000	34.7%	32.3-37.1	1,240,000
50-64	27.1%	23.8-30.4	305,000	20.8%	18.9-22.7	743,000
65 or over	8.3%	6.6-10.1	94,000	16.3%	14.8-17.9	583,000
Race/Ethnicity						
Latino	67.3%	63.5-71.1	746,000	58.4%	55.9-60.9	2,057,000
White	13.9%	11.2-16.5	154,000	17.4%	15.7-19.1	613,000
African American	11.9%	9.6-14.2	132,000	8.2%	7.0-9.3	288,000
Asian	6.2%	3.7-8.7	69,000	15.1%	12.8-17.3	530,000
Native Hawaiian or other Pacific Islander	-	-	-	0.3% [§]	0.1-0.5	n/a
American Indian/Alaska Native	0.3% [§]	0.0-0.6	n/a	0.2% [§]	0.0-0.3	n/a
Other	0.4% [§]	0.0-0.8	n/a	0.5%	0.2-0.8	n/a
Education						
Less than high school	40.5%	36.5-44.5	450,000	29.6%	27.3-32.0	1,049,000
High school	26.1%	22.5-29.6	290,000	26.4%	24.2-28.6	936,000
Some college or trade school	24.6%	21.0-28.1	273,000	28.4%	26.1-30.7	1,007,000
College or post graduate degree	8.9%	7.0-10.7	98,000	15.5%	14.0-17.1	550,000
Employment Status						
Employed	45.4%	41.4-49.5	505,000	52.1%	49.6-54.6	1,837,000
Unemployed	15.6%	12.7-18.5	174,000	9.9%	8.4-11.4	349,000
Not in labor force [¶]	39.0%	35.1-42.9	434,000	38.0%	35.6-40.3	1,338,000

[‡]Food insecurity is a scaled variable based on a series of six questions. [Ref: SJ Blumberg, K Bialostosky, WL Hamilton, and RR Briefel. The effectiveness of a short form of the Household Food Security Scale. Am J Public Health; 1999(89): 1231-1234]

[§]The estimate is statistically unstable (relative standard error >30%) and therefore may not be appropriate to use for planning or policy purposes.

[¶] Includes those who are retired from the labor force, who are unable to work because of a disability, and who are a student or a homemaker



Table 3: Percent of Adults (Ages 18 Years and Older) with Household Incomes <185% Federal Poverty Level Who Participated in the Supplemental Nutrition Assistance Program (SNAP)/ CalFresh, by Household Food Security Status, Los Angeles County Health Survey, 2018

Participated in SNAP/CalFresh	Food Insecure Household			Food Secure Household		
	Percent	95% CI	Estimated #	Percent	95% CI	Estimated #
Overall	33.6%	29.3-37.8	304,000	18.2%	15.8-20.5	385,000
Current Gender						
Male	27.9%	21.3-34.5	100,000	13.9%	10.6-17.2	129,000
Female	37.4%	32.0-42.8	205,000	21.5%	18.3-24.8	256,000
Age Group						
18-29	35.4%	24.7-46.1	70,000	17.1%	12.4-21.9	101,000
30-49	40.9%	34.0-47.8	156,000	24.1%	19.6-28.6	189,000
50-64	27.2%	20.9-33.5	69,000	16.4%	12.4-20.4	73,000
65 or over	12.9%	5.5-20.3	10,000	7.4%	4.4-10.3	22,000
Race/Ethnicity						
Latino	31.0%	26.1-35.9	197,000	17.9%	15.1-20.7	249,000
White	38.6%	26.8-50.5	44,000	16.9%	11.3-22.6	46,000
African American	48.1%	35.7-60.4	47,000	25.8%	18.1-33.5	43,000
Asian	*28.5%	3.5-53.6	13,000	15.3%	6.7-23.8	40,000
Employment Status						
Employed	23.6%	17.7-29.6	91,000	11.4%	8.6-14.1	117,000
Unemployed	45.1%	34.2-56.1	67,000	27.9%	19.5-36.3	62,000
Not in labor force**	39.8%	33.2-46.4	146,000	24.0%	19.9-28.1	201,000

#The estimate is statistically unstable (relative standard error > 30% in 2015-2018 and relative standard error > 23% prior to 2015) and therefore may not be appropriate to use for planning or policy purposes.

**Includes those who are retired from the labor force, who are unable to work because of a disability, and who are a student or a homemaker.



Health Care Access

This section describes the sociodemographic characteristics and food insecurity among adults in households with incomes less than 300% FPL.



16.8% of food insecure households were uninsured compared to 13.1% of food secure households (Figure 3).

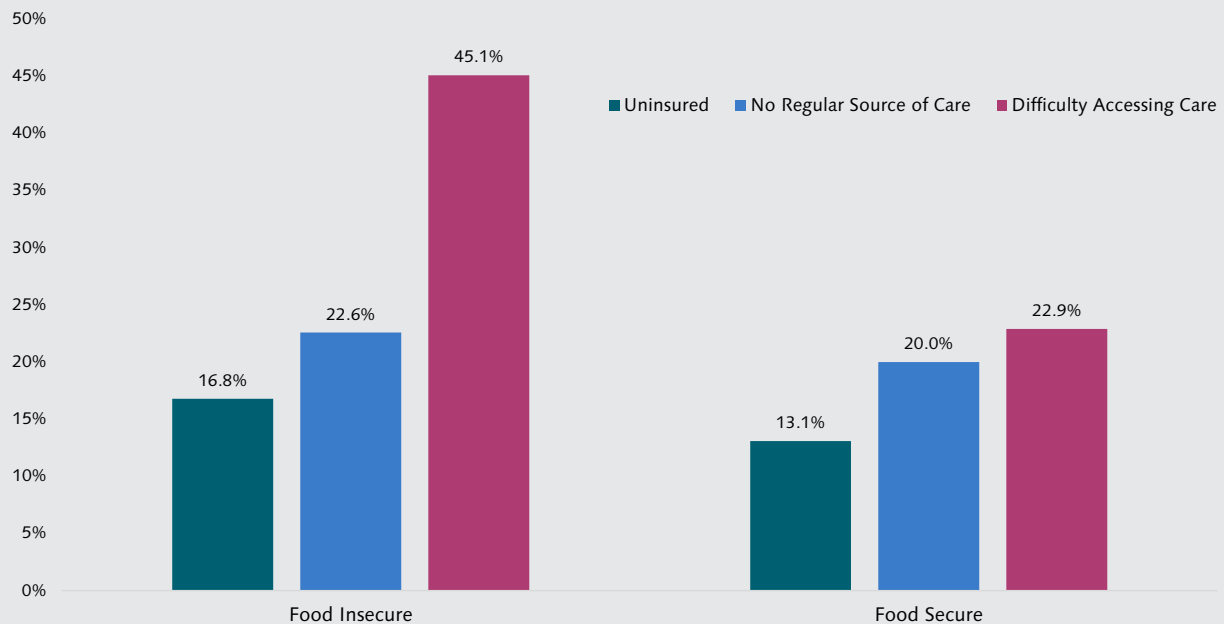


22.6% of food insecure households reported not having a regular source of health care compared to 20% among those who were food secure (Figure 3).



A higher percentage of food insecure households reported difficulty accessing needed medical care (45.1%) compared to those living in food secure households (22.9%) (Figure 3).

Figure 3: Health Insurance and Access to Care for Adults (Ages 18-64) in Households < 300% FPL by Food Security Status, LACHS 2018

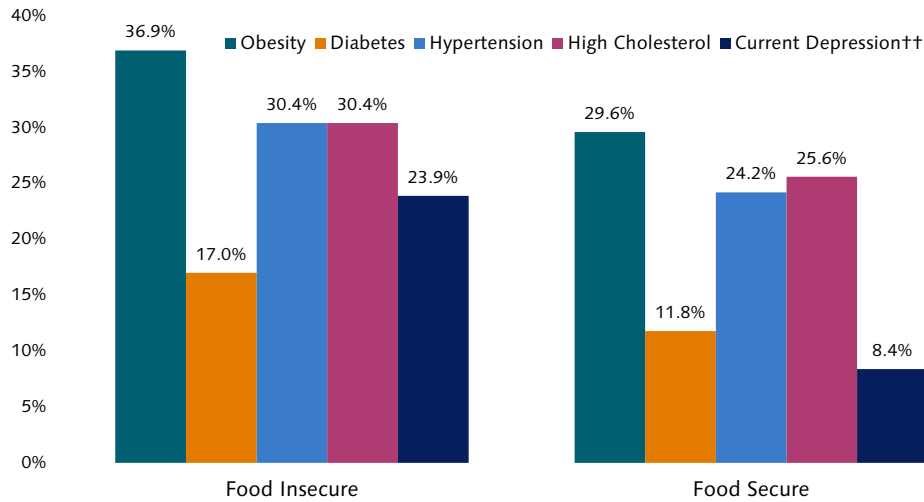


Chronic Conditions



Among households with incomes less than 300% FPL, the prevalence of obesity (36.9%), diabetes (17%), hypertension (30.4%), high cholesterol (30.4%), and depression (23.9%) was higher among adults living in food insecure households than among adults living in food secure households (29.6%, 11.8%, 24.2%, 25.6% and 8.4%, respectively).

Figure 4: Percent of Adults with Chronic Conditions in Households <300% FPL by Food Security Status, LACHS 2018



†† Current depression is defined as ever being diagnosed with depression AND either currently being treated for depression or currently having symptoms of depression.

Housing Instability

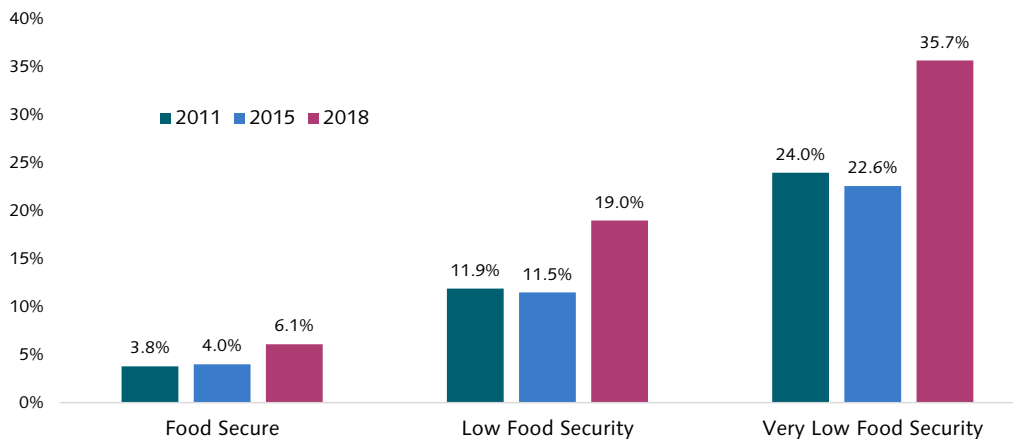


In 2018, among households with incomes less than 300% FPL, housing instability, defined as a history of experiencing homelessness or not having one's own place to live or sleep at some point in the past five years, was highest among households with very low food security (35.7%) compared with 19% of low food security households and 6.1% of food secure households (Figure 5).



Since 2015, housing instability increased among all households with incomes under 300% FPL. The most dramatic increase was among adults living in very low food secure households, from 22.6% in 2015 to 35.7% in 2018 (Figure 5).

Figure 5: Percent of Adults with Housing Instability in the Past 5 Years in Households <300% FPL by Food Security Status, LACHS 2011-2018





COVID-19

The Pandemic Came and Stayed: Food Insecurity and Inequities Widened

In addition to the morbidity and mortality caused by the novel coronavirus, the COVID-19 pandemic sent the nation into a recession, which resulted in millions of Americans facing unemployment. Los Angeles County was hit particularly hard, with the unemployment rate increasing to 19.4% in June 2020, compared to 14.9% in California and 11.1% nationally.^{16, 17, 18} The loss of jobs and associated income contributed to increased levels of food insecurity and deepened existing racial and economic inequities caused by a reduced access to healthy food.

The following section outlines key findings from the Los Angeles County panel of the Understanding Coronavirus in America study conducted during the COVID-19 pandemic, from early April 2020 to July 2020 and then between April 2020 to December 2020.^{19, 20} These two time periods are reported separately because they reflect the release of two reports: the first in June 2020, and the second in January 2021.

16. Daily Los Angeles COVID-19 Data Summary. City of Los Angeles, Mayor Garcetti's Innovation Team. August 3, 2020. Accessed October 1, 2021. https://coronavirus.lacity.org/sites/g/files/wph1886/files/inline-files/Release_Daily%20Data%20Report%20Monday%208_3_F.pdf

17. Unemployment Rate and Labor Force. State of California, Employment Development Department. Accessed October 1, 2021. <https://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html>

18. State Employment and Unemployment – June 2020. U.S. Department of Labor, Bureau of Labor Statistics. July 17, 2020. Accessed October 1, 2021. https://www.bls.gov/news.release/archives/laus_07172020.pdf

19. de la Haye K, Miller S, Livings M, Bruine de Bruin W, Wilson J, Weber K, Frazzini A. The Impact of COVID-19 on Food Insecurity in Los Angeles County: April to July 2020. Dornsife Public Exchange, University of Southern California. September 23, 2020. Accessed September 23, 2021. https://publicexchange.usc.edu/wp-content/uploads/2021/02/USC_LAC_Food_Insecurity_Report_April-July_2020.pdf

20. de la Haye K, Miller S, Saw, H-W, Kapetyn A, Livings M, Bruine de Bruin W, Wilson J, Weber K, Frazzini A, Babboni M. A Year of Food Insecurity in Los Angeles County During the COVID-19 Pandemic: Racial and Ethnic Minorities Have Been Hardest Hit. Research Brief. USC Dornsife - USC Public Exchange- Keck School of Medicine of USC. Accessed September 23, 2021. <https://publicexchange.usc.edu/wp-content/uploads/2021/02/A-Year-of-Food-Insecurity-in-Los-Angeles-County.pdf>

FOOD INSECURITY IN LOS ANGELES COUNTY IN THE WAKE OF THE COVID-19 PANDEMIC



41.6% of households below 300% FPL experienced food insecurity at some time between April and July 2020.

Across all socioeconomic levels, 34% of all households experienced food insecurity at some time between April and December 2020.

2020 LOS ANGELES COUNTY PANEL OF THE UNDERSTANDING CORONAVIRUS IN AMERICA STUDY DATA ON FOOD INSECURITY

Sociodemographic Characteristics

- Latinos experienced the highest prevalence of food insecurity (40%) from April to December 2020, followed by African Americans (39%), Asians (28%), and Whites (21%).
- The majority of adults who experienced food insecurity from April to July 2020 were female (57%), 18-40 years old (59%), Latino (55%), and low-income (82%) – defined as living at less than 300% FPL.
- When household income and employment status were adjusted, individuals ages 18 to 50 years had significantly greater odds of experiencing food insecurity, compared to those ages 65 years and older from April 2020 to July 2020.
- Half, or 50.3%, of adults who experienced food insecurity between April to July 2020 had children in their households and 35.6% were single parents.



Individuals who were found to be food insecure were almost twice as likely to have been infected with COVID-19 (11.6%) compared to those who were food secure (6.4%) between April to July 2020.

Nutrition Assistance Program Eligibility and Enrollment



After controlling for financial support, employment, and poverty level, participants in the study who received CalFresh in June-July 2020 had an 18% higher chance of transitioning from being food insecure in April-May to being food secure in June-July 2020.



Between 14.7% and 26.7% of Los Angeles County households were likely to be eligible for CalFresh but were not enrolled in the program as of July 2020.

LOOKING AHEAD

Prior to the COVID-19 pandemic, food insecurity in Los Angeles County had trended downward and appeared to have leveled off. However, stark inequities in access to and affordability of healthy food for communities of color, immigrants, and those living in extreme poverty remained.

During the pandemic, the prevalence of food insecurity became widespread as closures in various sectors resulted in job losses. The rise in food insecurity and economic hardship was observed across income levels, with communities of color hit the hardest.



RECOMMENDED STRATEGIES FOR REDUCING FOOD INSECURITY AND IMPROVING FOOD EQUITY IN LOS ANGELES COUNTY



Promote health equity by recognizing the relationship between food equity and racial equity

It is critical to understand and tackle the deeply rooted forces that perpetuate disparities in food insecurity to ensure that everyone in Los Angeles County has equitable access to healthy food. These forces include the rising cost of living and housing in the county, anti-immigrant sentiment, and structural racism, including the lasting impacts of redlining and zoning rules that have resulted in pockets of concentrated poverty and “food deserts.”²¹ Recently, food justice advocates have used the term “food apartheid” to describe the structural, social, and racial inequities of the food system and to acknowledge the policies and practices that have resulted in these inequities.²²

Working across sectors in partnership with organizations that are embedded in and trusted by marginalized communities is critical to overcoming barriers to food access associated with racism. Partnerships with trusted community organizations can help ensure that all low-income individuals and families are supported in accessing food resources and enrolling in nutrition assistance programs, while promoting food justice and health equity. The Food Equity Roundtable, established by the County of Los Angeles Board of Supervisors, shows promise toward building a more equitable and just food system.²³



Shift the focus of government, health care, and policymakers from “food security” to “nutrition security,” emphasizing food quality as well as access

While food security has traditionally focused on hunger and calories, nutrition security emphasizes access, availability, and affordability of foods that promote well-being and prevent or treat disease.²⁴ By working towards nutrition security, historically distinct efforts to tackle hunger on the one hand and promote nutrition on the other are brought together to address disparities in diet-related chronic diseases that impact vulnerable communities disproportionately. Key to this shift is improving the nutritional quality of food that is distributed in the charitable feeding system, as well as expansion of federal programs that focus on incentivizing the purchase of fruits and vegetables in low-income communities. Efforts should also be made to capture nutrition security in population-based surveys and clinic-based settings that traditionally focus on monitoring food insecurity. Policy and programmatic recommendations can better focus on improving the quality of food made available to low-income residents, rather than only on the quantity.

21. New York Law School Racial Justice Project., “Unshared Bounty: How Structural Racism Contributes to the Creation and Persistence of Food Deserts. (with American Civil Liberties Union).” (2012). Racial Justice Project. Book 3. http://digitalcommons.nyls.edu/racial_justice_project/3

22. Food Equity and Access. Los Angeles Food Policy Council. Accessed September 10, 2021. <https://www.goodfoodla.org/food-equity-and-access>

23. Creating Long-Term, Cross-Sector Coordination for a Sustainable and Just Food System. Los Angeles County Board of Supervisors, Motion by Supervisors Janice Hahn and Sheila Kuehl. February 9, 2021. Accessed September 30, 2021. <http://file.lacounty.gov/SDSInter/bos/supdocs/153656.pdf>

24. Mozaffarian D, Fleischhacker S, Andrés JR. Prioritizing nutrition security in the US. *JAMA*. 2021;325(16):1605–1606. doi: [10.1001/jama.2021.1915](https://doi.org/10.1001/jama.2021.1915)



Continue to implement innovative strategies to increase participation in nutrition assistance programs such as CalFresh and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

Participation in nutrition assistance programs such as CalFresh and WIC has been shown to improve food security in low-income populations and reduce poverty.^{25, 26} In May 2017, the County of Los Angeles Board of Supervisors adopted a motion to increase CalFresh participation rates by 20%, with a goal of enrolling an additional 70,000 households in the program.²⁷ Strategies to achieve this goal have included modification of the Los Angeles County Department of Public Social Services' (DPSS's) practices to permit new and re-enrolling SNAP applicants to complete and sign required documents over the phone. These efforts have increased new enrollees and reduced loss of benefits among enrollees when required to recertify. These new initiatives contributed to increases in CalFresh participation before and during the COVID-19 pandemic. As of July 2021, enrollment had increased by 780,058 households, including more than 1.3 million individuals, a 47% increase since 2017.²⁸ These and other best practices continue to demonstrate the possibilities for increased CalFresh participation among eligible Los Angeles County residents.

The WIC program saw a 21% increase in participation between March and June 2020, with participation rates remaining high as of the publication of this report.²⁹ Even with this increase, approximately 100,000 eligible participants are still not enrolled in the program.²⁹ Further countywide efforts should be initiated to close this gap, providing a critical nutrition safety net for pregnant people, infants, and children up to age five.



Leverage data sharing across county social service programs to increase enrollment in CalFresh and WIC

Much of DPSS's recent success in enrolling Supplemental Security Income (SSI) recipients, who became eligible for CalFresh after the reversal of a nearly 50-year-old policy, into the program was driven by effective use of data already available in the agency's system to identify eligible participants. As such, further data sharing across programs can be used to maximize CalFresh and WIC enrollment among other vulnerable populations that are likely eligible, such as Medi-Cal patients or participants of low-income benefit programs, such as energy assistance or housing vouchers.

25. Ratcliffe C, McKernan S-M. How much does SNAP reduce food insecurity? The Urban Institute. April 2010. Accessed October 5, 2021. <https://www.ers.usda.gov/webdocs/publications/843336/ccr-60.pdf?v=9198.9>

26. Kreider B, Pepper JV, Roy M. Identifying the effects of WIC on food insecurity among infants and children. *Southern Economic Journal*. 2016;82(4):1106–1122. doi: [10.1002/soej.12078](https://doi.org/10.1002/soej.12078)

27. Reduce Prevalence of Food Insecurity and Poverty by Increasing CalFresh Participation. Los Angeles County Board of Supervisors, Motion by Supervisors Sheila Kuehl and Janice Hahn. May 23, 2017. Accessed September 29, 2021. <http://file.lacounty.gov/SDSInter/bos/supdocs/114009.pdf>

28. CalFresh Data Dashboard. California Department of Social Services. Updated September 14, 2021. Accessed September 21, 2021. <https://www.cdss.ca.gov/inforesources/data-portal/research-and-data/calfresh-data-dashboard>

29. Whaley SE, Anderson CE. The importance of federal waivers and technology in ensuring access to WIC during COVID-19. *Am J Public Health*. 2021;111(6):1009-1012. doi.org/10.2105/AJPH.2021.306211





Expand nutrition incentive programs to help stretch CalFresh and WIC dollars and increase access to quality food resources for low-income families

CalFresh benefits are intended to be supplemental in nature. Benefit levels do not, therefore, generally enable participant families to meet all of their food needs. LACHS data show that low-income households still experience food insecurity while participating in CalFresh. Nutrition incentive programs such as Market Match and the ¡Más Fresco!/More Fresh program provide additional funds to CalFresh beneficiaries, increasing their purchasing power for fruits and vegetables.^{30, 31} The Market Match program provides up to, on average, \$10 of matching funds for fruits and vegetables at participating farmers' markets and farm stands. The ¡Más Fresco!/More Fresh program is a partnership between the University of California San Diego and Northgate González Markets that provides up to \$100 in matching funds per month for each participating household to purchase fruits and vegetables. The WIC Farmers' Market Nutrition Program, typically held for only a few months during the year, provides eligible WIC families with vouchers that can be used to purchase fresh fruits and vegetables at participating farmers' markets.

These programs are vital in supporting local farmers and businesses, promoting sustainable food systems and community food security. However, they are currently limited in their funding, locations, and enrollment capacity. Exploring avenues to expand these nutrition incentive programs will help ensure that CalFresh and/or WIC participants can purchase more healthy foods with their benefits.



Support a social safety net program for individuals who are undocumented and/or mixed status households at the county level

Los Angeles County recognizes that immigrants, including those who are undocumented, are a vital part of our communities and economy. The County has been a leader in the state for improving access to healthcare for individuals who are undocumented, for instance, creating the My Health LA managed care organization in 2014, which provides health insurance to undocumented immigrants.³² Significant strides have been made with Senate Bill 464 (Food4All) being included in the State's 2021-22 budget to begin implementation to expand the California Food Assistance Program (CFAP) and help meet the nutrition needs of those who, due to their immigration status, do not qualify for CalFresh.³³ Public, philanthropic, and community-based organizations across Los Angeles County should work together to support a social safety net program to reduce enrollment gaps in the expanded CFAP and ensure that all individuals who are undocumented are connected to available community resources for food and social services without fear.

It is also critical to address the chilling effect of federal policies, such as the prior administration's public charge rule, that discouraged enrollment in benefit programs even by eligible immigrants. One in four low-income immigrant adults in California have avoided accessing public assistance like food, health care, or housing programs due to fear of jeopardizing their own or a family member's immigration status.³⁴ More than half of those who avoided public programs were food insecure, compared to just over one-third who did not avoid public programs.³⁴

30. Market Match. Ecology Center. Accessed September 29, 2021. <https://marketmatch.org/>

31. Más Fresco!/More Fresh. Accessed October 1, 2021. <https://www.masfresco.org/>

32. MyHealth LA. Los Angeles County Department of Health Services. Accessed September 29, 2021. <https://dhs.lacounty.gov/my-health-la/>

33. S.B. 464, 2021-2022 Reg. Sess. (CA. 2021). https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=2021202205B464

34. Babey SH, Wolstein J, Shimkhada R, Ponce NA. Healthy Policy Brief: One in 4 Low-Income Immigrant Adults in California Avoided Public Programs, Likely Worsening Food Insecurity and Access to Health Care. UCLA Center for Health Policy Research, March 2021. Accessed September 10, 2021. https://healthpolicy.ucla.edu/publications/Documents/PDF/2021_publiccharge-policybrief-mar2021.pdf



Invest in food recovery systems throughout Los Angeles County to increase food resources and assure food equity for all

California's Short-Lived Climate Pollutant Reduction Strategy legislation will require some businesses to donate edible food to food recovery organizations and when it goes into effect in January 2022.³⁵ By redistributing surplus food to charitable feeding organizations and other community-based organizations, these efforts can help save landfill space and lower methane emissions, a climate super pollutant emitted by organic waste in landfills while improving food access.

It is anticipated that this statewide legislation will require investments to build capacity to distribute food safely and efficiently to organizations that serve individuals in need. Needs include capital improvements within the charitable feeding systems such as kitchen upgrades, expanded refrigeration and storage capacity, and the use of innovative technology to improve efficiency in food recovery and redistribution. The Los Angeles County Department of Public Health (DPH) implemented a pilot project to increase the efficiency of food recovery by partnering with a company that created a mobile application that was tailored to connecting businesses with surplus food and quickly transporting it to non-profit organizations.³⁶ Education of food service providers on Good Samaritan laws that protect donors from liability will also be needed to assure business participation in these recovery/redistribution efforts.³⁷

In 2019, recognizing the link between food waste and food insecurity, the County of Los Angeles Board of Supervisors adopted the motion, "Reducing Food Waste and Food Insecurity in Los Angeles County."³⁸ This motion led DPH's Nutrition and Physical Activity Program to coordinate a countywide fresh produce redistribution system to complement existing nutrition education efforts. As a result of this directive and with assistance from the Los Angeles Regional Food Bank, several food rescue and community-based organizations, more than 2.5 million pounds of mostly surplus fresh produce were distributed in less than 12 months to individuals accessing services at community-based settings including schools, healthcare settings and parks.

35. Final Short-Lived Climate Pollutant Reduction Strategy (March 2017). California Air Resources Board. Accessed September 28, 2021. <https://ww2.arb.ca.gov/resources/documents/slcp-strategy-final>

36. Food Redistribution Pilot Project. Los Angeles County Department of Public Health, Nutrition and Physical Activity Program. Accessed September 28, 2021. <http://publichealth.lacounty.gov/nut/productivity-investment-funding.htm>

37. Buzby J. Good Samaritan Act Provides Liability Protection for Food Donations. United States Department of Agriculture. July 29, 2021. Accessed October 1, 2021. <https://www.usda.gov/media/blog/2020/08/13/good-samaritan-act-provides-liability-protection-food-donations>

38. Reducing Both Food Waste and Food Insecurity in Los Angeles County. Los Angeles County Board of Supervisors. Motion by Supervisor Janice Hahn. February 19, 2019. Accessed September 28, 2021. <http://file.lacounty.gov/SDSInter/bos/supdocs/133178.pdf>



Engage the health care sector to expand food insecurity screening and link patients to nutrition assistance, including produce prescription programs and food distribution efforts throughout Los Angeles County

Food insecurity has numerous detrimental effects on the health and well-being of individuals.³⁹ Health care organizations and providers have shown increasing interest in identifying patients in need and connecting them with local and federal nutrition resources.

In 2017, the County of Los Angeles Board of Supervisors passed a motion to implement screening and referrals for food insecurity at all Department of Health Services (DHS) and DPH clinics.⁴⁰ The motion calls for universal screenings and engagement of a network of community partners to identify resources for these patients who screened positive for food insecurity. The newly established Los Angeles County Food Rx Collaborative, spearheaded by DPH and DHS is a promising model to provide this kind of support and coordination of food insecurity screening, nutrition education, and free surplus food distribution to patients.

Linking patients to produce prescription programs (PPRs) such as DPH's Fresco y Saludable/Fresh and Healthy program is another way in which the health care setting could be used to address food insecurity. The PPR provides participants with up to \$40 per month to purchase fresh fruits and vegetables at participating grocery stores and is tailored to patients with chronic conditions such as diabetes or prediabetes.⁴¹ Expanding and scaling such a program throughout the county has the added benefit of potentially growing the local economy by promoting purchase from local farmers and grocery stores, thus, helping these businesses increase sales and expand their customer base.

Community advocacy is under way and is seeking to prioritize policies that can leverage public and private health insurance companies to invest in healthy food interventions (i.e., as a covered medical benefit). The spectrum of services that can be provided to patients could include medically-tailored meals, produce prescriptions, food pharmacies, and healthy food vouchers. These services can be designed to prevent, reverse, and manage specified health conditions among low-income, vulnerable populations.

39. Laraia BA. Food Insecurity and Chronic Diseases. *Advances in Nutrition*. 2013;4(2):203–212. doi: [10.3945/an.112.003277](https://doi.org/10.3945/an.112.003277)

40. Food Insecurity Screening in Clinics. Los Angeles County Board of Supervisors. Motion by Supervisor Hilda L. Solis and Chair Shelia Kuehl. December 5, 2017. Accessed September 27, 2021. <http://file.lacounty.gov/SDSInter/bos/supdocs/118487.pdf>

41. Produce Prescription Project. Los Angeles County Department of Public Health, Nutrition and Physical Activity Program. Accessed September 28, 2021. <http://publichealth.lacounty.gov/nut/produce-prescription-project.htm>





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