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Food Insufficiency Among LGBT Adults During the COVID-19 Pandemic

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RESEARCH THAT MATTERS

FOOD INSUFFICIENCY AMONG LGBT ADULTS DURING THE COVID-19 PANDEMIC

APRIL 2022

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OVERVIEW

Previous research has found that more LGBT than non-LGBT people have experienced inadequate or uncertain access to food. This study provides information about current experiences of food insufficiency—defined as sometimes or often not having enough to eat in the last 7 days—in a nationally representative household sample of LGBT and non-LGBT people. Using data collected by the U.S. Census Bureau on the Household Pulse Survey, this study found that food insufficiency was more common among LGBT than non-LGBT people (12.7% vs. 7.8%) in the period between July 21 to October 11, 2021.

Findings also indicate that food insufficiency was more common among some parts of the LGBT community. More LGBT people of color experienced food insufficiency at some point during the summer or early fall of 2021, compared to non-LGBT people of color and all White respondents, regardless of LGBT status. Food insufficiency was reported by three times as many LGBT people of color as non-LGBT White people (17.3% vs 5.6%). In general, people with no more than a high school degree were at greater risk of not having enough food to eat as compared to those with more education. However, nearly twice as many LGBT people with a high school degree or less experienced food insufficiency than non-LGBT people with the same level of education (22.6% vs 12.6%, respectively). Food insufficiency was more common among transgender adults (19.9%), cisgender bisexual women (12.7%) and men (14.2%), and cisgender lesbian women (12.4%) relative to cisgender straight women (8.1%) and men (7.5%).

Household Pulse Survey data were further analyzed to provide information about current socioeconomic status, food resource utilization (e.g., SNAP, charitable food resources), and self-reported reasons for insufficient food among LGBT adults and their non-LGBT counterparts. More than one fifth (21.7%) of LGBT adults reported an income below the federal poverty level. Over one third (34.7%) of LGBT adults reported difficulty paying for household expenses, including but not limited to “food, rent or mortgage, car payments, medical expenses, student loans, and so on” in the last week.

Only 37.0% of income-eligible LGBT people and 38.8% of non-LGBT people were enrolled in SNAP. More LGBT people reported other barriers to accessing food than did non-LGBT people, including not being able to get out to buy food (20.2% and 11.4%, respectively) and safety concerns (15.3% and 11.3%, respectively). Details about study methods, as well as tables, are included in the Appendix.

INTRODUCTION

Previous research conducted with nationally representative samples collected between 2011-2017 found that more LGBT than non-LGBT people experienced inadequate or uncertain access to food.¹ Given the disproportionate economic impact burden of the COVID-19 pandemic on LGBT people,² new research on food security is warranted. In 2021, nationally representative household data about food insufficiency—defined as sometimes or often not having enough to eat in the last 7 days³—as well as sex assigned at birth, gender identity, and sexual orientation identity (SOGI) were collected by the U.S. Census Bureau on the Household Pulse Survey. This study utilizes these household data to provide current information about experiences of food insufficiency, as well as SNAP benefit and charitable food resource utilization. Differences by racial minority and majority status, educational attainment, and among LGBT population groups are also explored.

¹ Brown, T.N.T., Romero, A.P., & Gates, G.J. (2016). *Food Insecurity and SNAP Participation in the LGBT community*. The Williams Institute, UCLA, Los Angeles, CA. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/Food-Insecurity-SNAP-July-2016.pdf>; Wilson, B.D.M. & Conron, K.J. (2020). *National Rates of Food Insecurity among LGBT People: LGBT People and Covid-19*. The Williams Institute, UCLA, Los Angeles, CA; U.S. Census Bureau. (2021, August). *LGBT Community Harder Hit by Economic Impact of Pandemic*. <https://www.census.gov/library/stories/2021/08/lgbt-community-harder-hit-by-economic-impact-of-pandemic.html>

² Sears, R.B., Conron, K.J., & Flores, A.R. *The Impact of the Fall 2020 COVID-19 Surge on LGBT Adults in the U.S.*. 2021, The Williams Institute, UCLA Los Angeles, CA.

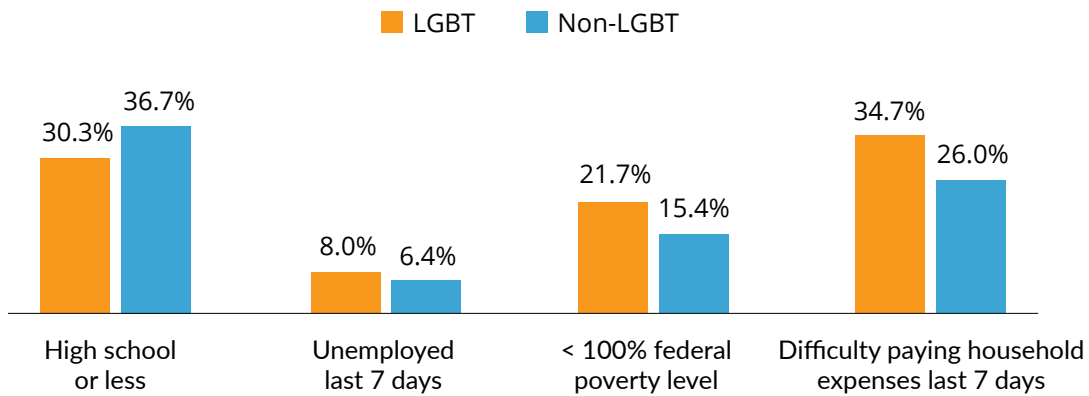
³ USDA Economic Research Service. (2021). *Food Security in the U.S.: Measurement: What is Food Insufficiency?* <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement/#insufficiency> Accessed November 2021.

RESULTS

CURRENT SOCIOECONOMIC STATUS

Despite slightly higher levels of educational attainment among LGBT people relative to non-LGBT people, unemployment among those in the workforce, poverty, and difficulty paying for household experiences were more common among LGBT than non-LGBT people. More than one fifth (21.7%) of LGBT adults reported an income below the federal poverty level (FPL). Over one third (34.7%) of LGBT adults reported difficulty paying for household expenses, including but not limited to “food, rent or mortgage, car payments, medical expenses, student loans, and so on” in the last week.

Figure 1. Socioeconomic characteristics of LGBT and non-LGBT participants in the Household Pulse Survey, July 21 to October 11, 2021 (N=328,578*)

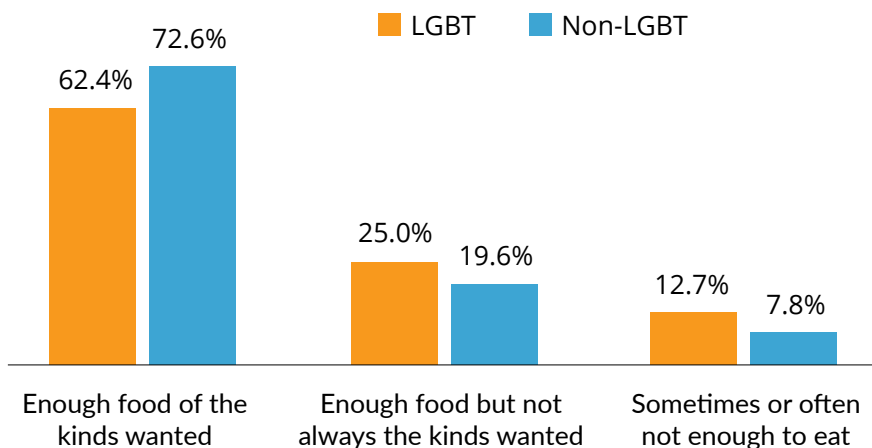


*The sample size (n=288,433) for poverty is smaller than the total analytic sample due to missing data on household income.

FOOD INSUFFICIENCY

Food insufficiency was more common among LGBT people than non-LGBT people; 12.7% of LGBT people reported sometimes or often not having enough to eat compared to 7.8% of non-LGBT peers.

Figure 2. Food insufficiency in the last 7 days among LGBT and non-LGBT participants in the Household Pulse Survey, July 21 to October 11, 2021 (N=328,578)

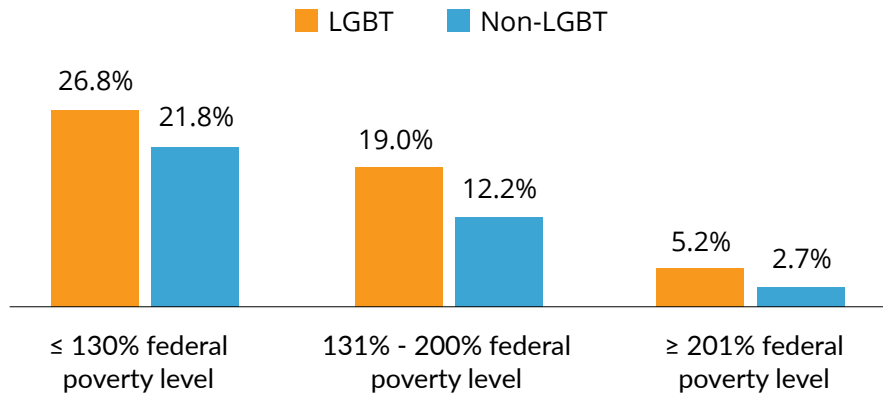


More than a quarter (26.8%) of LGBT people who reported earnings \leq 130% of the federal poverty level⁴—the amount set by the federal government to qualify for the Supplemental Nutrition Assistance Program (SNAP) public assistance program—experienced food insufficiency in the past week. Food insufficiency was reported by nearly a fifth (19.0%) of those living at 131-200% of the FPL and by about one in twenty (5.2%) LGBT adults living above 200% of the FPL.⁵

Over one-fifth (21.8%) of non-LGBT adults who earned \leq 130% of the FPL experienced food insufficiency in the past week. Food insufficiency was reported by more than one in ten (12.2%) non-LGBT people living at 131-200% of the FPL and by few (2.7%) living above 200% of FPL.

At all economic levels, among those who provided information about household income, food insufficiency was more common among LGBT than non-LGBT people.

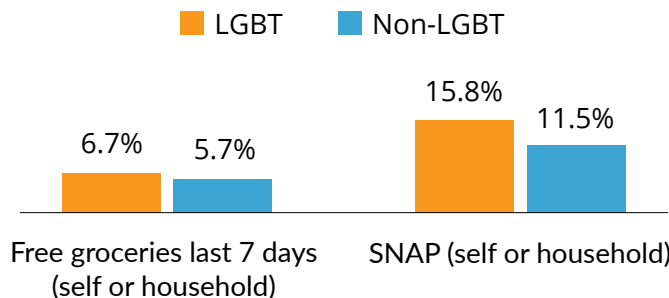
Figure 3. Food insufficiency among LGBT and non-LGBT participants in the Household Pulse Survey, July 21 to October 11, 2021, by federal poverty level (n=288,364)



FOOD RESOURCE UTILIZATION

Slightly more LGBT adults reported recent use of food resources, including charitable resources such as free groceries from food banks (6.7%) or the Supplemental Nutrition Assistance Program (SNAP) (15.8%) compared to their non-LGBT counterparts (5.7% and 11.5%, respectively).

Figure 4. Use of food resources by LGBT and non-LGBT participants in the Household Pulse Survey, July 21 to October 11, 2021 (N=328,578)

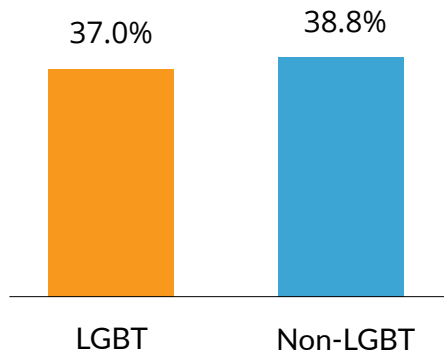


⁴ \$22,656 for a two-person household in 2021. See <https://www.fns.usda.gov/snap/recipient/eligibility>

⁵ \$35,840 for a two-person household in 2021. See <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines#thresholds>

Similar proportions of LGBT (37.0%) and non-LGBT (38.8%) adults living at \leq 130% federal poverty level—the amount set by the federal government to qualify for the Supplemental Nutrition Assistance Program (SNAP) public assistance program—reported that they or someone in their household are receiving SNAP.

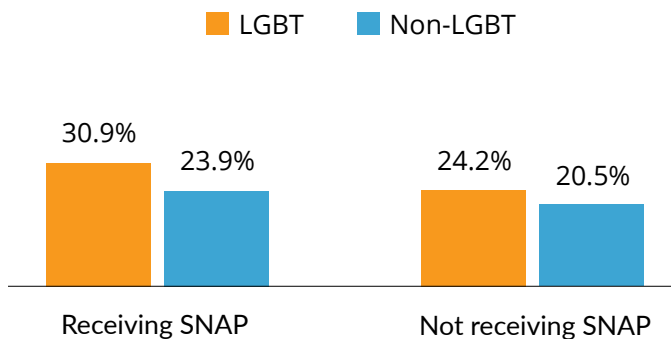
Figure 5. Household receipt of SNAP benefits among LGBT and non-LGBT participants* in the Household Pulse Survey, July 21 to October 11, 2021, with income at or below 130% of the federal poverty level (n=35,739)



*Differences in proportions are not statistically significantly different.

Among LGBT people who were income-eligible for SNAP, food insufficiency was more prevalent among those receiving SNAP as compared to those without SNAP benefits (30.9% vs. 24.2%, respectively).⁶ Among non-LGBT people who were income-eligible for SNAP, food insufficiency also was slightly more common among SNAP recipients than those not receiving SNAP benefits (23.9% vs. 20.5%, respectively).

Figure 6. Food insufficiency among LGBT and non-LGBT participants living at or below 130% of the federal poverty level by SNAP status in the Household Pulse Survey, July 21 to October 11, 2021 (n=35,467)



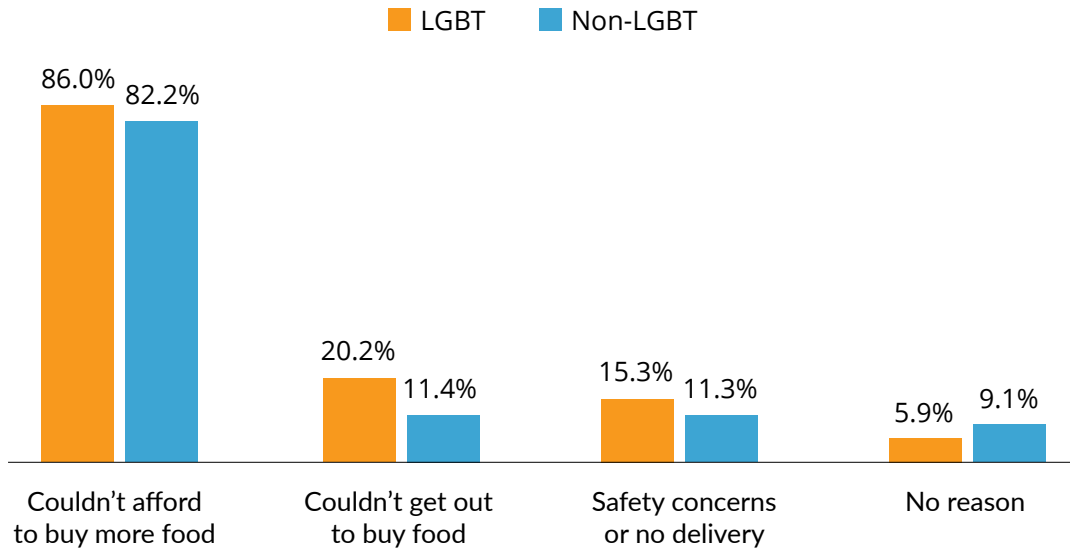
PERCEIVED CAUSES OF FOOD INSUFFICIENCY

Most LGBT (86.0%) and non-LGBT (82.2%) adults who were experiencing food insufficiency reported that their inability to afford more food was the cause of insufficient food in their household. More LGBT people than non-LGBT people reported other barriers to accessing food, including that they could not get out to buy food (20.2% and 11.4%, respectively), for reasons including, “didn’t have

⁶ The proportion of LGBT people who were food insufficiency and who received SNAP was larger than the proportion without SNAP benefits, p=0.03.

transportation, have mobility or health limitations that prevent you from getting out” and safety concerns (15.3% and 11.3%, respectively).

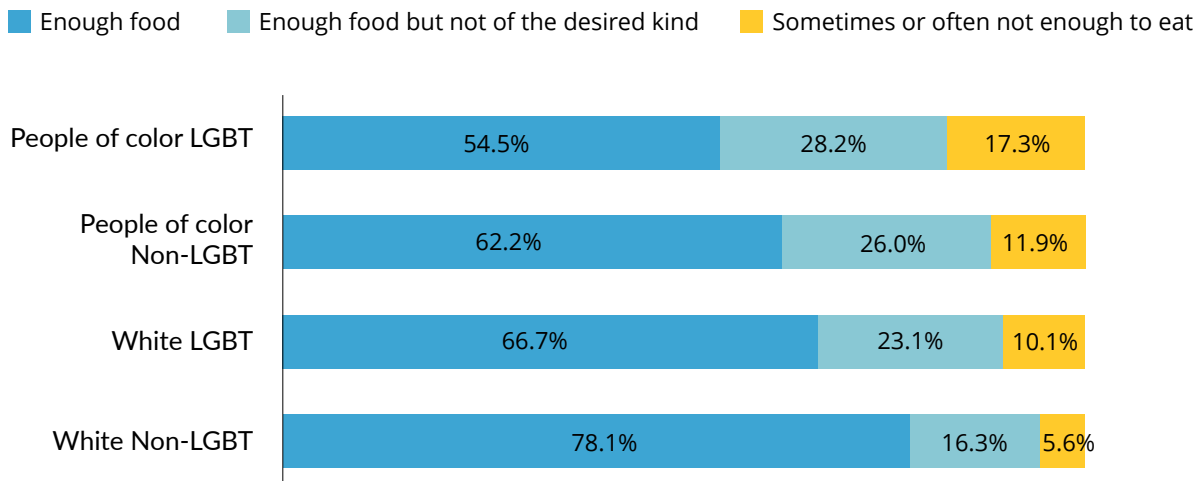
Figure 7. Perceived reasons for insufficient food among food insufficient LGBT and non-LGBT participants in the Household Pulse Survey, July 21 to October 11, 2021 (N=16,196)



DIFFERENTIAL VULNERABILITY TO FOOD INSUFFICIENCY

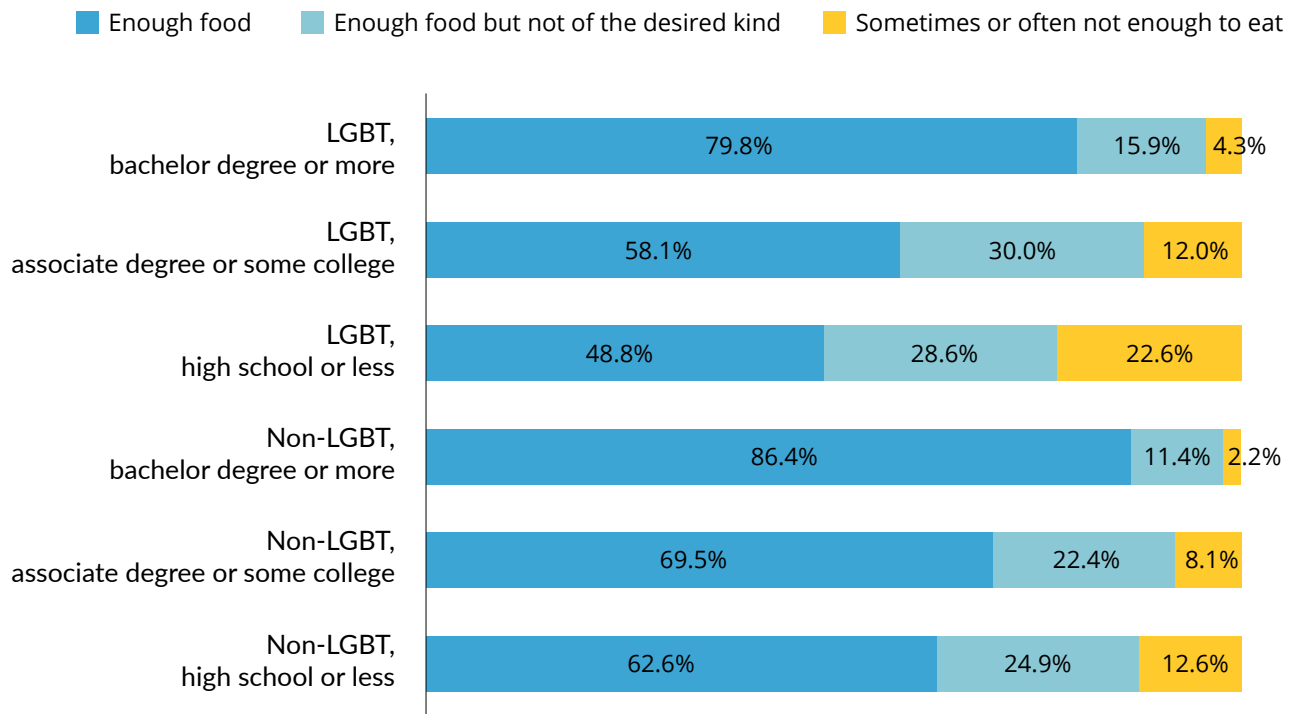
Food insufficiency varied by race and LGBT identity; 17.3% of LGBT people of color sometimes or often did not have enough to eat in the prior week as compared with 11.9% of non-LGBT people of color, 10.1% of LGBT White people and 5.6% of non-LGBT White people. More LGBT people of color experienced food insufficiency at some point during the summer or early fall of 2021, compared to non-LGBT people of color, and White respondents regardless of LGBT status. More people of color who are not LGBT reported food insufficiency compared to White LGBT people. Food insufficiency was reported by three times as many LGBT people of color as non-LGBT White people (17.3% vs 5.6%).

Figure 8. Food insufficiency among LGBT and non-LGBT participants in the Household Pulse Survey, July 21 to October 11, 2021, by race (N=328,578)



In general, people with no more than a high school degree were at greater risk of not having enough food to eat as compared to those with more education. For example, over a fifth of LGBT people with a high school degree or less (22.6%), 12.0% of those with an associate degree or some college, and 4.3% of LGBT adults with a bachelor’s degree or more experienced food insufficiency in the week prior to completing the Household Pulse Survey. Nearly twice as many LGBT adults with a high school degree or less experienced food insufficiency than non-LGBT adults with the same level of education (22.6% vs 12.6%, respectively).

Figure 9. Food insufficiency among LGBT and non-LGBT participants in the Household Pulse Survey, July 21 to October 11, 2021, by education level (N=328,578)



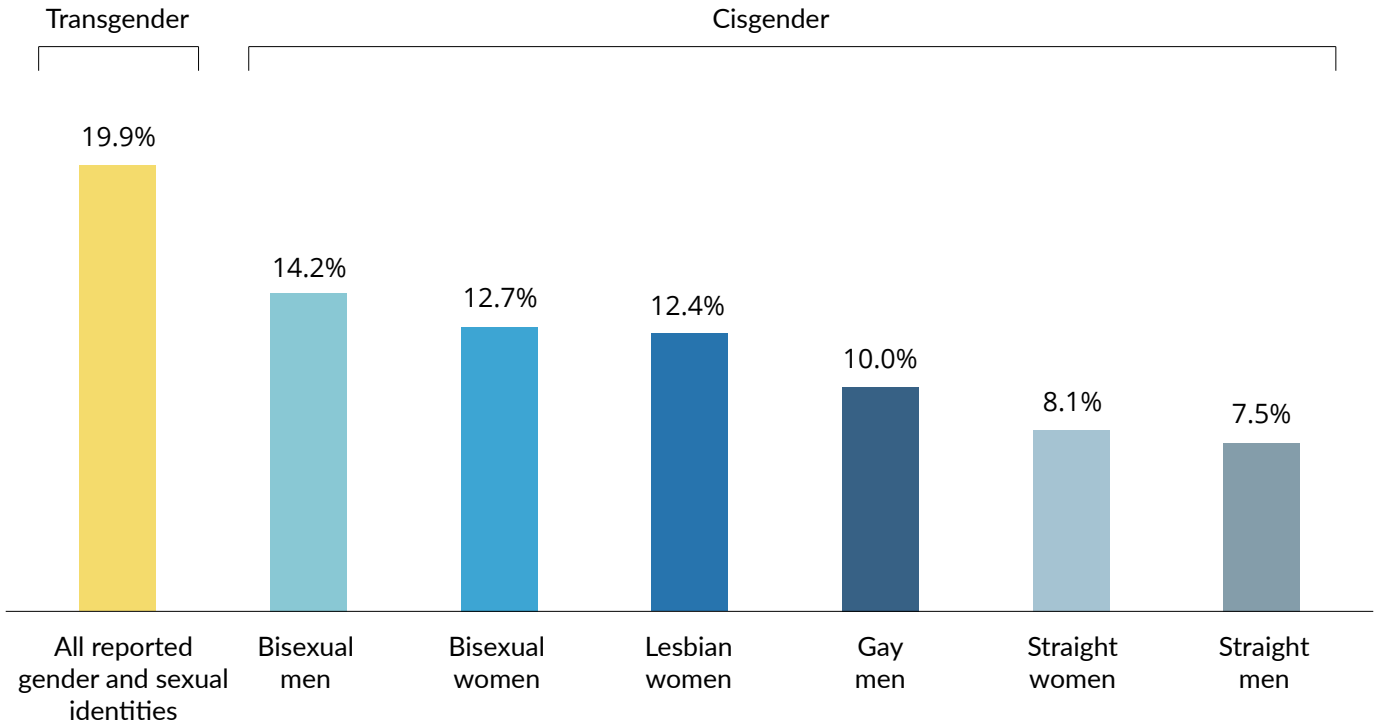
Food insufficiency also varied somewhat by gender and sexual orientation. More cisgender⁷ bisexual men reported food insufficiency (14.2%) than straight men (7.5%). More cisgender lesbian and bisexual women reported food insufficiency (12.4% and 12.7%, respectively) than their cisgender straight women peers (8.1%). Food insufficiency was common (19.9%) among transgender⁸ people—more so than among most other groups.⁹

⁷ Survey respondents who selected gender identity options (male or female) that were the same as their sex assigned at birth (male or female) were classified as cisgender. Those who selected gender identity options that differed from their sex assigned at birth were classified as transgender. Please refer to the methods appendix for further detail.

⁸ Transgender people, as a group, are diverse on gender identity and sexual orientation. In this sample, 12.3% of people classified as transgender selected male as their gender identity, 12.9% selected female, and 74.8% selected transgender as their response option from among these three gender identity options. In addition, 37.3% of transgender people identified their sexual orientation as bisexual, 23.7% as lesbian or gay, 7.0% as straight, and 28.0% as “something else.” The remainder (4.0%) selected “I don’t know.”

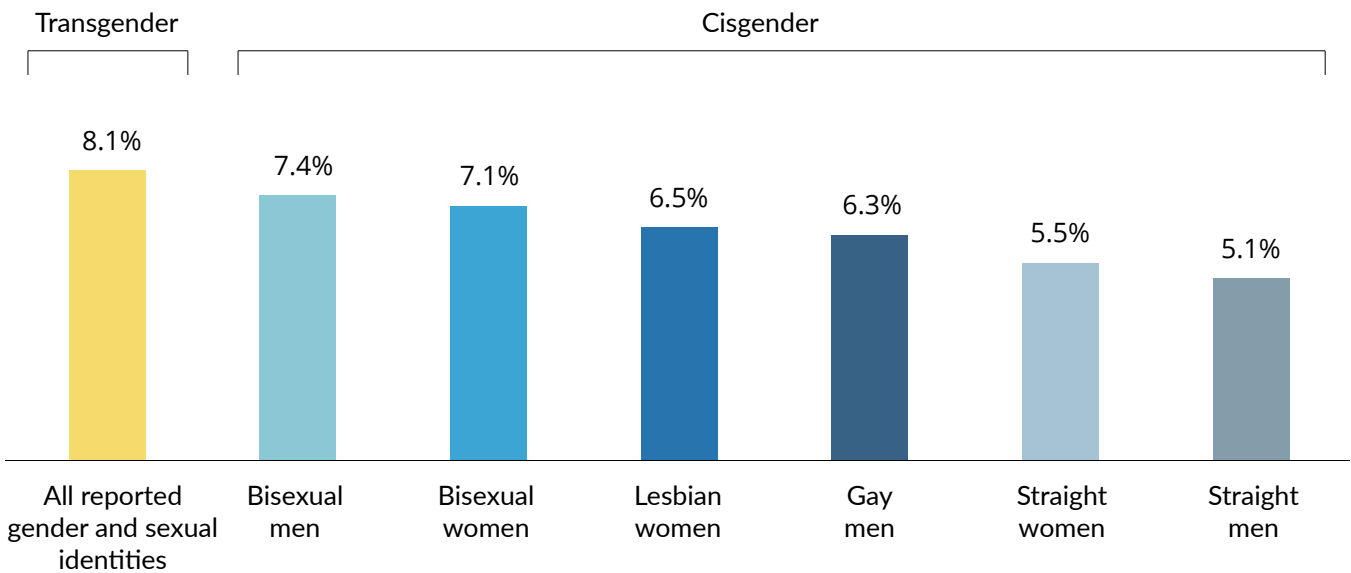
⁹ The comparison between the proportions of transgender people and cisgender bisexual men who reported food insufficiency was marginally statistically significant at $p = 0.06$, whereas the proportion food insufficient among transgender people was larger than the proportion food insufficient among other gender and sexual orientation groups.

Figure 10. Food insufficiency among participants in the Household Pulse Survey, July 21 to October 11, 2021, by gender and sexual orientation (N=331,097)



Use of charitable food resources was similar across gender and sexual orientation groups.

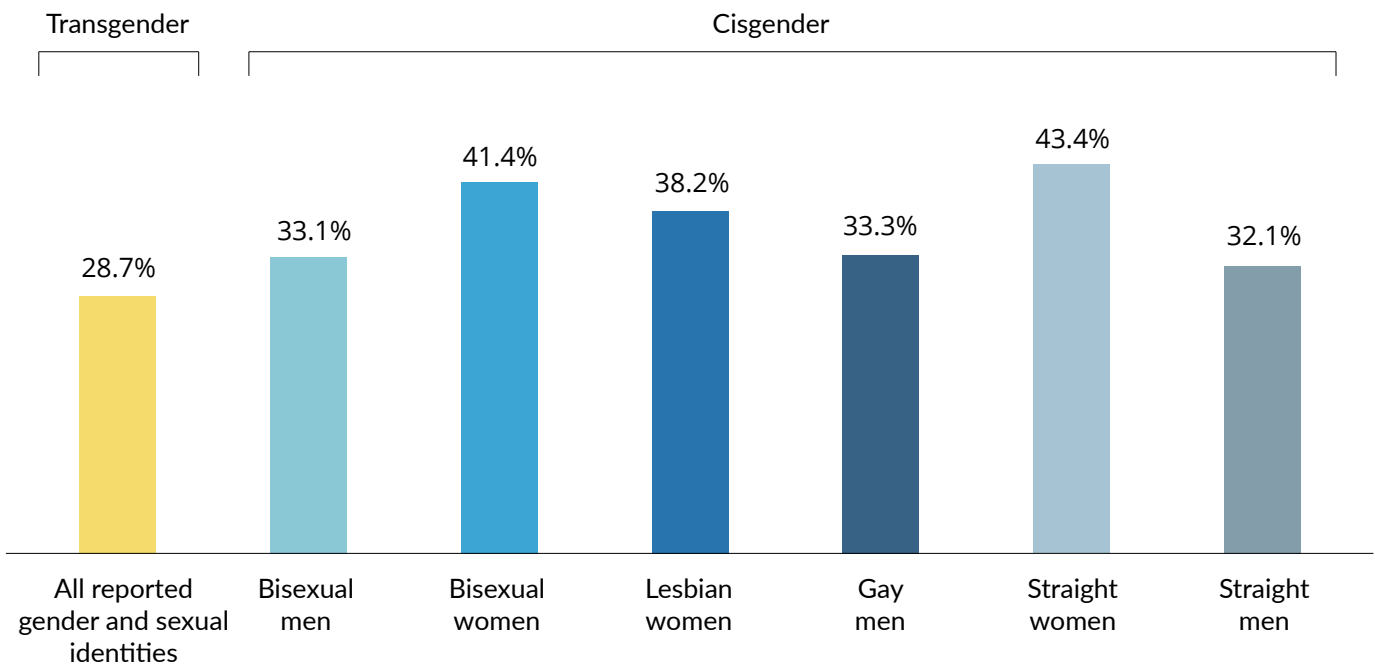
Figure 11. Use of charitable food resources in the past week among participants in the Household Pulse Survey, July 21 to October 11, 2021, by gender and sexual orientation (N=331,097)



Among those who met the SNAP income eligibility criterion, usage of SNAP benefits varied by gender. Cisgender women, collectively, reported higher rates of SNAP usage, with 38.2%, 41.4%, and 43.4% of lesbian, bisexual, and straight women, respectively, than other groups. About one-third of income-

eligible cisgender men reported that they or someone in their household receives SNAP, with 33.3%, 33.1%, and 32.1% of gay, bisexual, and men, respectively, reporting SNAP receipt. Income-eligible transgender participants reported SNAP coverage (28.7%) at similar levels as cisgender men. In a multivariable logistic regression model, income-eligible cisgender women, as a group, were slightly more likely to have SNAP compared to cisgender men and transgender people—a pattern that is likely due, at least in part, to the presence of children in the household.¹⁰

Figure 12. Receipt of SNAP benefits among income-eligible participants in the Household Pulse Survey, July 21 to October 11, 2021, by gender and sexual orientation (N=35,899)



Majorities of all groups (over 80%) reported that affordability was the primary reason that they did not have enough to eat in the past week (see Table 9). More than a quarter of transgender participants (27.7%) and more than a fifth of cisgender bisexual men and women (21.1%, and 23.0%, respectively) reported that being unable to get out to buy food was a reason that they did not have enough to eat in the past week.¹¹ Just under a fifth of cisgender lesbian women (18.1%) reported the same barrier to food.¹² Slightly more than one in ten cisgender gay men, straight men, and straight women reported being unable to get out to buy food (11.7%, 11.3%, and 11.5%, respectively).

Nearly one in five transgender people (19.7%) and cisgender bisexual women (19.5%) identified safety concerns related to getting to the store as a reason that they did not have enough to eat in the past week.¹³ Safety concerns were less frequently reported by cisgender straight or gay men (12.5 and

¹⁰ Brown, Romero & Gates (2016). UCLA, Los Angeles, CA: The Williams Institute. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/Food-Insecurity-SNAP-July-2016.pdf>;

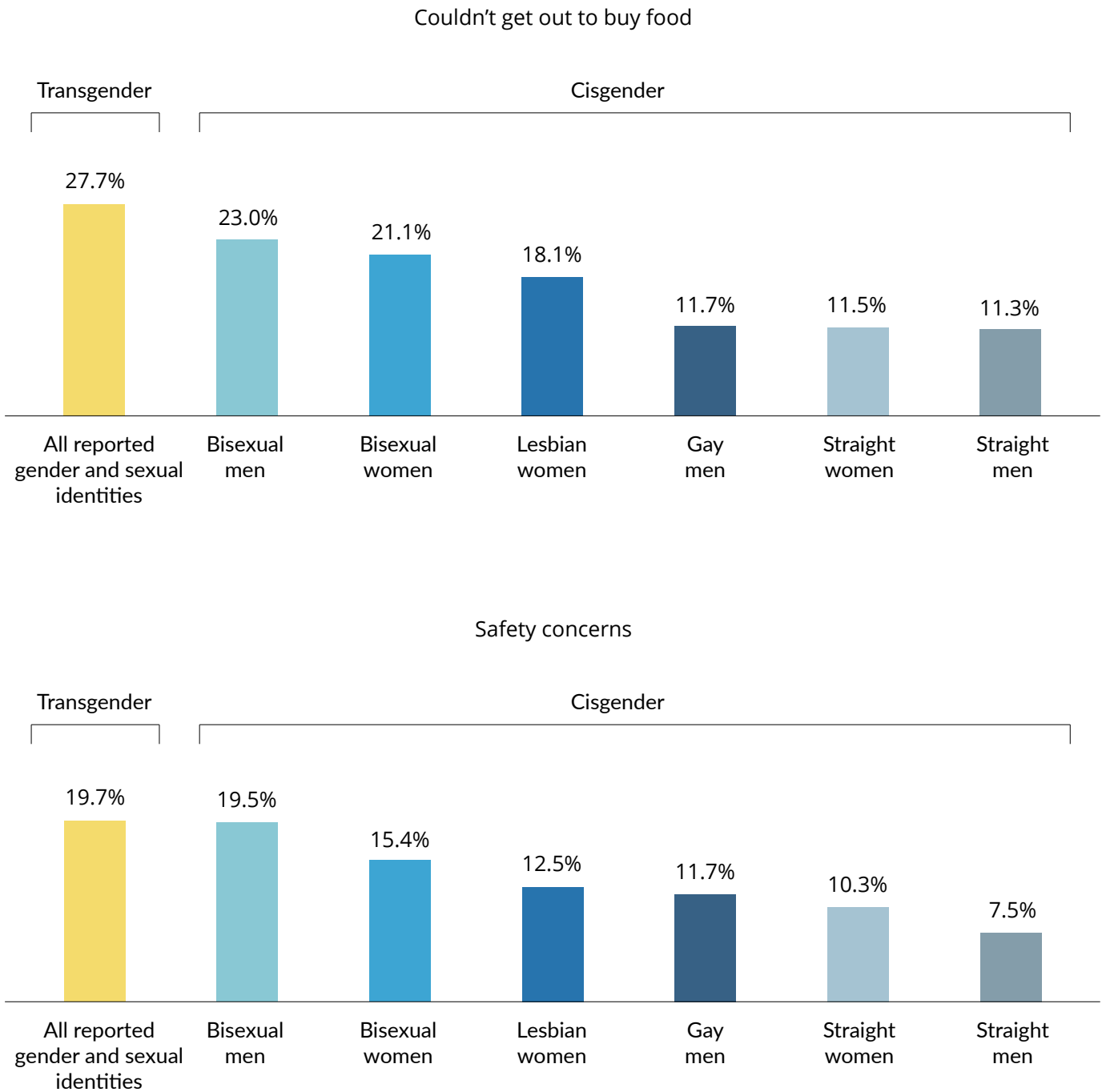
¹¹ Larger proportions of transgender people and cisgender bisexual women than cisgender straight people reported being unable to get out to buy food at $p < 0.05$.

¹² Differences between the proportions of cisgender lesbian women and straight women that were unable to get out to buy food were marginally statistically significant at $p = 0.06$.

¹³ Larger proportions of cisgender bisexual women than cisgender straight women reported safety concerns at $p < 0.05$.

7.5%, respectively) or by cisgender lesbian or straight women (10.3% and 11.7%, respectively) as reasons that they did not have enough to eat. Some (15.4%) cisgender bisexual men also reported safety concerns as barriers to food access.

Figure 13. Perceived reasons for insufficient food among food insufficient participants in the Household Pulse Survey, July 21 to October 11, 2021 by gender and sexual orientation (N=35,899)



Differences between transgender people and straight women were marginally statistically significant at p=0.07.

DISCUSSION

Approximately one in eight (13%) LGBT adults and 8% of non-LGBT adults report that they sometimes or often did not have enough to eat in the past week on Household Pulse survey collected between July 21 and October 11, 2021. This disproportionality is consistent with higher rates of poverty and unemployment among LGBT versus non-LGBT people observed in this study and as noted in prior research.¹⁴ Food insufficiency was also far more common among LGBT people of color and those with a high school education or less as compared to those who are White, cisgender, and have more formal education. Looking at patterns by gender and sexual orientation, food insufficiency was more common among transgender people relative to most other groups and among cisgender bisexual people and cisgender lesbian women compared to their same-gender straight cisgender peers. Patterns of food insufficiency generally parallel population patterns of poverty and marginalization¹⁵ Findings related to the intersections of LGBT status and race are also consistent with prior research about the disproportionate economic impact of the COVID-19 pandemic on LGBT people of color.¹⁶

More than a third of LGBT and non-LGBT people who met the income eligibility for enrollment in the Supplemental Nutrition Assistance Program (SNAP) reported that they or someone in their household are receiving SNAP. Income-eligible cisgender women, as a group, were slightly more likely to have SNAP compared to cisgender men and transgender people—a pattern that is likely due, at least in part, to the presence of children in the household.¹⁷ Regardless, majorities in every gender and sexual orientation group were not enrolled in SNAP. These findings indicate a need to expand efforts to enroll income-eligible people and may include tailored outreach to various communities (e.g., NYC's Take pride in using your SNAP benefits campaign).¹⁸ Additionally, given high levels of food insufficiency among those with SNAP, examination of benefit levels (currently linked to income and set at a maximum of \$459 per month for a household of two earning up to \$1,888 per month in pre-tax income)¹⁹ is needed.

¹⁴ James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L. A., & Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. National Center for Transgender Equality, Washington, DC.; Badgett, M.V.L., S.K. Choi, & B.D.M. Wilson. (2019). *LGBT Poverty in the United States: A Study of Differences between Sexual Orientation and Gender Identity Groups*. The Williams Institute, UCLA, Los Angeles, CA.

¹⁵ James, S. E., et al. (2016).; Badgett, M.V.L., et al. (2019); Pamuk, E., Makuc, D., Heck, K., Reuben, C., & Lochner, K. (1998). *Socioeconomic Status and Health Chartbook. Health, United States, 1998*. Hyattsville, Maryland: National Center for Health Statistics.

¹⁶ Sears, R.B., Conron, K.J., & Flores, A.R. *The Impact of the Fall 2020 COVID-19 Surge on LGBT Adults in the U.S.* 2021, The Williams Institute, UCLA Los Angeles, CA.

¹⁷ Brown, Romero & Gates (2016). UCLA, Los Angeles, CA: The Williams Institute. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/Food-Insecurity-SNAP-July-2016.pdf>;

¹⁸ NYC Human Resources Administration, Department of Social Services. *Fighting LGBTQ Food Insecurity*. https://www1.nyc.gov/site/hra/help/fighting_food_insecurity_in_the_lgbtq_community.page. Accessed March 15, 2022.

¹⁹ USDA Food and Nutrition Service. *SNAP Eligibility*. <https://www.fns.usda.gov/snap/recipient/eligibility>. Accessed November 2021.

Use of charitable food resources was fairly similar across gender and sexual orientation groups, despite higher need among LGBT people. Food banks, many of which have been religiously affiliated,²⁰ may not be viewed as welcoming places by LGBTQ people. Findings from qualitative studies in southern California²¹ and the southeastern U.S.²² indicate that some LGBTQ and transgender people anticipate rejection or judgement, and that others have experienced staring and looks of “disgust” at religiously affiliated food pantries.

Most LGBT and non-LGBT adults who were experiencing food insufficiency reported that their inability to afford more food was the cause of insufficient food in their household. More LGBT people than non-LGBT people reported other barriers to accessing food, including that they could not get out to buy food, for reasons including, “didn’t have transportation, have mobility or health limitations that prevent [them] from getting out.” Safety concerns related to getting to the store were also more common among LGBT than non-LGBT people. Concerns related to getting out to buy food and about safety getting to the store were most common among transgender people and cisgender bisexual women relative to cisgender straight peers.

Specific transportation and safety concerns were not assessed on the Household Pulse Survey; however, other research has found that functional limitations are more common among LGBT versus non-LGBT people.²³ In addition, studies have found that transportation problems impact help-seeking more often for transgender than cisgender people²⁴ and that verbal harassment on public transportation by transit employees is not an uncommon experience for transgender people.²⁵ It may also be that concerns related to COVID-19 impacted the perceived safety of going to the store.

²⁰ Briefel, R., Jacobson, J., Clusen, N., Zavitsky, T., Stake, M., Dawson, B., & Cohen, R. (2003). The Emergency Food Assistance System - Findings from the Client Survey. USDA Economic Research Service; Food Assistance & Nutrition Research Program in Russomanno, J. & Jabson Tree, J.M.(2020)

²¹ Wilson, B.D.M., Badgett, M. V. L., & Gomez, A. G. H. (2020). *Experiences with Food Insecurity and Food Programs Among LGBTQ People*. The Williams Institute, Los Angeles, CA. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/LGBTQ-Food-Bank-Jun-2020.pdf>

²² Russomanno, J. & Jabson Tree, J.M. (2020). Food insecurity and food pantry use among transgender and gender non-conforming people in the Southeast United States. *BMC Public Health* 20, 590.

²³ Cochran, S. D., Bjorkenstam, C., & Mays, V. M. (2017). Sexual orientation differences in functional limitations, disability, and mental health services use: Results from the 2013-2014 National Health Interview Survey. *J Consult Clin Psychol*, 85(12), 1111-1121; Fredriksen-Goldsen, K. I., Kim, H. J., & Barkan, S. E. (2012). Disability among lesbian, gay, and bisexual adults: disparities in prevalence and risk. *Am J Public Health*, 102(1), e16-21; James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L. A., & Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. National Center for Transgender Equality, Washington, DC.

²⁴ Babey, S. H., Wolstein, J., Herman, J. L., & Wilson, B. D. M. (February 2022). *Gaps in Health Care Access and Health Insurance Among LGBT Populations in California*. Retrieved from UCLA Center for Health Policy Research: <https://healthpolicy.ucla.edu/publications/Documents/PDF/2022/Health-Care-Access-Insurance-LGBT-policybrief-feb2022.pdf>

²⁵ James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L. A., & Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. National Center for Transgender Equality, Washington, DC.

Covering delivery charges through SNAP and considering innovative models that include the delivery of medically tailored meals,²⁶ such as those offered through state Medicaid programs,²⁷ or grocery delivery from food banks,²⁸ may provide additional strategies to reduce food insufficiency for LGBT people and other vulnerable groups that have trouble accessing food.

LGBT vs. non-LGBT inequities in food insufficiency observed in this study repeat those previously observed,²⁹ and largely reflect population patterns of poverty.³⁰ On-going monitoring of food insufficiency among LGBT people through surveys such as Household Pulse, the Current Population Survey Food Security Supplement, and the Behavioral Risk Factor Surveillance Survey is recommended.

²⁶ Farm Bill Law Enterprise. (2018). *Food Access, Nutrition, and Public Health*. http://www.farbillaw.org/wp-content/uploads/2018/03/FBLE_Food-Access-Nutrition-and-Public-Health_Final.pdf

²⁷ NYC Food Policy Center. (2021, August). *Medically Tailored Meals Become a Covered Service Option in California*. <https://www.nycfoodpolicy.org/food-policy-snapshot-medically-tailored-meals-california-medicaid/>

²⁸ Feeding America. (2021, July). *Feeding America Launches OrderAhead – A Convenient, Online Grocery Ordering System – To Help Eliminate Barriers to Accessing Food*. <https://www.feedingamerica.org/about-us/press-room/feeding-america-launches-orderahead>

²⁹ Brown, Romero & Gates (2016). UCLA, Los Angeles, CA: The Williams Institute. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/Food-Insecurity-SNAP-July-2016.pdf>; Goldberg, S.K & Conron, K.J. (January 2019). LGBT Demographic Data Interactive, US landing page. UCLA, Los Angeles, CA: The Williams Institute. <https://williamsinstitute.law.ucla.edu/visualization/lgbt-stats/#dens>

³⁰ James, S. E., et al. (2016).; Badgett, M.V.L., et al. (2019); Pamuk, E., Makuc, D., Heck, K., Reuben, C., & Lochner, K. (1998). *Socioeconomic Status and Health Chartbook. Health, United States, 1998*. Hyattsville, Maryland: National Center for Health Statistics.

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Conron, K.J., Guardado, R., O'Neill, K., & Wilson, B.D.M. (2022). *Food Insecurity Among LGBT Adults During the COVID-19 Pandemic*. The Williams Institute, UCLA, Los Angeles, CA.

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The Williams Institute is dedicated to conducting rigorous, independent research on sexual orientation and gender identity law and public policy. A think tank at UCLA Law, the Williams Institute produces high-quality research with real-world relevance and disseminates it to judges, legislators, policymakers, media, and the public. These studies can be accessed at the Williams Institute website.

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APPENDIX

METHODS

This study analyzed repeated cross-sectional data³¹ collected between July 21 to October 11, 2021 by the U.S. Census Bureau on the Household Pulse Phase 3.2 Survey³² (weeks 34-39). The Household Pulse Survey was developed to assess the impact of COVID-19 on employment, food and housing security, and the physical and mental wellbeing of the U.S. population. Households were enumerated via the Census Bureau's Master Address File (MAF); email addresses and cell phone numbers were appended to create a contact sampling frame for the survey which represented 81% of households in the MAF.³³ Group quarters such as homeless shelters, nursing homes, and college dormitories were not sampled. On-line surveys were conducted in English and Spanish with 382,908 U.S. adults ages 18 and up. The response rate for weeks 34-39 ranged from 5.4% to 6.5%.³⁴

Questions about sex assigned at birth (What sex were you assigned at birth, on your original birth certificate?) and current gender identity (Do you currently describe yourself as male, female or transgender?) were added to the Household Pulse Survey starting in week 34 and were used to classify respondents as transgender and cisgender. Respondents who selected transgender as their gender identity were classified as transgender. In the remaining sample that selected male or female gender identity responses and whose sex was not imputed by the Census Bureau (e.g., AGENID_BIRTH=2), those who selected a gender identity (male or female) that differed from their sex assigned at birth (male or female) were classified as transgender. Respondents who selected gender identity options (male or female) that were the same as their sex assigned at birth (male or female) were classified as cisgender. Those who selected "none of these" as their response to the gender identity question were excluded from classification.

Imputed sex was not used to classify transgender and cisgender respondents given concerns about the validity of the imputed sex data. Descriptive analyses conducted by Dr. Bill Jesdale indicate that the demographic characteristics of those classified as transgender based on imputed sex look more similar to those of cisgender respondents than to those of transgender respondents who answered the sex assigned at birth question.³⁵ In addition, 171 transgender respondents who reported living in households of 10+ members were excluded from the analytic sample for this study based on descriptive analyses conducted by the Williams Institute. Our analyses suggest that these

³¹ United States Census Bureau. (2021). *Household Pulse Survey Public Use File (PUF)*. <https://www.census.gov/programs-surveys/household-pulse-survey/datasets.html>

³² United States Census Bureau. (2021) *Household Pulse Survey Technical Documentation*. <https://www.census.gov/programs-surveys/household-pulse-survey/technical-documentation.html#phase3.2>

³³ United States Census Bureau. (2021). *Source of the Data and Accuracy of the Estimates for the Household Pulse Survey – Phase 3.2*. https://www2.census.gov/programs-surveys/demo/technical-documentation/hhp/Phase3-2_Source_and_Accuracy_Week39.pdf

³⁴ United States Census Bureau. (2021). *Source of the Data and Accuracy of the Estimates for the Household Pulse Survey – Phase 3.2*. https://www2.census.gov/programs-surveys/demo/technical-documentation/hhp/Phase3-2_Source_and_Accuracy_Week39.pdf

³⁵ Jesdale, B.M. (2021). *Counting Gender Minority Populations in the Household Pulse Survey (The AGENID=2 Memo)*. National LGBT Cancer Network. <https://cancer-network.org/wp-content/uploads/2021/10/Counting-GM-People-in-Pulse-Data.pdf>

10+ transgender households are grossly overrepresented in the sample (11.3% unweighted, 24.0% weighted) relative to cisgender households, both among cisgender LGB (1.3% weighted) and in the larger analytic sample (1.2% weighted), and in the US population as a whole (1.2% live in households of 7 or more.)³⁶ These respondents, identified as both transgender and living in households of 10 or more people, were also disproportionately older (48.7% 65+ weighted), living in households with 200K+ household income (25.5% weighted), and Latino/a (66.1%) as compared to cisgender respondents living in 10+ households in Pulse (31.2%, 8.6%, and 24.6%, respectively, weighted) and transgender respondents in other population-based datasets (e.g., BRFSS and TransPop³⁷) Such patterns suggest the presence of mischievous³⁸ or inattentive³⁹ responders. Further methodological investigation is needed to better understand Pulse response patterns—particularly as they relate to respondents classified as transgender.

A question about sexual orientation identity (Which of the following best represents how you think of yourself?) was added to the Household Pulse Survey starting in week 34 and were used to classify respondents as lesbian, gay, or bisexual (LGB) and straight based on their selection of these response options (gay or lesbian; straight, that is not gay or lesbian; bisexual). Respondents who selected “something else” as their identity were excluded from classification based on prior research indicating that this group is heterogeneous, and, without a follow-up write-in, cannot be classified as sexual minority or as straight.⁴⁰ Respondents who were transgender and/or LGB were classified as LGBT while respondents who were cisgender and straight were classified as non-LGBT.

Food insufficiency was assessed with a single question, “In the last 7 days, which of these statements best describes the food eaten in your household?” Using criteria articulated by the USDA,⁴¹ participants who indicated that they sometimes or often did not have enough to eat were considered food insufficient. Although not a focus of this report, the USDA also considers those who had enough, but not always the kinds of food that they wanted to eat marginally food insufficient and those who reported that they had had enough of the kinds of food that they wanted to eat food sufficient.

Participant-reported annual household income range and size were used to create an ordinal

³⁶ U.S. Census Bureau. (2021, November). Historical Households Tables; Table HH-4. Households by size: 1960 to Present. <https://www.census.gov/data/tables/time-series/demo/families/households.html>

³⁷ Meyer, I.H., Wilson, B.D.M., & O’Neill, K. (2021). *LGBTQ People in the US: Select Findings from the Generations and TransPop Studies*. Los Angeles: The Williams Institute.

³⁸ Cimpian, J. R. & Timmer, J. D. (2019). Large-scale estimates of LGBQ-heterosexual disparities in the presence of potentially mischievous responders: A preregistered replication and comparison of methods. *AERA Open*, 5(4), 1-35.

³⁹ Alvarez, R., Atkeson, L., Levin, I., & Li, Y. (2019). Paying attention to inattentive survey respondents. *Political Analysis*, 27(2), 145-162.

⁴⁰ Division of Health Interview Statistics, National Center for Health Statistics. (July 2014). *A Brief Quality Assessment of the NHIS Sexual Orientation Data*. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. <https://www.cdc.gov/nchs/data/nhis/qualityso2013508.pdf>. Accessed February 23, 2022; Eliason, M. J., Radix, A., McElroy, J. A., Garbers, S., & Haynes, S. G. (2016). The “Something Else” of Sexual Orientation: Measuring Sexual Identities of Older Lesbian and Bisexual Women Using National Health Interview Survey Questions. *Women’s health issues: Official publication of the Jacobs Institute of Women’s Health*, 26 Suppl 1, S71–S80.

⁴¹ USDA Economic Research Service. (2021). *Food Security in the U.S.: Measurement: What is Food Insufficiency?* <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement/#insufficiency>. Accessed November 2021.

measure of percentage of poverty. Annual household income was recoded to the midpoint for each income range or to the lower limit of the highest income category (\$200,000 or more). Recoded income was divided by household size-specific poverty thresholds⁴² to obtain percentage poverty (i.e., the “ratio of income to poverty” according to U.S. Census criteria).⁴³ Respondents were then placed into one of three economic status groups: $\leq 130\%$ (SNAP income eligible⁴⁴), 131%–200%, and $> 201\%$ of the federal poverty level.

The analytic sample was limited to 328,578 survey respondents who could be classified as LGBT or non-LGBT based on the criteria described above and who answered the Household Pulse Survey question about food insufficiency. Descriptive analyses were conducted using Stata v15.1 statistical software. Analyses included design-based F-tests (Rao-Scott chi-square tests) of differences in proportions to assess whether outcomes varied across groups at an alpha of 0.05.⁴⁵ Confidence intervals (95% CI) were included to communicate the degree of uncertainty around an estimate due to sampling error.

Non-overlapping confidence intervals were deemed indicative of statistically significant differences in two proportions at an alpha of 0.05. In instances where confidence intervals appeared close, t-tests were conducted to evaluate whether two proportions were indeed different. All analyses were weighted to represent adults ages 18 and up living in U.S. households using person-level weights provided by the Census Bureau. All sample sizes (n) are unweighted.

⁴² U S Census Bureau. *Poverty Thresholds by Size of Family and Number of Related Children Under 18 Years*. Available at: <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>. Accessed November 2021.

⁴³ U.S. Census Bureau. *How the Census Bureau Measures Poverty*. Available at: <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>. Accessed November 2021.

⁴⁴ USDA Food and Nutrition Service. *SNAP Eligibility*. <https://www.fns.usda.gov/snap/recipient/eligibility>. Accessed November 2021.

⁴⁵ J. N. K. Rao, A. J. Scott, On chi-squared tests for multiway contingency tables with cell proportions estimated from survey data. *Ann. Stat.* 12, 46–60 (1984).

TABLES

Table 1. Sociodemographic characteristics of LGBT and non-LGBT adult participants (N=328,578) in the Census Household Pulse Survey, July 21 to October 11, 2021 (Weeks 34-39)

	LGBT		NON-LGBT		F#
	N=23,599		N=304,979		
	%	95% CI	%	95% CI	P-VALUE
Age					
18-24	22.7	21.4, 24.1	6.1	5.8, 6.3	0.00
25-39	42.4	41.1, 43.7	24.3	23.9, 24.6	
40-54	18.7	17.8, 19.6	26.3	26.0, 26.6	
55-64	9.3	8.7, 9.9	18.7	18.4, 19.0	
65+	6.9	6.4, 7.5	24.6	24.3, 24.9	
Gender					
Cisgender man	41.6	40.3, 42.9	48.5	48.2, 48.9	--
Cisgender woman	51.2	49.8, 52.5	51.5	51.1, 51.8	
Transgender, all reported gender identities	7.2	6.5, 8.0	--	--	
Gender and sexual orientation					
Cisgender gay man	26.1	25.0, 27.2	0.0		--
Cisgender bisexual man	15.5	14.4, 16.6	0.0		
Cisgender straight man	0.0		48.5	48.2, 48.9	
Cisgender lesbian woman	13.9	13.1, 14.8	0.0		
Cisgender bisexual woman	37.2	36.0, 38.5	0.0		
Cisgender straight woman	0.0		51.5	51.1, 51.8	
Transgender, all reported gender and sexual identities	7.2	6.5, 8.0	0.0		
Race-ethnicity					
White, non-Hispanic	64.1	62.8, 65.4	65.2	64.9, 65.6	0.00
Black, non-Hispanic	8.0	7.3, 8.8	11.1	10.8, 11.3	
Asian, non-Hispanic	3.8	3.3, 4.4	5.3	5.1, 5.4	
Any other race alone, or more than one race	5.4	4.8, 6.0	3.3	3.2, 3.4	
Latino/a or Hispanic	18.7	17.6, 19.9	15.1	14.8, 15.5	
Education					
High school or less	30.3	28.9, 31.8	36.7	36.3, 37.1	0.00
Associates or some college	37.1	35.9, 38.3	30.0	29.7, 30.3	
Bachelors or more	32.6	31.6, 33.7	33.3	33.0, 33.6	
Employment past 7 days (work for pay or profit)					
<i>Among those in the workforce; n=203,622</i>	n=16,966		n=186,656		
Yes	92.0	90.9, 92.9	93.6	93.3, 93.9	0.00
No	8.0	7.1, 9.1	6.4	6.1, 6.7	

	LGBT		NON-LGBT		
	N=23,599		N=304,979		F#
	%	95% CI	%	95% CI	P-VALUE
Mean household size	3.27	3.26, 3.29	3.20	3.15, 3.26	0.01
Poverty*					
<100% federal poverty level (FPL)	21.7	20.5, 22.9	15.4	15.0, 15.7	0.00
100%-199% FPL	16.1	14.9, 17.2	14.7	14.3, 15.0	
≥200% FPL	62.2	60.8, 63.6	69.9	69.5, 70.4	
Difficulty with expenses past week					
Not at all or a little difficult	65.3	64.0, 66.6	74.0	73.6, 74.3	0.00
Very or somewhat difficult	34.7	33.4, 36.0	26.0	25.7, 26.4	
Region					
Northeast	16.5	15.6, 17.5	17.0	16.7, 17.3	0.00
South	35.0	33.7, 36.3	38.5	38.1, 38.9	
Midwest	19.5	18.5, 20.9	21.0	20.7, 21.3	
West	29.0	27.8, 30.2	23.5	23.2, 23.8	

CI: Confidence Interval. Bold p-values are statistically significant.

F test for test of difference in proportions.

*The sample size (n=288,433) for poverty is smaller than the total analytic sample due to missing data on household income.

Table 2. Food insufficiency, food resource utilization, and perceived reasons for food insufficiency among LGBT and non-LGBT adult participants (N=328,578) in the Household Pulse Survey, July 21 to October 11, 2021 (Weeks 34-39)

	LGBT		NON-LGBT		
	N=23,599		N=304,979		F#
	%	95% CI	%	95% CI	P-VALUE
Food insufficiency in the last 7 days					
Enough food of the kinds wanted	62.4	61.0, 63.7	72.6	72.2, 73.0	0.00
Enough food but not always kinds wanted	25.0	23.8, 26.1	19.6	19.3, 20.0	
Sometimes or often not enough to eat	12.7	11.7, 13.7	7.8	7.5, 8.0	
Free groceries or a free meal last 7 days (self or household member)					
Yes	6.7	6.0, 7.6	5.7	5.5, 5.9	0.00
No	93.3	92.4, 94.0	94.3	94.1, 94.5	
SNAP (self or household member)					
Yes	15.8	14.7, 16.9	11.5	11.2, 11.8	0.00
No	84.2	83.1, 85.3	88.5	88.2, 88.8	
Why did you not have enough to eat?					
<i>Among respondents who sometimes or often did not have enough to eat; n=16,142</i>	n=1,876		n=14,266		
Couldn't afford to buy more food	86.0	82.8, 88.6	82.2	80.9, 83.6	0.03
Couldn't get out to buy food	20.2	16.6, 24.2	11.4	10.4, 12.5	0.00
Safety concerns	15.3	12.5, 18.7	11.3	10.2, 12.6	0.00
No reason	5.9	4.2, 8.2	9.1	8.1, 10.1	0.01

CI: Confidence Interval. Bold p-values are statistically significant.

F test for test of difference in proportions.

Table 3. SNAP benefits and food insufficiency among LGBT adult participants (n=21,238) in the Household Pulse Survey, July 21 to October 11, 2021 (Weeks 34-39) by poverty level

	<= 130% FPL*		131% - 200% FPL		>=201% FPL		
	N=3,726		N=1,728		N=15,784		F#
	%	95% CI	%	95% CI	%	95% CI	P-VALUE
SNAP benefits	37.0	34.1, 40.0	22.2	18.5, 26.4	5.4	4.6, 6.4	0.00
Food insufficiency in the last 7 days							
Enough food of the kinds wanted	39.2	36.2, 42.2	43.1	39.0, 47.4	76.7	75.3, 78.1	0.00
Enough food but not always kinds wanted	34.1	31.2, 37.1	37.9	33.9, 42.1	18.1	16.9, 19.4	
Sometimes or often not enough to eat	26.8	24.0, 29.7	19.0	15.4, 23.2	5.2	4.4, 6.1	

CI: Confidence Interval. FPL: Federal Poverty Level.

* ≤ 130% FPL is the threshold for basic SNAP benefit eligibility set by the USDA

Bold p-values are statistically significant.

F test for test of difference in proportions.

Table 4. SNAP benefits and food insufficiency among non-LGBT adult participants (n=267,126) in the Household Pulse Survey, July 21 to October 11, 2021 (Weeks 34-39) by poverty level

	<= 130% FPL*		131% - 200% FPL		>=201% FPL		
	N=32,013		N=18,605		N=216,508		F#
	%	95% CI	%	95% CI	%	95% CI	P-VALUE
SNAP benefits	38.8	37.6, 39.9	15.3	14.3, 16.4	3.2	3.0, 3.4	0.00
Food insufficiency in the last 7 days							
Enough food of the kinds wanted	44.0	42.9, 45.2	55.4	54.0, 56.8	84.2	83.9, 84.5	0.00
Enough food but not always kinds wanted	34.2	33.1, 35.3	32.4	31.1, 33.8	13.1	12.8, 13.4	
Sometimes or often not enough to eat	21.8	20.8, 22.8	12.2	11.3, 13.2	2.7	2.5, 2.8	

CI: Confidence Interval. FPL: Federal Poverty Level.

* ≤ 130% FPL is the threshold for basic SNAP benefit eligibility set by the USDA

Bold p-values are statistically significant.

F test for test of difference in proportions.

Table 5. Food insufficiency among LGBT participants living at or below 130% of the federal poverty level (n=3,704) by SNAP status in the Household Pulse Survey, July 21 to October 11, 2021 (Weeks 34-39)

	SNAP RECIPIENT		NOT A SNAP RECIPIENT		
	N=1,379		N=2,325		F#
	%	95% CI	%	95% CI	P-VALUE
Enough food of the kinds wanted	35.6	30.8, 40.7	41.2	37.3, 45.1	0.05
Enough food but not always kinds wanted	33.5	29.2, 38.1	34.6	30.9, 38.5	
Sometimes or often not enough to eat	30.9	26.4, 35.9	24.2	20.9, 27.8	

CI: Confidence Interval. FPL: Federal Poverty Level.

≤ 130% FPL is the threshold for basic SNAP benefit eligibility set by the USDA

Bold p-values are statistically significant.

F test for test of difference in proportions.

Table 6. Food insufficiency among non-LGBT participants living at or below 130% of the federal poverty level (n=31,763) by SNAP status in the Household Pulse Survey, July 21 to October 11, 2021

	SNAP RECIPIENT		NOT A SNAP RECIPIENT		
	N=11,302		N=20,461		F#
	%	95% CI	%	95% CI	P-VALUE
Enough food of the kinds wanted	40.1	38.3,42.0	46.3	44.8,47.8	0.00
Enough food but not always kinds wanted	36.0	34.2,37.9	33.1	31.8,34.6	
Sometimes or often not enough to eat	23.9	22.2,25.7	20.5	19.4,21.8	

CI: Confidence Interval. FPL: Federal Poverty Level.

≤ 130% FPL is the threshold for basic SNAP benefit eligibility set by the USDA

Bold p-values are statistically significant.

F test for test of difference in proportions.

Table 7. Food insufficiency among LGBT adult participants (n=23,599) in the Household Pulse Survey, July 21 to October 11, 2021 (Weeks 34-39) by select demographic characteristics

	ENOUGH FOOD		ENOUGH FOOD BUT NOT OF THE DESIRED KIND		SOMETIMES OR OFTEN NOT ENOUGH TO EAT		F#
	N=16,837		N=4,871		N=1,891		
	%	95% CI	%	95% CI	%	95% CI	P-VALUE
Age							
18-24	21.3	19.7, 23.0	25.7	23.1, 28.5	23.5	19.7, 27.9	0.00
25-39	40.8	39.2, 42.3	45.1	42.5, 47.8	45.1	41.0, 49.4	
40-54	18.7	17.7, 19.8	17.0	15.2, 18.9	21.7	18.3, 25.5	
55-64	10.4	9.7, 11.1	8.2	6.9, 9.8	6.0	4.9, 7.4	
65+	8.8	8.1, 9.6	4.0	3.1, 5.1	3.6	2.2, 5.9	
Gender							
Cisgender men	45.2	43.6, 46.8	34.5	31.9, 37.2	37.9	33.5, 42.4	0.00
Cisgender women	48.9	47.3, 50.4	57.1	54.3, 59.7	50.8	46.5, 55.1	
Transgender, all reported gender identities	5.9	5.1, 6.9	8.5	7.0, 10.1	11.3	8.8, 14.4	
Gender and sexual orientation							
Cisgender, gay men	29.8	28.4, 31.3	19.6	17.6, 21.9	20.6	17.4, 24.1	0.00
Cisgender, bisexual men	15.4	14.1, 16.7	14.9	12.9, 17.0	17.3	13.5, 21.9	
Cisgender, lesbian women	13.9	13.0, 14.9	14.1	12.2, 16.1	13.6	11.2, 16.4	
Cisgender, bisexual women	34.9	33.5, 36.4	43.0	40.3, 45.7	37.2	33.4, 41.3	
Transgender, all reported gender and sexual identities	5.9	5.1, 6.9	8.5	7.0, 10.1	11.3	8.8, 14.4	
Race-ethnicity							
White, non-Hispanic	68.6	67.0, 70.1	59.4	56.6, 62.2	51.1	46.8, 55.4	0.00
Black, non-Hispanic	6.5	5.8, 7.4	8.8	7.3, 10.5	14.0	11.5, 17.0	
Asian, non-Hispanic	4.4	3.8, 5.1	3.0	2.1, 4.3	2.4	1.1, 5.1	
Any other race alone, or more than one race	4.6	3.9, 5.4	6.5	5.5, 7.8	6.6	5.1, 8.6	
Latino/a or Hispanic	15.9	14.6, 17.2	22.2	19.8, 24.9	25.9	21.9, 30.3	
Education							
High school or less	23.7	22.0, 25.5	34.7	31.8, 37.7	54.0	49.9, 58.1	0.00
Associates or some college	34.5	33.1, 36.0	44.5	41.9, 47.2	34.9	31.3, 38.7	
Bachelors or more	41.8	40.3, 43.2	20.8	19.1, 22.6	11.1	9.4, 12.9	

	ENOUGH FOOD		ENOUGH FOOD BUT NOT OF THE DESIRED KIND		SOMETIMES OR OFTEN NOT ENOUGH TO EAT		
	N=16,837		N=4,871		N=1,891		F#
	%	95% CI	%	95% CI	%	95% CI	P-VALUE
Poverty*							
<100% federal poverty level (FPL)	12.8	11.6, 14.0	29.8	27.1, 32.5	51.3	46.7, 55.9	0.00
100%-199% FPL	11.5	10.3, 12.8	24.5	22.0, 27.2	22.6	18.8, 27.0	
≥ 200% FPL	75.7	74.2, 77.3	45.7	42.9, 48.6	26.1	22.5, 30.0	
Employment past 7 days (work for pay or profit)							
<i>Among those in the workforce; n=16,966</i>	n=12,382		n=3,397		n=1,187		
Employed	95.8	94.8, 96.6	89.7	87.5, 91.6	76.1	70.8, 80.7	0.00
Unemployed	4.2	3.4, 5.2	10.3	8.4, 12.5	23.9	19.3, 29.2	
Region							
Northeast	17.5	16.4, 18.7	14.6	12.7, 16.8	15.3	12.3, 18.9	0.00
South	33.2	31.8, 34.7	36.4	33.8, 39.1	40.7	36.5, 45.0	
Midwest	19.3	18.1, 20.5	21.0	19.0, 23.1	17.8	15.0, 21.0	
West	30.0	28.5, 31.5	28.0	25.6, 30.4	26.2	22.6, 30.1	

CI: Confidence Interval. Bold p-values are statistically significant.

F test for test of difference in proportions.

*The sample size (n=21,238) for poverty is smaller than the total analytic sample due to missing data on household income.

Table 8. Food insufficiency within select demographic groups (race or education and LGBT status) among adult participants (N=328,578) in the Household Pulse Survey, July 21 to October 11, 2021 (Weeks 34-39)

	ENOUGH FOOD		ENOUGH FOOD BUT NOT OF THE DESIRED KIND		SOMETIMES OR OFTEN NOT ENOUGH TO EAT		F#
	N= 261,084		N=51,115		N=16,379		
	%	95% CI	%	95% CI	%	95% CI	P-VALUE
Race and LGBT identity							
White Non-LGBT	78.1	77.8, 78.5	16.3	16.0, 16.6	5.6	5.3, 5.8	0.00
White LGBT	66.7	65.2, 68.2	23.1	21.8, 24.5	10.1	9.1, 11.2	
POC* Non-LGBT	62.2	61.4, 62.9	26.0	25.3, 26.6	11.9	11.3, 12.5	
POC LGBT	54.5	52.0, 57.0	28.2	26.0, 30.5	17.3	15.3, 19.4	
Education and LGBT identity							
Non-LGBT, High school or less	62.6	61.7, 63.4	24.9	24.1, 25.6	12.6	12.0, 13.2	0.00
Non-LGBT, Associate, or some college	69.5	69.0, 70.0	22.4	22.0, 22.9	8.1	7.7, 8.4	
Non-LGBT, Bachelors or more	86.4	86.1, 86.7	11.4	11.1, 11.7	2.2	2.1, 2.3	
LGBT, High school or less	48.8	45.6, 52.0	28.6	25.8, 31.5	22.6	20.0, 25.5	
LGBT, Associate, or some college	58.1	56.1, 60.0	30.0	28.2, 31.8	12.0	10.7, 13.3	
LGBT, Bachelors or more	79.8	78.5, 81.1	15.9	14.8, 17.1	4.3	3.7, 5.0	

CI: Confidence Interval. Bold p-values are statistically significant. Row percentages total 100%.

F test for test of difference in proportions

*People of color

Table 9. Food insufficiency, food resource utilization, and perceived reasons for food insufficiency among adult participants (N=331,097) in the Household Pulse Survey, July 21 to October 11, 2021 (Weeks 34-39), by gender and sexual orientation

	CISGENDER												TRANSGENDER*	F#	
	GAY MEN		BISEXUAL MEN		STRAIGHT MEN		LESBIAN WOMEN		BISEXUAL WOMEN		STRAIGHT WOMEN		ALL REPORTED GENDER AND SEXUAL IDENTITIES		
	N= 6,866		N=2,624		N=124,244		N=4,410		N=8,423		N=183,308		N=1,222		
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	P-VALUE
Food insufficiency in the last 7 days															
Enough food of the kinds wanted	71.3	68.8, 73.6	61.9	57.8, 65.8	74.5	74.0, 75.1	62.4	59.1, 65.7	58.5	56.4, 60.5	70.6	70.1, 71.0	51.0	45.4, 56.6	0.00
Enough food but not always kinds wanted	18.7	16.8, 20.9	23.9	20.8, 27.3	18.0	17.5, 18.5	25.2	22.2, 28.4	28.8	26.9, 30.7	21.3	20.9, 21.7	29.1	24.5, 34.2	
Sometimes or often not enough to eat	10.0	8.4, 11.8	14.2	11.0, 18.1	7.5	7.1, 7.9	12.4	10.3, 14.9	12.7	11.3, 14.2	8.1	7.8, 8.4	19.9	15.7, 24.9	
Free groceries or a free meal last 7 days (self or household member)															
Yes	5.5	4.3, 7.0	6.5	4.4, 9.5	5.1	4.8, 5.4	7.4	5.2, 10.3	7.1	6.0, 8.3	6.3	6.1, 6.6	8.1	5.8, 11.2	0.00
No	94.5	93.0, 95.7	93.5	90.5, 95.6	94.9	94.6, 95.2	92.6	89.7, 94.8	92.9	91.7, 94.0	93.7	93.4, 93.9	91.9	88.8, 94.2	
SNAP (self or household member)															
<i>Among income eligible, n=35,899</i>	n=775		n=430		n=9,973		n=562		n=1,603		n=22,197		n=322		0.00
Yes	33.3	27.0, 40.2	33.1	25.2, 42.2	32.1	30.1, 34.3	38.2	31.0, 46.0	41.4	36.9, 46.0	43.4	42.1, 44.7	28.7	21.5, 37.3	
No	66.7	59.8, 73.0	66.9	57.8, 74.8	67.9	65.7, 69.9	61.8	54.0, 69.0	58.6	54.0, 63.1	56.6	55.3, 57.9	71.3	62.7, 78.5	

	CISGENDER												TRANSGENDER*	F#	
	GAY MEN		BISEXUAL MEN		STRAIGHT MEN		LESBIAN WOMEN		BISEXUAL WOMEN		STRAIGHT WOMEN		ALL REPORTED GENDER AND SEXUAL IDENTITIES		
	N= 6,866		N=2,624		N=124,244		N=4,410		N=8,423		N=183,308		N=1,222		
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	P-VALUE
Why did you not have enough to eat?															
<i>Among respondents who did not have enough food (or the kinds wanted); n=16,353</i>	n=378		n=205		n=4,770		n=299		n=787		n=9,713		n=201		
Couldn't afford to buy more food	89.6	82.3, 94.1	83.7	72.7, 90.8	80.0	77.5, 82.2	80.0	68.5, 88.0	86.5	82.3, 89.9	84.0	82.6, 85.4	87.7	79.1, 93.1	0.01
Couldn't get out to buy food	11.7	6.9, 19.1	21.1	10.5, 37.7	11.3	9.6, 13.3	18.1	12.2, 26.0	23.0	17.7, 29.3	11.5	10.4, 12.8	27.7	17.7, 40.7	0.00
Safety concerns	7.5	4.9, 11.3	15.4	8.0, 27.8	12.5	10.4, 15.0	11.7	7.6, 17.7	19.5	14.5, 25.7	10.3	9.2, 11.5	19.7	11.5, 31.7	0.00
No reason	4.5	2.2, 8.8	3.3	1.0, 10.2	10.0	8.4, 11.9	10.0	4.0, 23.1	7.1	4.6, 10.8	8.3	7.4, 9.4	3.4	1.2, 9.2	0.00

* Comparisons between transgender men, women, and transgender-identified people and cisgender men and women are included in the companion report in this series --*Food Insufficiency Among Transgender Adults During the COVID-19 Pandemic*.

CI: Confidence Interval. Bold p-values are statistically significant.

F test for test of difference in proportions.