



# THE STATE OF **FOOD INSECURITY** **IN HAWAI'I** 2024-2025

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## EXECUTIVE SUMMARY

This report estimates statewide household food insecurity in Hawai'i over a 12-month period between late Spring 2024 and late Spring 2025. It provides an update to estimates for the year 2023 and allows for the tracking of changes in household food insecurity overtime. It is timely given dramatic cuts to the United States (US) social safety net, especially to supplemental nutrition and food programs.

Based on the current survey (2024/25), 32% of Hawai'i households were food insecure. These results closely mirror the 2023 survey, in which 30% of Hawai'i households were food insecure. Of those households that experienced food insecurity at some or multiple points in time during 2024/25 assessment period, two thirds experienced very low food security. This pattern was similar to that observed in 2023.

Similar to the previous survey, households with children were more food insecure than those without them. Food insecurity among children was estimated at 34%, but for adults in households with children, the estimate was 45%. Based on this survey, food insecurity among adults in households with children is notably higher than in 2023 when the estimate was 38%. Households with two or more children appear particularly vulnerable to food insecurity. Overall, multiple results from this survey point to possible increases in food insecurity among households with children, as compared to 2023. Careful monitoring of these households over time is needed to assess if this is a trend.

In this survey, food insecurity was similarly elevated in Hawai'i and Maui Counties at around 40% of households, followed by Kaua'i County at 32%, and Honolulu County at 25%. Similar to the statewide numbers, at the county level, most food insecure households fell into the category of very low food security, indicating significant disruption to normal eating habits by one or more persons in the household.

Food insecurity was more than twice as high in households with adults 45 years and younger compared to those with older adults. This pattern was also observed in 2023. Congruent with the estimates suggesting that households with older adults had the lowest food insecurity in the state were those that compared the reference person's insurance status with household food insecurity. The reference person is the individual who answered the survey. Food insecurity was lowest in households in which one or more people were on Medicare as compared to other insurance types, such as Medicaid or insurance from an employer.

Similar to 2023, those households in which the reference person was Filipino were far more likely to be food insecure than households in which the reference person was another race/ethnicity. In the 2023 survey, the sample did not contain enough reference persons who identified as Hispanic to estimate food insecurity for this group. This survey did; household food insecurity was particularly elevated for households with at least one Hispanic member. For non-Hispanic Whites and Native

Hawaiians, estimates of food insecurity were similar to the state average.

Public benefits appear critical to those with food insecurity. Respondents were asked if anyone in their household had applied to the Supplemental Nutrition Assistance Program (SNAP) during the one-year period assessed by this survey. Household food insecurity among those who had applied was very high at 75%, but even higher among those reporting they had been denied SNAP after applying (83%). The most common reason for denial was having too high of an income, followed by not being able to provide a verification document. Whether or not a respondent received SNAP, among those that applied in the year preceding the survey, many reported application process barriers such as long wait times, difficulties understanding the application process and challenges with getting transportation to the office. Challenges with communicating by phone, especially a lack of response when attempting to call, were commonly expressed.

For children, it is clear that free or reduced-price meals at school are very important to buffering against food insecurity. Food insecurity was significantly higher in households with children who received free or reduced-price meals. The importance of providing food support outside of the school-year was also demonstrated. Eighty-one percent of households that received summer food support were food insecure. Those who indicated that they would have liked to have received food support during the summer, but did not, were also very food insecure (68% of households). The latter result emphasizes the need to expand food support programs during summer.

Hawai'i foodbanks play a critical role in supporting the population after a disaster, as was demonstrated after the Maui wildfires. As such, this survey asked a number of questions to learn about people's perceived barriers to being prepared for a disaster. Statewide, the most common barrier was lack of storage space, followed by lack of financial resources and then a lack of knowledge about which supplies are needed. Among those residing in food insecure households, the most important barrier was lack of financial resources. In fact, eight times as many individuals living in food insecure households experience this barrier compared to those in food secure households.

In Hawai'i, many people grow fruits and vegetables, raise animals such as chickens, hunt and fish for food. Reasons for engaging in these activities vary widely: such activities hold cultural significance; they are important sources of recreation; and/or they are viewed as healthy and/or environmentally-conscious

ways of getting food. However, these activities may also supplement the household food supplies of those without sufficient resources. Compared to food secure households, results from this survey demonstrate that food insecure households are significantly more likely to keep livestock and engage in hunting and fishing to provide important sources of food to the household. They are also significantly more likely to rely on food gifts that are raised (e.g., chickens) or hunted (e.g., venison) as important sources of food, when compared to food secure households. Sharing networks in Hawai'i are clearly important sources of food for food insecure households.

Associations were observed between certain chronic health conditions and household food insecurity. People residing in food insecure households were more likely to have been told by a doctor that they had anxiety or depression or gastrointestinal problems. Conditions or health concerns, such as mobility disability and fear of falling, that restricted the ability to go to the store to get food were also associated with household food insecurity. Finally, delaying or skipping medical treatment or care was quite common in food insecure households.

This survey also sought to assess Hawai'i residents' knowledge of where to go if they needed free food and groceries and their comfort levels seeking out this kind of support. About half of Hawai'i residents know where to go to get free food if needed. Knowledge was lowest in Honolulu County at about 40%, followed by Hawai'i and Maui Counties at about 65%, and then Kauai County at around 80%. Food security status did not appear to affect knowledge about where to go for free food if needed. Comfort levels seeking food support varied widely and appeared lowest in Honolulu followed by Hawai'i County. Comparatively, comfort levels were much higher in Maui and Kaua'i counties. Similar to knowledge about where to get food support, food security status did not appear to affect comfort levels. It was very common for respondents to indicate shame at and embarrassment with the idea of seeking free meals or groceries. For those that indicated they were comfortable seeking free food or groceries from places in the community that provide free food, previous experience with the food bank, such as having been a volunteer, and previous experiences needing food support were often cited.

Overall, this report provides an update on the state of food insecurity in Hawai'i for the 12-month period spanning from mid-2024 to mid-2025. It also complements the previous report by examining new indicators related to food insecurity such as barriers to disaster preparedness and health status measures.

# INTRODUCTION

The food security status of a population is a multi-dimensional indicator of food availability, access, and stability over time. It is also a marker of household and personal well-being. Deprivations of the basic needs represented by food insecurity are undesirable in their own right, but they are also risk factors for nutritional, health, and developmental problems (Bickel et al. 2000; Pirkle et al. 2014; Leung and Tester 2019).

Food (in)security is an indicator of particular importance to policy-makers, governmental and non-governmental agencies, and advocacy groups, because the inability to access food and to properly feed one's family is a salient consequence of various forms of disadvantage, such as insufficient household incomes, limited access to transportation, physical disability, and discrimination experiences. Accurate measurement and monitoring of food (in)security can help public officials, service providers, and charitable organizations, among others, identify at-risk population groups, assess changing needs for assistance, and evaluate the effectiveness of existing programs (Bickel et al. 2000).

Food security is also a topic that resonates with the general population in that food is a basic need and access to food, or a lack of it, is something more easily understood than other indicators of disadvantage, such as poverty, which can seem abstract. Household food insecurity and economic poverty are different. Low-income households can be food secure and vice versa. Unexpected changes in circumstances (e.g., loss of income, illness), household decision-making about how to handle competing demands for limited resources (e.g., medications versus food), and geographic patterns relative to the costs and physical availability of food may all contribute to food (in)security (Bickel et al. 2000).

## The Right to Food

The United Nations recognizes the right to food as a universal human right. Accordingly, everyone has the right to be free from hunger and everyone has the right to an adequate standard of living, including sufficient and nutritious food (Food and Agriculture Organization (FAO), n.d.-a)

By declaring the right to food a universal human right, the expectation and obligations of governments is to respect, protect, and fulfill this right through continuous efforts to achieve the full realization of the right to adequate food (Food and Agriculture Organization (FAO), n.d.-a). The 1977 International Covenant on

Economic, Social and Cultural Rights recognizes the right to adequate food. The US has signed the International Covenant on Economic, Social and Cultural Rights, but has not yet become a State Party (Food and Agriculture Organization (FAO), n.d.-b), which means it has not consented to be bound by the Covenant. Nevertheless, the US is among the 185 nations that signed the Declaration of Rome at the 1996 International Food Summit, pledging to reduce by at least half the prevalence of hunger early in the 21st century (Bickel et al. 2000). Thus, historically, food insecurity has been recognized by the US as a priority issue to resolve.

The United Nations defines the right to food along four key elements: availability, accessibility, adequacy, and sustainability (OHCHR, n.d.). These elements mirror the four pillars of food security generally acknowledged by international agencies and that underly the definition of food security:

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (Committee on World Food Security 2012).

## Need to Measure Food Insecurity in Hawai'i

In practice, accurate estimates of food (in)security are necessary for a variety of program planning purposes, especially around social benefits and charitable activities. The Hawai'i Foodbank, Hawai'i Foodbank Kaua'i, Maui Food Bank, and the Food Basket are committed to ending hunger and to assuring that food reaches those most in need. To succeed in their mission, they need accurate estimates of household food insecurity, at state and county levels. Further, they need to be able to interpret these numbers in terms of those who might be at higher or lower risk of food insecurity. This means taking into consideration factors such as key demographics: age, sex, and race/ethnicity. Moreover, they need additional information such as how food insecurity levels may vary based on use of public benefits, alternate food support mechanisms (e.g., growing food or raising livestock), as well as by health status and service utilization indicators.

In Hawai'i, there have been widely varying estimates of food security. At the low end (9.6%) are those from the 2023 Economic Research Service of the US Department of Agriculture Food Security Supplement (USDA-FSS) (Rabbitt et al. 2024) to higher numbers (22%) estimated from the Hawai'i Behavioral Risk Factor Surveillance System (BRFSS) in 2018 (Stuppelbeen et al., n.d.) and



the SMS Hawai'i Community Pulse Surveys in 2020 and 2021 (22% and 25%, respectively) (Pirkle and Sentell 2020; 2021). Highest yet were results from the College of Social Sciences at the University of Hawai'i at Mānoa, which estimated that 48% of Hawai'i families with children experienced food insecurity between 2020 and 2021 (Barile et al. 2021). In 2023, the Hawai'i Foodbank arrived at an estimate of 30% of Hawai'i households (Hawai'i Foodbank 2024). Finally, in 2024, the Aloha United Way estimated statewide household food insecurity at 28%, but 46% among households characterized as Asset Limited, Income Constrained, Employed (ALICE) (Aloha United Way et al. 2025). With the exception of the USDA-FSS, all results indicate that a significant proportion of Hawai'i households are food insecure.

# FOOD SECURITY MEASUREMENT

There are a wide variety of tools available to assess household food (in)security through surveys (Marques et al. 2015). Most food (in)security measurement tools assess food anxiety, food depletion, and food unsuitability (Marques et al. 2015). While food security

is defined as existing when “all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (Committee on World Food Security 2012), the instruments applied to assess food security typically focus on food insecurity caused by a lack of financial resources (Marques et al. 2015).

One of the most commonly used food security assessment tools is the US-HFSSM. Originally developed in the mid 1990s, and also called the Core Food Security Module, the US-HFSSM is the most validated food security measurement tool applied in population studies (Marques et al. 2015). Psychometric assessments of the US-HFSSM have examined the tool's test-retest validity, structural validity, face validity, construct validity and internal consistency (Marques et al. 2015). It has also been translated and applied in many countries outside of the US (Marques et al. 2015). A derivation of the US-HFSSM also exists. This is known as the HFSSM Six Item Short Form (HFSSM-6SF). It is a shorter version of the US-HFSSM and its psychometric properties have also been substantially assessed (Marques et al. 2015). The current survey, like the one estimating food insecurity in 2023, assesses household food insecurity using both of these measurement instruments and compares the findings.

Use of the US-HFSSM by this survey is important, because until the 2023 The State of Food Insecurity in Hawai'i survey was conducted, statewide estimates of food insecurity in the preceding 5 years had not used this “gold standard” tool. As such, despite the consistently elevated food insecurity estimates obtained by different surveys in Hawai'i (Stupplebeen et al., n.d.; Pirkle and Sentell 2020; 2021; Barile et al. 2021), measurement concerns remained, resulting in a clearly identified need to conduct a Hawai'i-specific survey using the US-HFSSM. Nonetheless, it should be noted that administration of the USDA-FSS can vary across surveys, in particular, with regard to screening questions and the categorization of marginal food security (Men and Tarasuk 2022). Sampling differences, as well as statistical treatments to make results representative of the population from which samples are taken, can also lead to different estimates of household food insecurity, even when using the same measurement instrument. These considerations may help explain the widely different food insecurity estimates obtained by the 2023 The State of Food Insecurity in Hawai'i survey as compared to the 2023 USDA-FSS results. Thus, a second statewide survey using the US-HFSSM was warranted not only to evaluate trends over time, but also to assess the consistency of results calculated from similar surveys conducted at two different time-points in the same population.

There is another reason to carry out a separate survey specific to Hawai'i. While the USDA-FSS provides a food (in)security estimate for Hawai'i, it does not have information on the food insecurity status of specific populations in the state (e.g., Asian American and Native Hawaiian groups), nor by county. As such, the Hawai'i Foodbank, Maui Food Bank, and The Food Basket commissioned for a second time a statewide, representative survey of food (in)security. **Results from this survey will help guide programmatic distribution and implementation efforts, and improve the understanding of which populations are most at need of food support services. It is also a part of an effort to track food insecurity trends over time.**

Pirkle Epidemiology and Evaluation Consulting, LLC. prepared the survey questionnaire; it was extensively reviewed by the Hawai'i Foodbank, Hawai'i Foodbank Kaua'i, Maui Food Bank, and The Food Basket. Ward Research administered the questionnaire as both an online and a Computer Assisted Telephone Interview (CATI) survey. Sampling was conducted to achieve a sample of at least 1000 participants with quota sampling for neighbor islands (minimum of 200 participants by county). The quota sampling was done to assure sufficient numbers of participants from Hawai'i, Maui, and Kaua'i Counties for a limited number of county-specific analyses. This was done to address a limitation from the previous survey in which there were relatively few participants from Kaua'i County (n=83). For this survey, Ward Research sampled 1079 participants in total, with 449 from Honolulu, 215 from Hawai'i, 212 from Maui, and 203 from Kaua'i counties. Panel participants were sampled electronically using a proprietary online panel sample of verifiable Hawai'i residents. Postcards with links to the survey were also mailed to random addresses across the state and there was also random sampling of Hawai'i phone numbers for the CATI surveys. The latter efforts were necessary to achieve the county-specific quotas and to increase the participation of older adults due to concerns from 2023 of insufficient/skewed sampling of this demographic group. Once the data were collected, Ward Research created weighting variables using the American Community Survey 5-year estimates (2019-2023). The weights corrected for differences between the sample and the state of Hawai'i population based on the following demographic variables: county adult resident distribution, age (categorized), ethnicity, education, gender, and household composition (alone vs family). Weights were provided for the state overall, as well as by county for the county-specific analysis. The weights allowed survey results to be generalized to the population of the state overall, as well as to the counties. Data were then statistically analyzed and the results

interpreted by Pirkle Epidemiology and Evaluation Consulting. Results are presented in this report, also drafted by Pirkle Epidemiology and Evaluation Consulting.

## US-HFSSM Questions, Application, and Scoring

The US-HFSSM assesses food security for two different household types—those with children and those without them. The questionnaire length and the questions asked differ according to whether or not there are children under 18 years in the household. The full US-HFSSM contains 18 questions, known as items. If there are no children in the household, then a maximum of ten questions are asked. All households are eligible to be asked these 10 questions, whether or not they have children. If the household has children, up to another eight questions are asked. In households with children, it is also possible to estimate the food security status of adults and compare it to children. The text box shows the US-HFSSM items.

Affirmative answers to items in the US-HFSSM are indicative of food concerns across different facets of the construct of food (in)security. The items in the US-HFSSM are increasingly severe. Thus, the US-HFSSM is organized such that items at the end of the questionnaire represent more extreme manifestations of the food concerns and limitations in a household, such as going a whole day without food. Based on the numbers of affirmative responses and whether or not there are children present, a score is calculated. This score is then used to categorize households into different levels of food security. Table 1 shows how the scores are calculated and categories created for the different types of households.

**Table 1: Categorization of food security status based on the raw scores of the US-HFSSM**

Food Security Status	Households with no children present	Households with one or more children under 18 years
Food secure	Raw score 0 <i>High food security</i>	Raw score 0 <i>High food security</i>
	Raw score 1-2 <i>Marginal food security</i>	Raw score 1-2 <i>Marginal food security</i>
Food insecure	Raw score 3-5 <i>Low food security</i>	Raw score 3-7 <i>Low food security</i>
	Raw score 6-10 <i>Very low food security</i>	Raw score 8-18 <i>Very low food security</i>

## Items in the US-HFSSM

### All Households

**The first three items ask the respondent to indicate if a series of statements apply to them. These are asked of all households.**

1. “(I/We) worried whether (my/our) food would run out before (I/we) got money to buy more.” Was that often true, sometimes true, or never true for (you/your household) in the last 12 months?
2. *“The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?*
3. *“(I/we) couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?*

**If the respondent answers affirmatively to any of the items above, they are asked additional questions.**

4. *In the last 12 months, since last (name of current month), did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn’t enough money for food?*
5. *How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?*
6. *In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food?*
7. *In the last 12 months, were you every hungry but didn’t eat because there wasn’t enough money for food?*
8. In the last 12 months, did you lose weight because there wasn’t enough money for food?

**If the respondent answers affirmatively to any of the items above, they are asked additional questions.**

9. In the last 12 months, did (you/you or other adults in your household) ever not eat for a whole day because there wasn’t enough money for food?
10. How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?

### Households with Children Under 18 years

**The first three items ask the respondent to indicate if a series of statements apply to them. These are asked only if children under 18 are a part of the household.**

11. “(I/we) relied on only a few kinds of low-cost food to feed (my/our) child/the children) because (I was/we were) running out of money to buy food.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?
12. “(I/We) couldn’t feed (my/our) child/the children) a balanced meal, because (I/we) couldn’t afford that.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?
13. “(My/Our child was/The children were) not eating enough because (I/we) just couldn’t afford enough food.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

**If the respondent answers affirmatively to any of the items above, they are asked additional questions.**

14. In the last 12 months, since (current month) of last year, did you ever cut the size of (your child’s/any of the children’s) meals because there wasn’t enough money for food?
15. In the last 12 months, did (your child/any of the children) ever skip meals because there wasn’t enough money for food?
16. How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?
17. In the last 12 months, (was your child/were the children) ever hungry but you just couldn’t afford more food?
18. In the last 12 months, did (your child/any of the children) ever not eat for a whole day because there wasn’t enough money for food?

## Six-Item Food Security Scale

There is a short module that can also be used to assess household food (in)security. It is called the Six-Item Food Security Scale. It only uses six questions (i.e., items) to estimate food (in)security in a population. It is a shorter version of the US-HFSSM. This version of the US-HFSSM can be applied to all households, irrespective of whether or not they have children. The items in bold and italicised in the text box are those that comprise the Six-Item Food Security Scale. Those with scores of 0 or 1 are considered to have high or marginal food security. Those with scores of 2 to 4 are considered to have low food security and those with scores of 5 to 6 are considered to have very low food security. Results in this report will include this measure of household food security, in addition to the full US-HFSSM.

A very important distinction between the Six-Item Food Security Scale and the US-HFSSM is the ability to estimate food (in)security among children and in households with children. The Six-Item Food Security Scale does not provide an estimate for households with children. Thus, use of this scale obscures differences between the two different types of households. This is an important limitation because households with children tend to be more food insecure than those without them. This is observed both nationally (Rabbitt et al. 2024) and in Hawai'i (Hawai'i Foodbank 2024).

## Screeners and Respondent Burden

Initial screening questions can be applied to the US-HFSSM to reduce respondent burden; that is, to reduce the time required by a respondent to complete the survey. A common screener question is, "Which of these statements best describes the food eaten in your household in the last 12 months: –enough of the kinds of food (I/we) want to eat; –enough, but not always the kinds of food (I/we) want; –sometimes not enough to eat; or, –often not enough to eat?" In some surveys, if a respondent answers no to these questions they are not administered the US-HFSSM, because they are assumed to be food secure. Preliminary screening questions are optional. **We did not apply any preliminary screening questions to our survey**, because the US-HFSSM already includes several stages meant to reduce respondent burden based on responses to early questions in the module.

The US-HFSSM seeks to reduce respondent burden (i.e., time to complete the survey) based on its structure. Because the items in the questionnaire capture increasingly severe states of food insecurity as the questionnaire progresses, it can be assumed that if respondents do not answer affirmatively to

early questions, then it is unlikely they will answer affirmatively to later questions. For example, it is unlikely that a respondent who states that it was **never true** that she worried whether her food would run out before she got money to buy more would later report that she was hungry, but didn't eat because there was not enough money for food. Thus, as shown in the text box, certain questions are only asked if the respondent answers affirmatively to preceding questions. This means that food secure households will not be asked the full questionnaire. For our survey, we followed these administration recommendations to reduce respondent burden.

## Time Period Assessed by the US-HFSSM

Both versions of the US-HFSSM, full and six-question form, are designed to assess food security in the 12 months–year–preceding the survey. While this assessment period can be modified, we also asked about the preceding year (12 months). This allows for comparability with other surveys. Thus, because the survey was administered in May and June 2025, it estimates statewide food insecurity in the period between May 2024 to June 2025.



# FOOD INSECURITY IN HAWAI'I

This section presents the estimates of household food insecurity in the state of Hawai'i between mid-2024 and mid-2025. It is based on the full 18-question US-HFSSM. The sections to follow describe the questions that were used to obtain these estimates, as well as the sub-estimates that can be calculated based on the US-HFSSM.

It is important to note that there are slightly different cut-offs for adult-only households compared to those with children. Adult-only households complete a maximum of 10 questions on the HFSSM. Those with children may be asked as many as 18 questions. The number of questions a household answers depends on their responses to earlier questions in the US-HFSSM, which "screen out" households unlikely to be food insecure.

Table 2 presents the household food insecurity results for the state between mid-2024 and mid-2025. In it, the number of respondents from the sample that fell into each food security category is provided. It is important to note that these respondents report on the experiences and characteristics of their households. Based on that number, it is possible to provide a weighted percent value that generalizes these findings to the whole state. In other words, the weighted percent is an estimate of the proportion of households in Hawai'i that experienced the same food situation. The table also provides a 95% confidence interval for the weighted percent. Confidence intervals provide an idea of how precise is the estimate provided in the table. The smaller the numbers in a given category, the wider the confidence interval will be, because there is less information and thus, the estimates will be less precise.

## 32% OF HAWAI'I HOUSEHOLDS WERE FOOD INSECURE

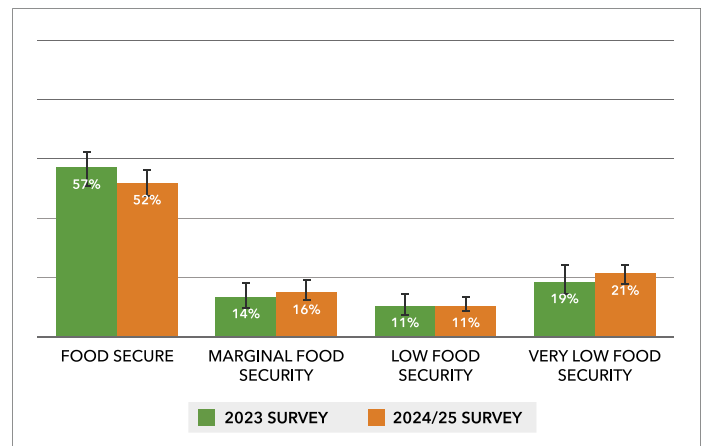
**Based on this survey, 68% of Hawai'i households were food secure throughout the entire 2024-25 assessment period, while 32% were food insecure at some or multiple points of time during that same period.** Conceptually, food secure households are able to obtain enough food to meet their needs (Rabbitt et al. 2024). In contrast, food insecure households are, at times, unable to obtain adequate food for one or more members, because of insufficient money or other resources (Rabbitt et al. 2024). **Eleven percent of Hawai'i households had low food security, while 21% had very low food security.** In low food security households, there are limited reductions or disruptions in food intake. Instead, these households typically rely on a few basic foods or reduce the variety in their diets

(Rabbitt et al. 2024). In contrast, in households with very low food security, food intake may decrease, because there is not enough money for food (Rabbitt et al. 2024).

**The results from this survey closely mirror the one conducted in 2023.** Accordingly, in 2023, 30% of Hawai'i households were food insecure, 14% had marginal food security, 11% had low food security, and 19% had very low food security. Figure 1 compares the estimates of both surveys. All of the confidence intervals overlap indicating that there are not statistically significant differences between the two surveys. The numbers calculated in this survey are concordant with those estimated by the Economic Research Organization at the University of Hawai'i at Mānoa (UHĒRO). Based on data collected between March and December 2024, they reported that nearly 30% of adults in Hawai'i have low or very low food security (Juarez, Bond-Smith, et al. 2025).

**Table 2: Food (in)security of households in Hawai'i (n=1009). Note, there are 68 missing values, due to responses such as do not know or prefer not to answer. This is 6.3% of the sample.**

	Responses	Number	Weighted percent	95% Confidence Interval
Food Security Status in 4 Categories	High food security	641	52.0%	46.3-57.7%
	Marginal food security	121	15.7%	11.9-20.4%
	Low food security	98	11.1%	7.9-15.4%
	Very low food security	149	21.2%	16.8-26.3%
Food Secure	Yes	762	67.7%	62.0-72.9%
	No	247	32.3%	27.1-38.0%



**Figure 1: Comparison of statewide household food (in)security estimates from 2023 and 2024/25, weighted results**



## Core US-HFSSM questions and affirmative responses

Table 3 presents the estimated percent of Hawai'i households affirming each of the first 10 questions of the US-HFSSM. Each question refers to the experiences of that household in the past 12 months before the survey was administered; that is, the year preceding the day of the survey. The questions also specify that the reason for each food situation is because there was not enough money for food. For example, respondents were asked if they or members of their household lost weight because there was not enough money for food. As such, the US-HFSSM seeks to clarify that the weight loss was due to monetary limitations and not to voluntary behaviors, such as a being on a diet.

The US-HFSSM is designed so that as it progresses the food situations described by the questions represent more severe manifestations of food insecurity. There should be fewer respondents indicating food access challenges to later items in the questionnaire than to earlier questions; alternatively, there should be more respondents indicating no challenges to later questions than earlier ones. Our results largely follow that pattern, with the notable exception of question three, which asks about a household's ability to afford to eat

balanced meals. For this question, an estimated 44% of households experienced financial challenges to eating balanced meals. This may reflect the expensive food environment of Hawai'i. For context, the USDA has a "Thrifty Food Plan" that represents a nutritious, practical, and cost-effective diet. Based on estimates from 2022, the Thrifty Food Plan was 52% higher in Honolulu, than in the mainland US (U.S. Department of Agriculture 2023).

According to responses to this survey, 35% of households in Hawai'i experienced anxiety about running out of food before they could get money to buy more (it was 37% in 2023); many (9%) worried about this often (12% in 2023). Just over a quarter of households (27%) reported cutting the size or skipping meals (28% in 2023); 11% reported this experience almost every month (10% in 2023). With regard to going a whole day without food, 11% of Hawai'i households experienced this food situation between mid-2024 and mid-2025, with nearly all of them having had this happen some months or nearly every month. In 2023, it was estimated that 12% of households had one or more individuals that did not eat for a whole day at some point during that year and similar to 2024/5, for nearly all of these households, this was happening some months or almost every month.

**Table 3: Household estimates for each of the US-HFSSM core questions, which apply to all households.**  
**Note: some percentages do not sum to 100% due to rounding**

Question	Responses	Number	Weighted Percent	95% Confidence Interval
Worried food would run out before there was money for more	Never	771	65.0%	59.5-70.2%
	Sometimes	223	26.4%	21.7-31.7%
	Often	79	8.5%	5.9-12.2%
Food did not last and there was no money to get more	Never	827	70.1%	64.7-75.0%
	Sometimes	173	21.9%	17.6-27.0%
	Often	70	8.0%	5.5-11.6%
Could not afford to eat balanced meals	Never	703	55.7%	50.1-61.1%
	Sometimes	242	29.7%	24.8-35.1%
	Often	129	14.7%	11.1-19.1%
Cut or skipped meals because not enough money	No	837	72.6%	67.3-77.3%
	Yes	228	27.4%	22.7-32.7%
How often were meals cut or skipped in the past 12 months	Never	849	73.2%	67.9-77.9%
	1-2 months only	46	4.3%	2.5-7.2%
	Some months, but not every	89	11.4%	8.3-15.5%
	Almost every month	89	11.2%	8.1-15.2%
Ate less than thought one should because there was not enough money for food	No	827	71.3%	65.9-76.1%
	Yes	240	28.7%	23.9-34.1%
Was hungry but did not eat because there was not enough money for food	No	891	78.3%	73.3-82.6%
	Yes	180	21.7%	17.4-26.7%
Lost weight because there was not enough money for food	No	923	81.9%	77.0-85.9%
	Yes	122	18.1%	14.1-23.0%
Did you or other adults not eat for a whole day because there was not enough money for food	No	991	89.1%	85.1-92.2%
	Yes	80	10.9%	7.8-14.9%
How often was food not eaten for a whole day	Never	997	89.2%	85.2-92.3%
	1-2 months only	12	1.4%	0.5-3.6%
	Some months, but not every	31	5.5%	3.4-8.8%
	Almost every month	36	3.9%	2.2-6.7%

## Households with Children

There is a second half of the US-HFSSM, or the US Children’s Food Security Scale, that is administered only to those households with children under the age of 18 years. There are 8 questions in this scale, which assesses food (in)security among children. Table 4 presents each of these questions, as well as the number of respondents reporting these food experiences happening to children in their households. The table also presents the weighted percents for each question. This value is intended to reflect the proportion of Hawai’i households with children that also experience these food situations. In our sample, there were 293 households with children under 18 years.

Similar to the first 10 questions of the HFSSM, later questions on the Children’s Food Security Scale represent more severe manifestations of food insecurity among children. The first question of the Children’s Food Security

Scale asks respondents with children under 18 in the household if they relied on a few low-cost foods because they were running out of money to buy more. Based on the 2024/25 survey, 37.1% of households in Hawai’i may have experienced this situation at some point between mid-2024 and mid-2025. This estimate is similar to the one in 2023—34.7% of households. Among households with children in Hawai’i in 2024/5, it is estimated that in 8.7% of them, children were skipping meals because there was not enough money for food. This number is nearly identical to the 2023 estimate (9.0%). Similarly, among households with children, in approximately 10.9% of them, one or more children were hungry because there was not enough money for food. Again, this estimate is very similar to the one from 2023 (11.7%).

It should be noted that the numbers of respondents answering affirmatively to the more extreme manifestations of food insecurity among children are small. Point estimates—the weighted percent values—

**Table 4: Household estimates for each of the US-HFSSM child questions (n=293 administered). The items in this scale reflect experiences happening to one or more children in the household at some point the year preceding the survey. Note: some percentages do not sum to 100% due to rounding and some numbers do not equal 293 due to missing responses.**

Question	Responses	Number	Weighted Percent	95% Confidence Interval
Relied on a few kinds of low-cost because of running out of money to buy more	Never	189	62.9%	51.4-73.1%
	Sometimes	66	21.4%	13.5-32.2%
	Often	36	15.7%	9.1-25.8%
Couldn’t feed a balanced meal because couldn’t afford it	Never	184	57.4%	45.8-68.3%
	Sometimes	76	33.5%	23.5-45.2%
	Often	28	9.1%	4.4-17.8%
Not eating enough because couldn’t afford food	Never	246	77.9%	66.9-86.1%
	Sometimes	29	17.2%	9.9-28.0%
	Often	16	4.9%	1.9-12.2%
Cut size of meals because not enough money for food	No	266	86.1%	76.1-92.3%
	Yes	27	13.9%	7.7-23.9%
Skipped meals because not enough money for food	No	270	91.3%	82.5-95.9%
	Yes	23	8.7%	4.1-17.6%
How often did this happen	Never	270	91.3%	82.5-95.9%
	Some months, but not every	9	3.3%	1.0-11.2%
	Almost every month	12	5.4%	2.1-13.3%
Hungry, but couldn’t afford more food	No	262	89.1%	79.5-94.5%
	Yes	28	10.9%	5.5-20.5%
Did not eat for a whole day because not enough money	No	276	90.2%	80.6-95.3%
	Yes	14	9.8%	4.7-19.4%

should be interpreted carefully and attention paid to the 95% confidence interval. For the last four questions, the actual percent value likely falls somewhere between 5% and 20%, but the point estimates are less reliable than for the other statistics presented above, in which the numbers of respondents answering affirmatively was higher.

The number of affirmative responses to questions in the Children’s Food Security Scale are used to calculate the food security status of children. Food insecurity based on this scale indicates that there are children living in households in which one or more children are food insecure. In some households there may be a mix of food secure and insecure children. For example, in some food insecure households, older children may experience food insecurity, while caregivers and other family members seek to protect younger children from the effects of household food insecurity (Rabbitt et al. 2024).

**34% OF CHILDREN IN HAWAI’I ARE LIVING IN HOUSEHOLDS IN WHICH ONE OR MORE OF THEM ARE FOOD INSECURE**

In contrast to the full scale, there are only three categories to the Children’s Food Security Scale, with the high and marginal groups combined into one category. As shown in table 5, food insecurity among children between mid-2024 to mid-2025 in Hawai’i is estimated to be 33.6%. That is, in a third of households in Hawai’i,

one or more children experienced food insecurity, at least once, between mid-2024 and mid-2025. This number is slightly higher than the estimate in 2023 of 29.1% and slightly higher than the 2024/25 statewide estimate in all households of 32.3%. Very low food security among children between mid-2024 and mid-2025 is estimated at 12.6%, as compared to 8.2% among children in 2023. While the numbers in 2024/25 are similar to those in 2023, overall, **there is a trend across indicators suggesting an uptick in food insecurity in households with children.** This is concerning and needs to be assessed carefully, both according to the everyday experiences of the charitable food network and by continued tracking over time using validated measures.

Table 5 also presents the county-specific estimates of children living in households with food insecurity among children. At a county level, the numbers of respondents categorized as residing in households with food insecure children are small (all are 30 or less). This means that the confidence intervals for all of the estimates are wide. Thus, the county-specific numbers provided in table 5 are meant to serve as benchmarks for future investigations into child food insecurity in Hawai’i. Comparisons between counties should be made cautiously. For example, while the difference in estimated child food insecurity between Kaua’i (19.8%) and Maui (37.7%) is large, it is not statistically significant as the confidence intervals overlap. The only county that has statistically significantly higher child food insecurity than any other county is Hawai’i.

**Table 5: Food insecurity among children in Hawai’i (n=282), statewide and by county. Note there are 16 missing values. This is less than 1% of the applicable sample. Values for individual counties should be interpreted carefully as samples are small when stratified.**

Responses		Number	Weighted Percent	95% Confidence Interval
<b>STATEWIDE VALUES</b>				
Food Security Status in 3 Categories	High or marginal food security	199	66.4%	54.7-76.5%
	Low food security	59	20.9%	13.0-32.0%
	Very low food security	24	12.6%	6.6-22.9%
Food Secure	Yes	199	66.4%	54.7-76.5%
	No	83	33.6%	23.5-45.4%
<b>ESTIMATES BY COUNTY (FOOD INSECURITY ONLY)</b>				
Honolulu	Food insecure	30	27.5%	17.3-40.7%
Hawaii	Food insecure	24	61.9%	42.9-77.9%
Maui	Food insecure	18	37.7%	20.4- 58.8%
Kaua’i	Food insecure	11	19.8%	8.5- 39.8%

## Adult Food Security in Households with Children

The first 10 questions of the US-HFSSM can be used to assess the food security of adults in households with children (table 6). **In 44.8% households with children, there were one or more adults that experienced food insecurity at some time between mid-2024 and mid-2025.** The corresponding figure in 2023 was 38.1%.

Among those households with adults that experienced food insecurity at some time in the 12-month period covered by the survey, 18.7% were categorized as low food security and 26.1% as very low food security. Comparatively, in 2023 these estimates were 15.8% and

22.4%, respectively. While similar to 2023, the current survey numbers are slightly higher, which is consistent with the results for children only.

Compared to statewide estimates, the percentage of adults in households with children that are categorized as having low food security is much higher (15.8% versus 9.5%). The estimate is also higher for very low food security (26.1% compared to 21.4%) Overall, the higher food insecurity among adults residing in households with children is expected, because adults try to preserve their children’s food security by compromising their own (Rab-bitt et al. 2024). It is clear that food insecurity in households with children is unacceptably high in Hawai’i.

**Table 6: Food insecurity among adults in households with children (n=262). Note: There are 36 missing values for adults in households with children. This is 12% of the applicable sample.**

	Responses	Number	Weighted Percent	95% Confidence Interval
Food Security Status in 4 Categories	High food security	124	41.8%	30.8-53.7%
	Marginal food security	42	13.4%	7.3-23.4%
	Low food security	44	18.7%	10.9-30.1%
	Very low food security	52	26.1%	17.0-37.9%
Food Secure	Yes	166	55.2%	43.3-66.6%
	No	96	44.8%	33.4-56.8%

## 6-Item Food Security Score

There is a shorter, alternative measure of household food security called the Six-Item Food Security Scale. It uses 6 questions from the first half of the US-HFSSM to calculate a score and it has been shown to be a valid measure of food security in a population. Because this measure was presented in the 2023 report, the values assessed by this survey, using this indicator of statewide food security, are also presented here (table 7).

Based on this score, 65% of households in Hawai’i were food secure throughout the entire period between mid-2024 and mid-2025, and **35% were food insecure.** The value obtained from this survey closely matches that of 2023, which was 36% food insecurity in Hawai’i households. Using this shorter scale, the estimate of very low household food security is 21%, which is slightly higher than in 2023, when very low food security was estimated at 19%.

**Table 7: Food security of households in Hawai’i (n=1045), 6-item Food Security Scale. Note: there are 32 missing values; this is 3% of the sample.**

	Responses	Number	Weighted Percent	95% Confidence Interval
Food Security Status in 3 Categories	High or marginal food security	765	64.9%	59.3-70.1%
	Low food security	120	13.8%	10.3-18.3%
	Very low food security	160	21.3%	17.1-26.3%
Food Secure	Yes	765	64.8%	59.3-70.1%
	No	280	35.1%	30.0-40.7%

# SUMMARY OF FOOD INSECURITY FINDINGS

- One third (32%) of Hawai'i households experienced food insecurity at some point between mid-2024 and mid-2025.
  - One in ten Hawai'i households experienced low food security and one in five Hawai'i households experienced very low food security in that same period.
- Anxiety about running out of food before there was money to get more was elevated at 35% of Hawai'i households.
- In a notably high percentage (27%) of Hawai'i households, one or more members cut or skipped meals because of financial limitations at some point between mid-2024 and mid-2025.
- In one in five households (22%), one or more members were hungry, but did not eat because there was not enough money for food.
- Just over a third (34%) of Hawai'i children lived in households in which one or more children were food insecure at some point between mid-2024 and mid-2025.
  - 13% of children lived in households with very low food security among children.
- About one in five children (22%) lived in households in which one or more children did not eat enough because of financial limitations at some point between mid-2024 and mid-2025.
  - 11% of children lived in households in which one or more children were hungry but the household could not afford more food
- In households with children, food insecurity was very elevated among adults. In 45% of these households, at least one adult experienced food insecurity at some point between mid-2024 and mid-2025.
  - In over half (58%) of these food insecure households with children, one or more adults experienced very low food security.

## FOOD INSECURITY BY LOCATION AND DEMOGRAPHIC CHARACTERISTICS

### County

Tables 8-11 present the detailed estimates of household food insecurity by county. Figure 2 provides a comparison of the estimates across counties. Food insecurity was highest in Hawai'i County and lowest in Honolulu County. The estimate for Kaua'i matched the statewide average, while Honolulu County was slightly lower. The estimates for Hawai'i and Maui counties were similar to each other at just over 40% of households. Overall and across counties (except Kaua'i), very low food security tended to be the predominant form of food insecurity in Hawai'i households. This means that individuals in these households experienced disrupted and/or reduced food intake at least once between mid-2024 and mid-2025. Results from this survey are similar to 2023 in that the highest levels of household food insecurity are observed in Hawai'i and Maui Counties.

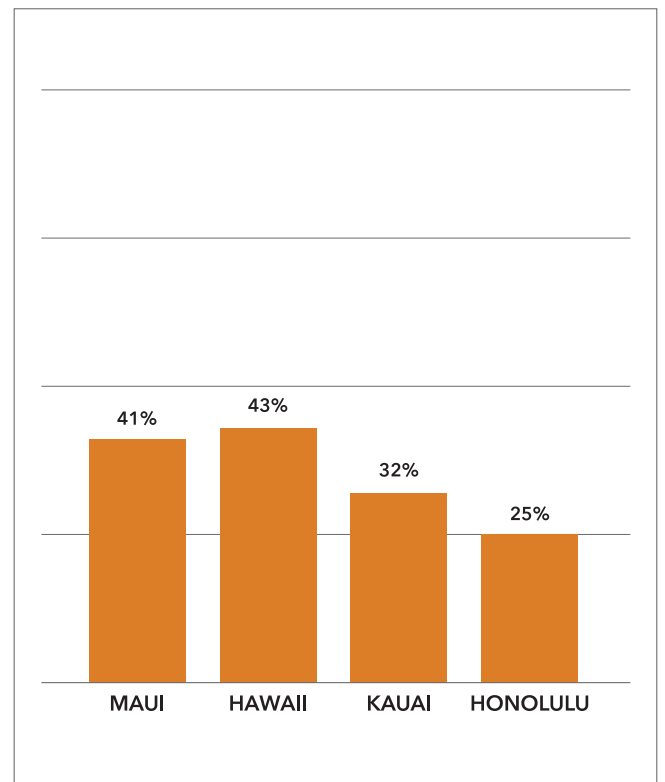


Figure 2: Household food insecurity by county, weighted results

## HONOLULU

Household food insecurity in Honolulu County is lower than the statewide average. Marginal food security in Honolulu County is higher than in any other county; indicating that approximately 20% of those categorized as food secure in this county are at risk of becoming food insecure.

**Table 8: Food insecurity among households in Honolulu County (n=418)**

	Responses	Number	Weighted Percent	95% Confidence Interval
Food Security Status in 4 Categories	High food security	266	58.1%	51.2-64.8%
	Marginal food security	60	17.1%	12.3-23.3%
	Low food security	33	9.1%	5.7-14.2%
	Very low food security	59	15.7%	11.3-21.4%
Food Secure	Yes	326	75.3%	68.7-80.1%
	No	92	24.7%	19.2-31.3%

**Table 9: Food insecurity among households in Hawai'i County (n=196)**

## HAWAI'I

Food insecurity is high in Hawai'i County. In fact, two-thirds of the food insecurity observed in Hawai'i County is categorized as very low food security. Thus, not only is food insecurity quite elevated in Hawai'i County, it is also predominately severe with households, at least once in 2024/25, having to significantly disrupt eating patterns, such as by skipping meals.

	Responses	Number	Weighted Percent	95% Confidence Interval
Food Security Status in 4 Categories	High food security	120	46.5%	36.1-57.1%
	Marginal food security	22	10.8%	5.8-19.2%
	Low food security	21	13.0%	7.3-22.3%
	Very low food security	33	29.7%	20.1-41.5%
Food Secure	Yes	142	57.3%	46.0-67.8%
	No	54	42.7%	32.2-54.0%

## MAUI

The current estimate of food insecurity in Maui is 10% higher than in 2023. While higher than the 2023 survey upon which this work builds, the Maui estimates for food secure, low food security, and very low food security reported in table 10 are lower than the ones calculated from the MauiWes cohort. The MauiWes cohort includes individuals who lived or worked in or near the areas affected by the wildfires in Maui in 2023. In one study from that cohort, which examined over 1000 individuals, 53% were food insecure based on data collected in 2024. Among these, 29.1% experienced low food insecurity and 23.5% very low food security (Juarez, Phankitnirundorn, et al. 2025). Thus, there is other evidence to support findings of elevated food insecurity in Maui.

**Table 10: Food insecurity among households in Maui County (n=198)**

	Responses	Number	Weighted Percent	95% Confidence Interval
Food Security Status in 4 Categories	High food security	123	50.9%	40.5-61.2%
	Marginal food security	22	8.0%	3.9-15.7%
	Low food security	18	11.4%	6.0-20.8%
	Very low food security	35	29.7%	20.3-41.2%
Food Secure	Yes	145	58.9%	47.8-69.1%
	No	53	41.1%	30.9-52.2%

**Table 11: Food insecurity among households in Kauai County (n=197)**

## KAUAI

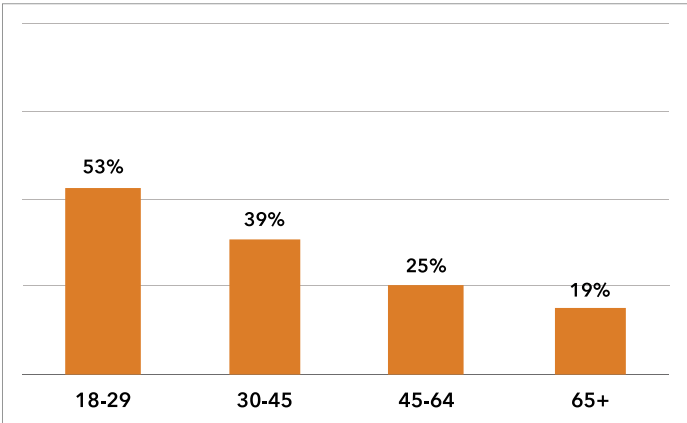
In 2023, food insecurity in Kauai was estimated to be the lowest in the state (22.5%), which is not observed in this survey. The estimate for Kauai in this survey is 9% higher than in 2023. This difference may be due to sampling, as the current survey quota sampled by county to get sufficient numbers for more detailed analysis. This was not the case for the 2023 survey, in which the numbers of participants from Kauai County were quite small (83 respondents versus 203 in this survey). Currently, the estimate of food insecurity in Kauai County is about the same as the statewide average.

	Responses	Number	Weighted Percent	95% Confidence Interval
Food Security Status in 4 Categories	High food security	132	56.8%	46.5-66.6%
	Marginal food security	17	11.4%	5.9-20.7%
	Low food security	26	17.1%	10.3-27.0%
	Very low food security	22	14.7%	8.6-24.1%
Food Secure	Yes	149	68.2%	57.6-77.2%
	No	48	31.8%	22.8-42.4%



### Age

Survey respondents provided their ages, which were categorized into 4 groups comparable with the 2023 report. The individual who completed the survey on behalf of the household is referred to in this report at the household reference person.



**Figure 3: Food insecurity in households with reference persons 18-29, 30-34, 45-64, and 65 years and older (weighted percents)**

The younger the household reference person, the higher the estimated household food insecurity for similar households in Hawai'i. Households with the lowest food insecurity were those in which the reference person was 65 years and older.

In this sample, food insecurity was notably higher among households with older adults than in 2023. In

the previous survey, the estimate was 8.4% for such households. This difference is likely due to sampling changes across surveys. The current survey included 142 more older adults than the 2023 survey due to purposeful oversampling. This was done to provide a better representation of food insecurity in Hawai'i households with older adults. In contrast, the current survey captured few younger adults (only 49 household reference persons were between 18 and 29). Thus, this survey has the opposite limitation of the 2023 survey, which had 173 individuals in that age group.

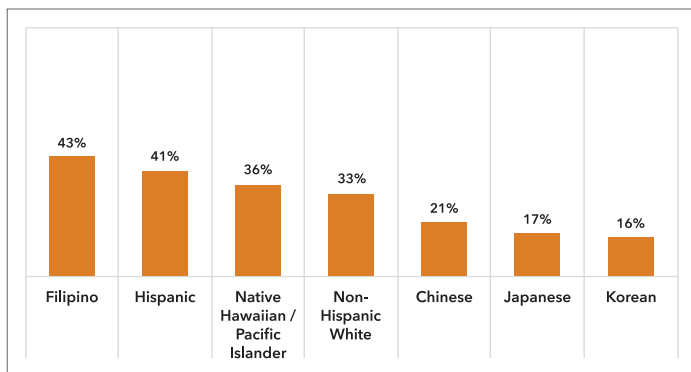
Despite the sampling limitations discussed above, Hawai'i households with adults 65 years and older appear to have lower food insecurity than younger households (figure 3). This was also reported by UHERO, but they estimated food insecurity among older adults to be around 10%, as compared to 19% in this sample (Juarez, Bond-Smith, et al. 2025). In the UHERO survey, approximately 40% of respondents 18-34 were food insecure and 30% of respondents 35-64 years (Juarez, Bond-Smith, et al. 2025). The pattern in which food insecurity is highest among younger households and lowest among those with older adults is consistent with the 2023 survey and with the one conducted in early 2024 by UHERO (Juarez, Bond-Smith, et al. 2025; Hawai'i Foodbank 2024). Moreover, the pattern observed across all three surveys is consistent with the highest food insecurity estimates occurring in households with children, as demonstrated in preceding sections; these households tend to be composed of younger and working-age adults, rather than older adults.

## Sex/Gender

Irrespective of the sex of the household reference person, estimates of household food insecurity in Hawai'i were similar. Household food insecurity was estimated to be 30% (95% CI:23-38%) if the respondent was male and 35% (95% CI:28-44%) if the respondent was female; differences were not statistically significant.

## Race/Ethnicity

There were large differences in food insecurity by the household reference person's self-identified race and ethnicities. Respondents could select more than one race/ethnicity. If a respondent selected Filipino, then they were categorized as Filipino. The respondent could also select another group, such as Native Hawaiian or White and so would be categorized in those groups as well. As a result, the groups were non-exclusive and individuals could be included in more than one category. It is important to note that the household reference person may be a different race/ethnicity than the rest of the household and the food insecurity results presented in this report represent the household and not the individual. Thus, the results reflect households that are similar to those in which the reference person identified as a given race(s)/ethnicity(ies).



**Figure 4: Food insecurity in households with reference persons who self-identified as one or more of the race and ethnicities listed in the figure (weighted percentages)**

Figure 4 shows household food insecurity estimates by the reference person's race and ethnicities. Results are only reported for groups in which 30 or more respondents identified themselves in a given category. As such, the results for Black (n=27) and American Indian/Alaska Native (n=26) are not shown, as too few people identified in these groups. Pacific Islanders were combined with Native Hawaiians due to the very small number of Pacific Islanders in the sample (n=21), and because of previous work demonstrating high food insecurity for this group (Stupplebeen et al., n.d.; Hawai'i Foodbank 2024) and the precedent for



combining these categories in other work (Long et al. 2020). Overall, household food insecurity was highest if the reference person identified as Filipino and lowest if they identified as Korean. Consistent with previous reports (Stupplebeen et al., n.d.; Hawai'i Foodbank 2024), food insecurity remains stubbornly high in households with one or more individuals who identify as Filipino. Hispanic and Native Hawaiians/Pacific Islanders had household food insecurity levels higher than the statewide average. Non-Hispanic Whites were close to the statewide average. As with the 2023 report, households in which the reference person was Japanese or Chinese had lower than average food insecurity. Food insecurity was also substantially lower in households in which the reference person identified as Korean.

## Language

There were 33 respondents who indicated that someone living in their household did not speak English. The weighted food insecurity estimate in these types of households was 49% (95% CI: 27-70%), as compared to 31% (95% CI: 26-37%) for those households in which everyone spoke English. This difference of 18% was not statistically significant, likely due to the small numbers of households with individuals who did not speak English.

## Education

Higher levels of education among the household reference persons corresponded to lower levels of household food insecurity (figure 5). While this survey did not capture data on the educational attainment of all members in a household, the results suggest that if at least one person in the household completed a 4-year college or university program, food insecurity would be around 20%. This is much less than the total statewide estimate of 32%. About 30% of households with similar characteristics as those in which the reference person

had between 1 and 3 years of education were food insecure and nearly 50% of households with similar characteristics as those in which the reference person completed grade 12 or less were food insecure. The differences are statistically significant.

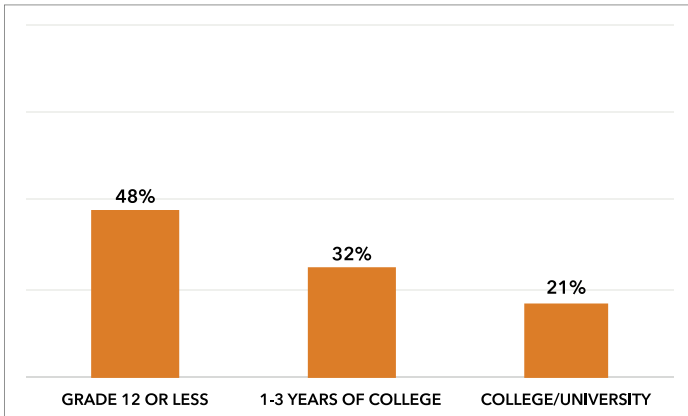


Figure 5: Food insecurity in households with reference persons with grade 12 or less, 1-3 years of college, or a degree from a college or university (weighted percents)

## Sexuality

Household food insecurity was estimated at 41% (95% CI:28-57%) for those in which the reference person identified as LGBTQIA+ as compared to 31% (95% CI:25-37%) for those in which the reference person did not. This difference of 10% was not statistically significant. Only 84 respondents identified as LGBTQIA+; 50 respondents answered do not know or prefer not to answer. As such, these numbers should be interpreted with caution, but are nonetheless consistent with the 2023 survey.

## Enrolled in College or University

In the sample, only 34 household reference persons were enrolled in college or university. Yet, food insecurity was much higher (58%, 95% CI:32-80%) for households with similar characteristics as those in which the reference person was enrolled in college or university, as compared to those in which the reference person was not enrolled in college or university (31%, 95% CI:26-37%). The difference was statistically significant despite the small number of respondents.

## Lives Alone

Household food insecurity was similar if the reference person lived alone (30%, 95% CI:22-39%) or did not (34%, 95% CI:27-41%). The difference between groups was not statistically significant.

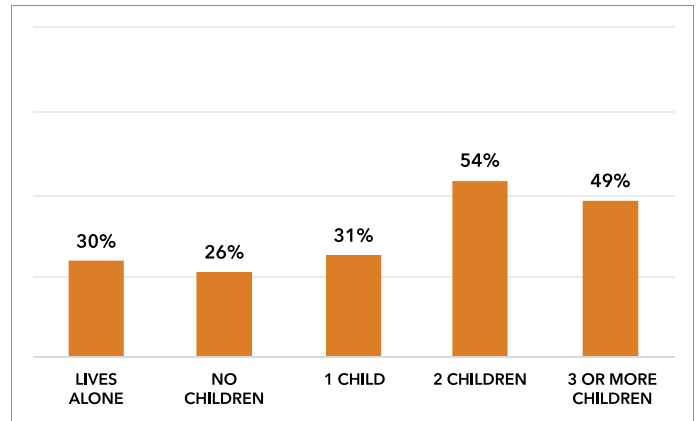


Figure 6: Household food insecurity by presence and number of children; percent values above each bar represent estimated food insecurity (weighted percents)

## Household composition

There may be differences in the vulnerability of households to food insecurity according to their compositions, such as the number of children or by the age/generational groups in households.

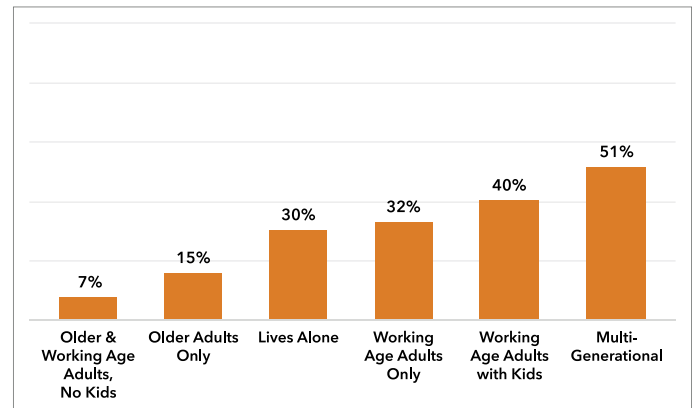


Figure 7: Household food insecurity by household composition; percent values above each bar represent estimated food insecurity (weighted percents)

## Households with Children

Figure 6 shows the estimated proportion of food insecure households by the presence and number of children in the household. The most vulnerable households are those with two or more children. Households with more than one person, but no children, were the least vulnerable. Comparatively, at 53.9% (95%CI: 35.9-71.0%), households with 2 children had more than twice the food insecurity as households with 2 or more adults, but no children (25.8%, 95%CI: 18.1-35.3%). The difference is statistically significant.

## Generational composition

Figure 7 presents the estimated household food insecurity for different household compositions, such as those with older adults only and those that are multigenerational (older adults with children, or older adults with working age adults and children). Households with a combination of older adults and working age adults were the least food insecure. The most food insecure were those with children, especially multigenerational households. **Again, these results underscore the vulnerability of households with children to food insecurity in Hawai'i.**

## Household Income

As expected, household food insecurity decreased as household incomes increased (figure 8). This is especially clear for those households earning \$110,000 or less. The weighted percentage of food insecure households was nearly 10% higher for those reporting \$110,000 to \$149,999 compared to those with incomes of \$90,000 to \$109,999. Household food insecurity then drops down again for higher income households. The uptick in food insecurity for those earning between \$100,000 to \$149,999 could reflect peculiarities of the sample for that income bracket. It could also reflect other factors, such as households that stretched their resources to purchase a home in one of the most expensive housing markets in the US and thus have limited disposable income for other expenses, including food. Alternatively, it could reflect household compositions and incomes that are just above cut-offs for federal benefits, such as lower cost housing.

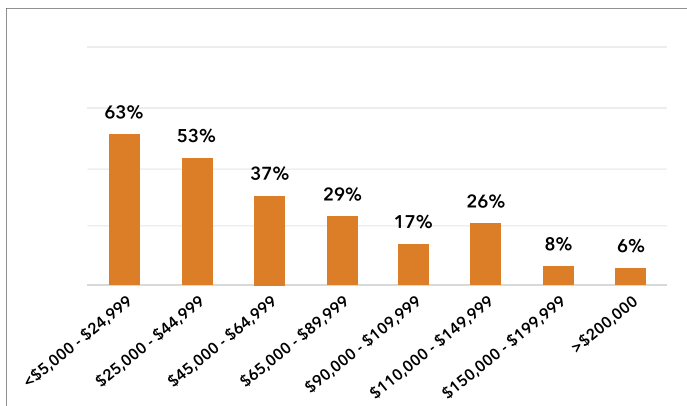


Figure 8: Household food insecurity by household income (weighted percents)

To examine each county individually, household income was categorized into two groups, less than \$90,000 and \$90,000 or more. Despite large differences in the percentage of food insecure households by county, the

percent among those earning more than \$90,000 was relatively similar for Honolulu, Hawai'i, and Maui counties (figure 9). Thus, while it is expected that lower income households are at greater risk of food insecurity, in Maui and Hawai'i counties in particular, where just over 40% of households in each county are food insecure, the vast majority of those food insecure households earn less than \$90,000 a year. In Kaua'i county, this observation is even more noticeable; food insecurity estimates for this county are being strongly driven by households with annual incomes less than \$90,000.

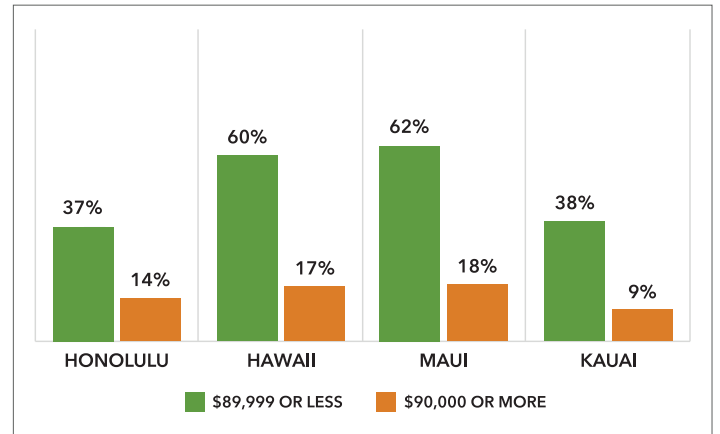


Figure 9: Household food insecurity by county and income grouping (weighted percents)

## Household member who ever served in U.S. Armed Forces

Survey respondents were asked if there was anyone in their household that had ever served on active duty in the U.S. Armed Forces. There was no difference in household food insecurity by whether or not there was a household member who had served in the armed forces, whether currently or previously.





# INSURANCE STATUS, SNAP, AND WIC

Food received from the charitable network, inclusive of the Hawai'i Foodbank, Maui Foodbank, and The Food Basket, can provide essential support to individuals and families without sufficient income to meet their food needs. Financial precarity often coincides with use of public benefits, to the extent that individuals and households are eligible. Understanding how food insecurity varies by public benefit use is important for identifying high risk populations. In the current context of significant cuts to the social safety net, this information is vital to plan for the expected increases in demand on foodbanks across the country.

## Primary source of health insurance

Most respondents in the sample (n=550) received insurance from their employer, followed by Medicare (n=304), Medicaid/MedQuest (n=100), a private plan (n=52), or another source including Tricare (n=52). Figure 10 shows the weighted percent estimates for the state based on this survey. As expected, food insecurity was highest in those households in which one or more persons were on Medicaid/MedQuest compared to all other categories of insurance. It was lowest among those on Medicare or receiving insurance from their employer. The percent values for those with private or another insurance type should be interpreted with caution as the numbers of individuals in these groups are relatively small.

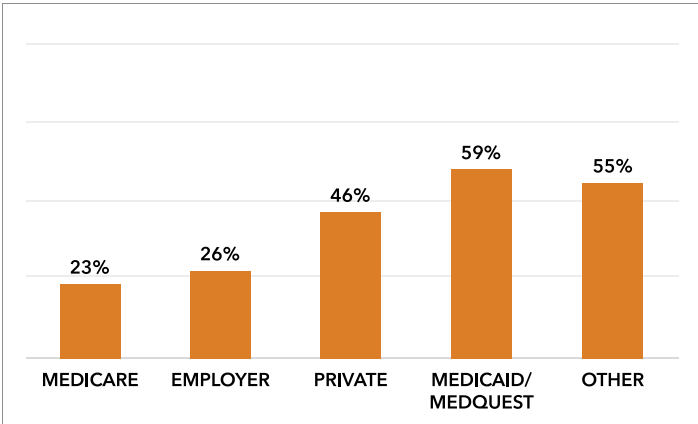


Figure 10: Household food insecurity by health insurance type (weighted percent)

## Temporary Assistance for Needy Families (TANF)

A relatively small number of respondents (n=41) were receiving TANF benefits. Unsurprisingly, weighted results indicated that those receiving TANF were significantly more likely to live in a food insecure household (79%) than those not receiving TANF (29%).



## Supplemental Nutrition Assistance Program (SNAP)

Respondents were asked a number of questions about SNAP benefits. The first question asked whether or not they applied for SNAP benefits. Accordingly, 91 respondents responded affirmatively and that they were currently enrolled. Another 61 respondents said they applied but were denied. Based on this survey, it can be estimated that about 16% of adults in Hawai'i applied for SNAP benefits between mid-2024 and mid-2025, with 11% receiving them. It is likely that many respondents in this survey considered recertification the same as an application. Assuming the latter, the estimated percentage of adults receiving SNAP benefits in Hawai'i, based on this survey, is congruent with results from other surveys (14% in 2022 according to BRFSS) (Hawaii Health Matters, n.d.). Importantly, there is a relationship between Medicaid and SNAP benefits. Of those respondents reporting Medicaid/MedQuest as their health insurance, 58% applied for SNAP benefits in the preceding year.

Food insecurity was very high in households in which the reference person applied or received SNAP (74.5%, 95%CI: 55.3-87.4%) and especially if the reference person reported denial of benefits (83.3%, 95%CI: 55.9-95.2%). Because the numbers reporting having applied for SNAP are relatively small, the confidence intervals around the estimated food insecurity percentages are quite wide, indicating a lack of precision for these estimates. Nonetheless, even with very large confidence intervals, the weighted percent estimate of household food insecurity among those who applied and were denied SNAP benefits indicates a significant gap in the social safety net.

### Barriers to applying to SNAP

The 152 respondents who reported having applied to SNAP between mid-2024 and mid-2025 were also asked to describe any barriers they may have experienced during the application process. Respondents could select more than one option. The most common barrier reported was long wait times, followed by

the application being too complicated, difficulty understanding the process, and challenges with getting transportation to the office. Respondents were allowed to write in barriers they experienced. Many described long wait times over the phone:

- Didn't answer phone - took days and hours to reach them! Connected over a month later!
- Office says our app got lost in the shuffle and we were cutoff for almost a month and I called for days from open to close, no answer, got disconnected, left messages and no response
- They only do online interviews but don't answer the phone

### Time to go through the SNAP application process

Respondents who applied and received SNAP benefits were asked how long it took from application submission to benefits in hand. The most common response was 1-2 weeks (40%), followed by 1-2 months (23%), 3-4 weeks (17%), and more than 2 months (6%). About 15% did not remember.

### Reason for denial of SNAP benefits

Respondents who reported having applied for SNAP benefits, but who were denied them, were asked the reason(s) for the denial. It is important to note that only a small proportion of the sample (6%) indicated they had applied for SNAP, but had been denied. The most common reason given for the denial was having too high of an income, followed by not being able to provide a verification document, not being able to complete an interview, and not being able to meet the work requirements.

### Reasons for not applying for SNAP benefits

All individuals who reported that they had not applied for SNAP benefits in the 12-month period assessed by this survey were asked why they did not do so (figure 11). Unsurprisingly, vast majority responded that they did not need governmental assistance and therefore did not apply for SNAP benefits. Only 6% of those reporting that they did not need food assistance were from food insecure households. In other words, those from food secure households are demonstrably aware that they are food secure.

Based on the weighted results, 37% percent of adults did not apply for SNAP benefits because they believed

themselves to be ineligible. Of those who did not apply for SNAP benefits because they believed themselves ineligible, 33% were from food insecure households as compared to 18% of those who did not list ineligibility as a reason for not applying to SNAP. This difference is statistically significant. It is likely that those people who cite being ineligible for SNAP benefits have had some experience with the program before. People with enough prior experience with the program to know eligibility requirements are ones that have sought SNAP assistance in the past.

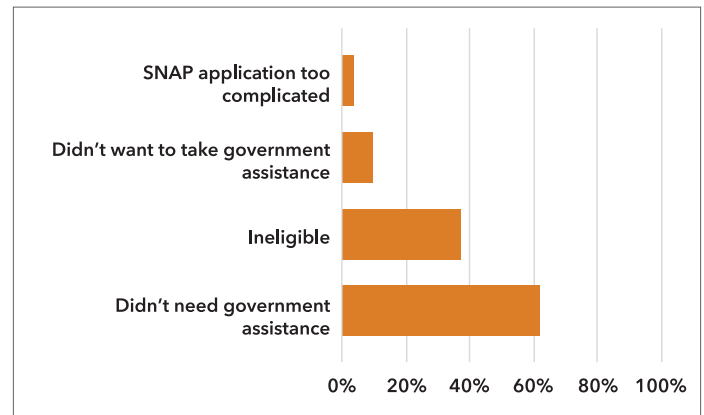


Figure 11: Common reasons for not applying for SNAP benefits (weighted percents)

### Special Supplemental Nutrition Program for women, infants, and children (WIC)

Survey respondents were asked, "In the past 12 months, did you or any member of your household receive benefits from...WIC". The overwhelming majority indicated that they had not, but 22 respondents indicated that they had and were currently enrolled, while 19 indicated that they had, but were denied. The primary reason for denial was having too high of an income. Because so few respondents indicated that they had applied to WIC during the survey assessment period, those who had applied and were enrolled and those who applied and were denied were grouped into a single category to assess the association between applying to WIC and food insecurity. Unsurprisingly, the vast majority of those households in which someone had applied to WIC during the 12-month assessment period were food insecure (83%, 95% CI: 61-94%).



## PUBLIC BENEFITS FOR HOUSEHOLDS WITH CHILDREN

A series of questions were asked of reference persons who indicated that they lived in households with children. These questions were focused on school and summer meals. For school meals, although eligibility for free or reduced-price lunch or breakfast is the same, not all families will use both programs. Based on data from this survey, 92% of respondents who indicated that children in their household ate a free or reduced-price breakfast at school also indicated that one or more children ate a free or reduced-price lunch. Of those who did not eat a free or reduced-price breakfast, 14%, however, did eat a free or reduced-price lunch. Overall, school lunches were accessed more than school breakfasts. Thus, we analyzed school lunches and breakfasts separately.

### Free or reduced-price lunch at school

One third of respondents who had children in the household reported that one or more of these children received a free or reduced-price lunch in the past month. When statistically weighted to be representative

of the population of the state, this equates to 41% of households with children. Food insecurity was significantly higher in households with children receiving free or reduced-price lunch than in households in which children did not receive free or reduced-price lunches (figure 12).

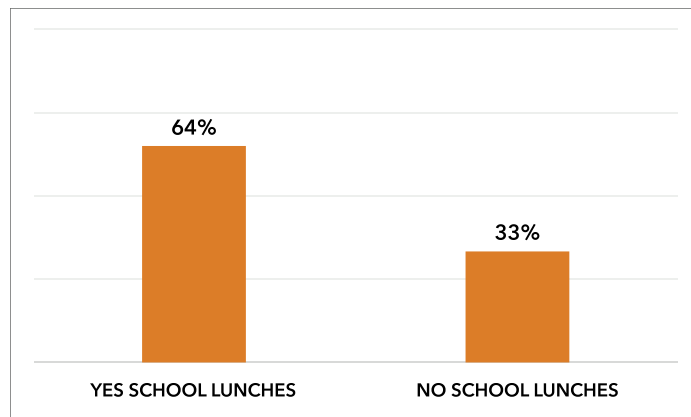


Figure 12: Household food insecurity, weighted percent, by children receiving free or reduced-price lunches compared to those not receiving them

## Reasons children in the household did not eat free or reduced-price lunches at school

If a reference person indicated that children in their household did not receive free or reduced-price lunches at school, they were asked why (figure 13). Unsurprisingly, the most common response was that the household income was too high to be eligible for free or reduced-price lunches at school. When this reason was compared by household food security status, there was no statistically significant difference. About a fifth of the reasons given were that the school did not offer free or reduced-price lunches, followed by not submitting an application, preferring to pack school lunches, and children not liking the school lunches. It should be noted that this question was not applicable to a number of respondents for reasons such as having very young children (<5) and homeschooling.

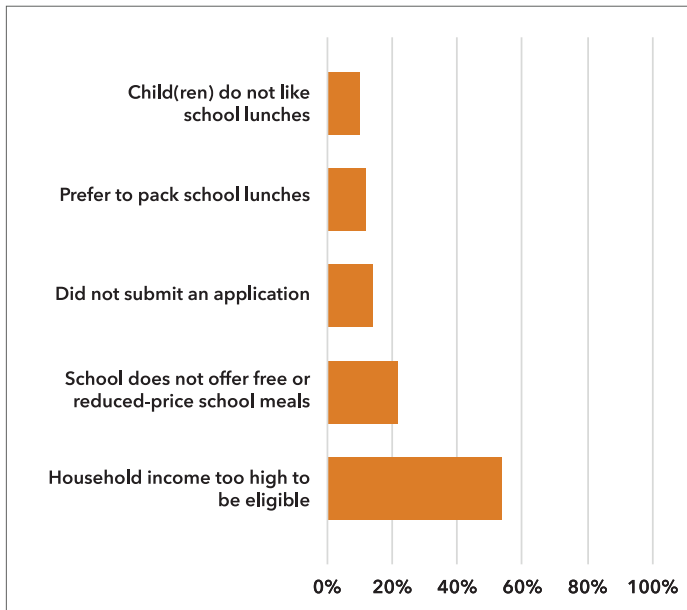


Figure 13: Reasons why children did not receive free or reduced-price school lunches, weighted percents

## Free or reduced-price breakfast at school

Twenty-nine percent of respondents who had children in the household reported that one or more of these children received a free or reduced-price breakfast in the past month. When statistically weighted to be representative of the population of the state, this equates to 31% of households with children. Food insecurity was significantly higher (76%) in households with children receiving free or reduced-price breakfast than in households in which children did not receive free or reduced-price breakfasts (figure 14). Households in which children receive free or reduced-price breakfasts appear particularly vulnerable.

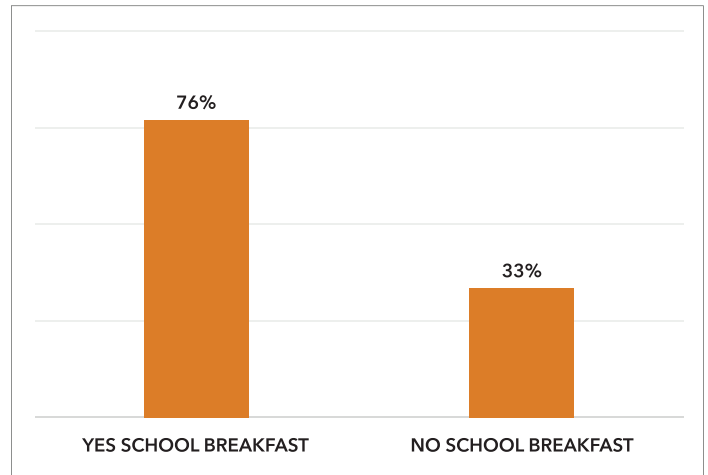


Figure 14: Household food insecurity, weighted percent, by children receiving free or reduced-price breakfasts compared to those not receiving them

## Reasons children in the household did not eat free or reduced-price breakfasts at school

If a reference person indicated that children in their household did not receive free or reduced-price breakfasts at school, they were asked why (figure 15). Like free school lunch, the most common response was that the household income was too high to be eligible for free or reduced-price breakfasts at school. When this reason was compared by household food security status, there was no statistically significant difference. It should be noted that this question was not applicable to a number of respondents for reasons such as having very young children (<5) and homeschooling.

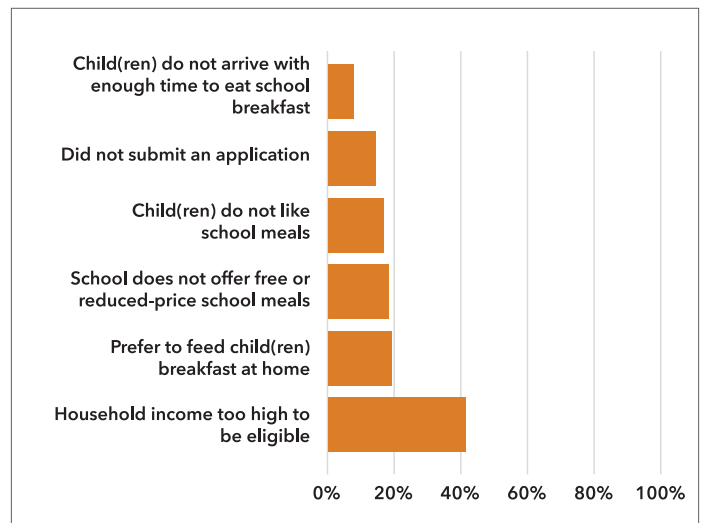
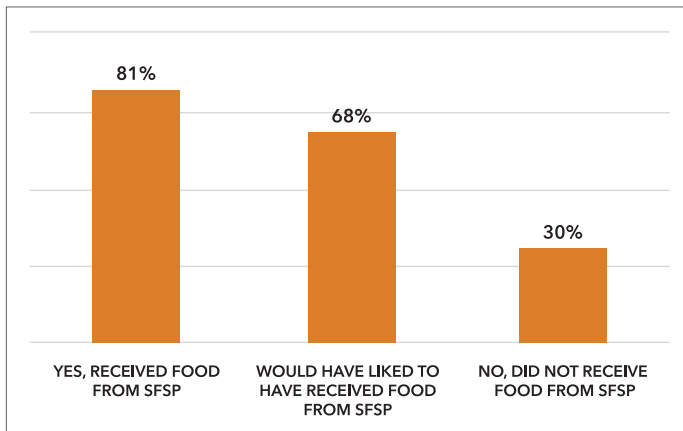


Figure 15: Reasons why children did not receive free or reduced-price school breakfasts, weighted percents

## Summer Food Support

Survey respondents were asked to think about the past summer and if any of their children received food through the Summer Food Service Program (SFSP). It was specified that this program included free meals at places such as their school, community center, library, church or Kaukau 4 Keiki. This question does not specify the frequency of use, nor if all children in the household used the program. Thus, an affirmative response to this question does not mean that all children in a household received food from this program, nor that the program was used daily.

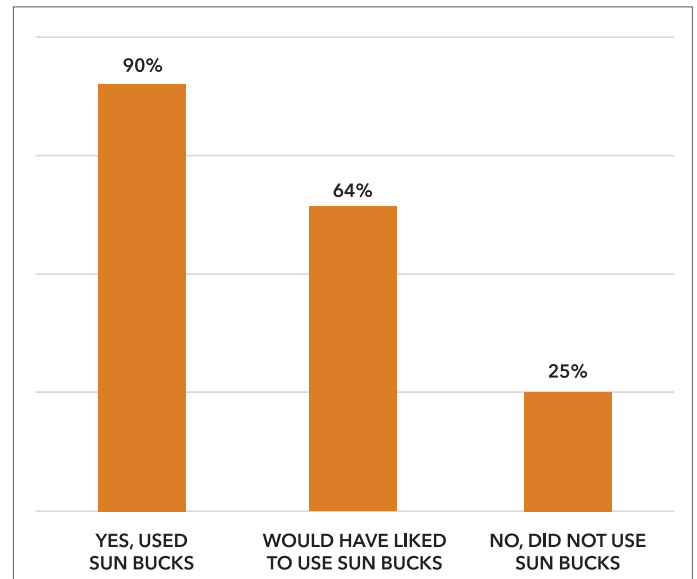


*Figure 16: Household food insecurity, weighted percent, by those who received free food from the Summer Food Service Program, those who would have liked to, and those who did not*



Of those reference persons that lived in households with children, 195 responded that they did not get food through this program, 38 indicated that it would have been helpful, and 48 indicated that they did receive food through the SFSP. When statistically weighted to be representative of the population of the state, this equates to 17% of households with children using the SFSP and another 17% indicating that they did not, but that it would have been helpful. Those who did not use the program resided in households that were much less likely to be food insecure than those who used the program, or thought it would have been helpful (figure 16). Numbers in each group were relatively small, so the estimates should be interpreted with caution.

Similarly, reference persons were asked if the household received benefits through the Summer-EBT program, or SUN Bucks, to help purchase food while the children were out of school. Of those respondents that lived in households with children, 194 responded that they did not get food through this program, 37 indicated that it would have been helpful, and 55 indicated that they did receive food through the SUN Bucks program. When statistically weighted to be representative of the population of the state, this equates to 21% of households with children using the SUN Bucks program and another 12% indicating that they did not, but it would have been helpful. Those who did not use the program resided in households that were much less likely to be food insecure than those who used the program or thought it would have been helpful (figure 17). Numbers in each group are relatively small, so the estimates should be interpreted with caution.



*Figure 17: Household food insecurity, weighted percent, by use of SUN Bucks, would have liked to have used SUN Bucks, and did not use it*



## USE OF CHARITABLE FOOD NETWORK

Respondents were asked questions to better understand if and the extent to which they use the charitable food network. The first question asked: *During the past 12 months, have you or anyone in your household gotten free groceries from a food pantry, food bank, school pantry or backpack program, church, or other place that helps with free food, because you needed food assistance? [Include any free food you plan to receive today when you answer.]*

Two-hundred respondents of the survey indicated that they or someone in their household had gotten free groceries from a food pantry, food bank or other place that helps with free food. Accordingly, based on weighted estimates, approximately 20% of households in Hawai'i used the charitable food network one time or more in the 12-month period assessed by the survey. Of those 20% of Hawai'i households that used the charitable food network, 7% of them did so only once or twice, 8% more than two times but less than 10, and 5% ten times or more. Unsurprisingly, there was a very strong association with household food insecurity. An estimated 81% (95%CI 69.2-88.8%) of households that used the charitable food network were food insecure; an additional 4% were categorized as having marginal food security.

Because several programs in Hawai'i target kūpuna food insecurity, charitable food network use was examined in this group specifically. Accordingly, based on weighted results, 20% of Hawai'i households with older adults used the network one time or more in the 12-month period assessed by the survey. Of these, 6% did so once or twice, 4% more than two times but less than 10, and 10% did so ten times or more. Food

insecurity in Hawai'i households with older adults that used the charitable food network was estimated at 70% (95%CI 43.1-87.7%). While high, this is 11% lower than for the population as a whole. Older adults who used the charitable food network did so more frequently than the population as a whole and lived in less food insecure households. This may indicate that efforts to target kūpuna food insecurity through the charitable food networks are having positive effects.

Respondents were also asked: *Did you or anyone in your household get a free meal or meals from a soup kitchen or shelter, because you needed food assistance? [Include any free food you plan to receive today when you answer.]*

Sixty-four respondents indicated they had received free meals from a soup kitchen or shelter. The weighted results indicate that approximately 9% of households in Hawai'i used a soup kitchen or shelter one time or more in the 12-month period assessed by the survey. Of the estimated 9% of households in Hawai'i in which one or more persons used a soup kitchen or shelter, 3% did so only once or twice, 5% more than twice but less than 10 times, and 2% ten times or more. Unsurprisingly, there was a very strong association with household food insecurity. An estimated 89% (95%CI 71.4-96.2%) of households in which one or more persons used a soup kitchen or shelter between mid-2024 and mid-2025 were food insecure. It should be noted that only 13 respondents indicated that they used a soup kitchen or shelter, but were also categorized as food secure; 5 of these were categorized as marginally food secure.



# DISASTER PREPAREDNESS

This section asked a number of questions to assess disaster preparedness. These responses are important for planning purposes in the case of a serious disaster that would place pressure on the state’s charitable food network. The massive July 29th, 2025 earthquake in Russia and resulting tsunami that threatened Hawai’i were potent examples and reminders of the importance of such information to the charitable food network. Had the tsunami resulted in a serious disaster, especially one that prevented access to grocery stores or shipping vessels from bringing food to the islands, foodbanks across Hawai’i would have had a significant role in feeding the population.

The Hawai’i Foodbank, Hawai’i Foodbank Kaua’i, Maui Food Bank, and The Food Basket sought to quantify perceptions of being prepared for a disaster, as well as reasons why households might not be prepared. A better understanding of these reasons may help to direct efforts to increase disaster preparedness.

## Reasons for not being prepared

Respondents were provided a list of reasons that might prevent them from being prepared for a disaster. This list does not necessarily mean the respondent was unprepared, but rather reflects their perceptions of reasons they may or may not be prepared. **Only 15% of Hawai’i adult residents feel prepared for a disaster.** This is particularly true for food insecure households, of which only 6% appear to feel prepared. In contrast, 21% of food secure households feel prepared for a disaster based on the responses of the reference person who was surveyed. Common reasons given for not feeling prepared are presented in Figure 18.

- Based on the survey results, a lack of financial resources negatively affects 28% Hawai’i residents’ preparedness. A lack of financial resources is a very significant concern for Hawai’i households with food insecurity. An estimated 62% of food insecure households experience a lack of financial resources as an important barrier to disaster preparedness; in comparison, about 8% of food secure households face this as a barrier.
- A lack of knowledge about what specific supplies are needed may be a barrier to 20% of Hawai’i residents. Food insecure households appear disproportionately uncertain about which supplies are needed. Results suggest that 30% of food insecure households do know what supplies are needed as compared to 17% of households that are food secure. These results are concordant with a related question the survey, with 19% of Hawai’i residents potentially lacking information about recommended emergency preparedness supplies.
- A lack of household storage space appears to be an important barrier to having sufficient emergency preparedness supplies. An estimated 39% of Hawai’i residents experience this as a barrier to disaster preparedness. This reason for not feeling prepared for a disaster did not differ by food security status.
- A lack of time to prepare is a barrier for about 14% of Hawai’i residents. This appears to be a bigger concern for food insecure households (20%) than food secure ones (11%).
- Just over a quarter (26%) of Hawai’i residents do not think much about disaster preparedness. This sentiment was higher among those who resided in food secure (32%) than food insecure (13%) household.

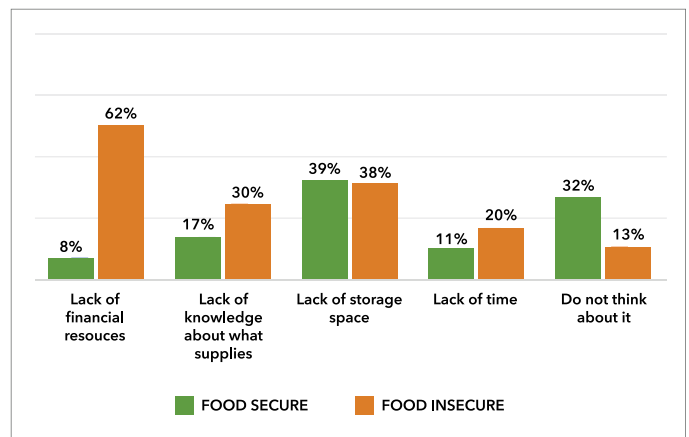


Figure 18: Hawai’i residents experiencing different types of barriers to disaster preparedness, for food secure and insecure households (weighted percents).



# GROWING, RAISING OR HARVESTING FOOD

## Food grown, raised, hunted by household

Many individuals in Hawai'i grow, raise, hunt and/or fish for food. The reasons for engaging in these activities can differ for individuals and groups. Some may hunt or fish for recreation, while others may grow their own food for health or environmental reasons. Others may engage in these activities to supplement the foods they can buy at retail stores, because they lack sufficient financial resources to purchase enough food. This survey sought to quantify the percent of Hawai'i households that engaged in growing fruits and vegetables, keeping and raising livestock, hunting and fishing for food. It was specified that these activities had to be an important source of food for the household during the 12-month period assessed by the survey. Results from these questions are presented below.

- Growing fruits and vegetables at home is common in Hawai'i, with an estimated 23% of the households doing so in order to provide an important source of food for the household. There was little difference in the proportion of Hawai'i households that grow fruits and vegetables at home according to food security status.
- About 7% of Hawai'i households keep livestock, such as chickens, at home, as an important source of food. Those residing in food insecure households (15%) were nearly four times more likely to keep livestock than those in food secure households (4%). This was a statistically significant difference.
- Hunting as an important source of food for the household is relatively uncommon; an estimated 4% of Hawai'i households engage in this activity to provide a meaningful amount of food for

their household. Hunting for food to support the household was more common in food insecure households (7%) than secure ones (2%).

- An estimated 8% of Hawai'i households used fishing as a means to provide an important source of food for the household. Similar to raising livestock and hunting for food, fishing to provide food for the household was more common in food insecure Hawai'i households (17%) than food secure ones (5%).
- About 70% of Hawai'i households did not engage in any of these activities in a way that provided an important source of food for the family. An estimated 22% of households engaged in one of these activities and 9% in two or more. This varied markedly and statistically significantly by food security status (figure 19).

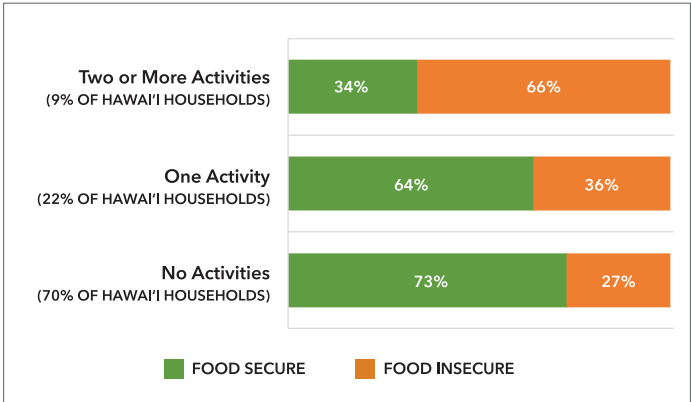


Figure 19: Percent of households that engage in one or more activities such as growing, harvesting, or hunting foods by food security status and number of activities (weighted percents)

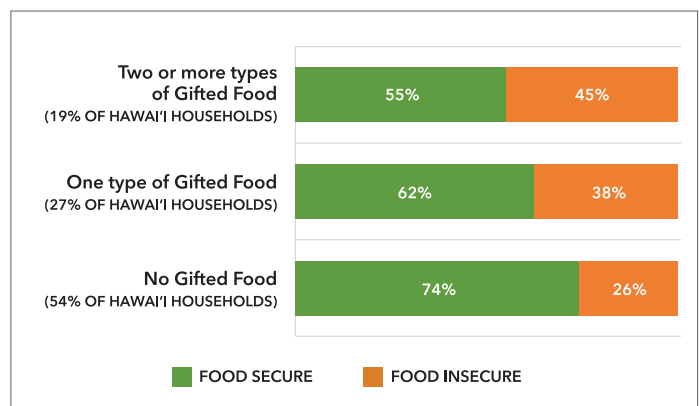


## Food received as gifts from others

Food sharing networks in Hawai'i are important (Grafeld et al. 2017). There are households in the state that may depend partially or entirely on support from families, friends, and neighbors for food. Those who cultivate their own food, or hunt or fish for it may share with others, especially those in need. Thus, the survey asked respondents about gifts they received in the past 12 months, from someone outside of their household, that was an important source of food for their household. The results are presented below confirm the importance of sharing networks across the state.

- Over a third (37%) of households across the state benefit from gifts of fruits and vegetables that served as important sources of food for their households. When examining gifts of fruits and vegetables by food security status, there was no statistically significant difference between groups. This lack of statistically significant association between food secure and insecure groups with regard to receiving gifts of fruits and vegetables is similar to the results above describing the engagement in this activity by members of the household itself.
- An estimated 9% of households benefitted from gifts such as chicken, eggs, duck, beef that were raised by others. This was significantly higher for food insecure households (15%) as compared to food secure ones (7%).
- Ten percent of Hawai'i households received an important part of their food in the form of gifts that were hunted, such as venison. At 19%, this was much higher for food insecure households compared to food secure households (6%). The results pertaining to gifts of food such as chicken, eggs, or hunted items like venison mirror those describing activities engaged in by members of the household itself.

- The survey results indicate that about one in five households (17%) in the state received fish from those who are not a part of their household and the gifted fish was an important source of food for them. There was no statistically significant difference by food security status.
- Just over half (54%) of Hawai'i households did not receive gifts of these items—fruits, vegetables, chicken, eggs, venison, fish, etc.—that were significant enough to be described as important sources of household food. About a third of households (27%) benefit from gifts related to one of these food types and 19% benefit from gifts related to two or more of these food types. The importance of these gifts differed significantly by food security status (figure 20).



*Figure 20: Percent of households that benefit from gifts such as fruits and vegetables, those raised at home such as chicken, and/or hunting foods or fish by food security status and number of types of gifted foods (weighted percents)*

## HEALTH STATUS

A number of health-related questions were asked of those completing the survey. These questions sought to ascertain if there were associations between the reference person's health and their household food security status. These analyses build on other work in Hawai'i documenting associations between food insecurity and chronic health conditions (Stupplebeen et al., n.d.). Chronic health conditions may contribute to food insecurity for many reasons. For example, they may contribute to mobility limitations that prevent people from going to the store to get food and/or they may be so costly that households must make difficult decisions such as whether to pay for care or purchase food. On the other hand, experiencing food insecurity may contribute to poor health, such as through anxiety and depression or negatively affecting the variety and quality of foods in ways that can make people sick.

The health conditions presented below were selected based on the eligibility criteria for a temporary Medicaid waiver. This waiver is intended to provide nutritional support through Medicaid funding to eligible members with diet-related health conditions. When interpreting the results, the health conditions reported reflect those of the reference person, while the outcome, food insecurity, reflects the household. When possible, the prevalence of the health conditions assessed are compared to the BRFSS estimates for Hawai'i.

## Heart Conditions

The survey asked the respondents if a doctor had ever told them that they had hypertension, a heart attack, coronary heart disease, angina, congestive heart failure, or another heart condition. It also asked about high cholesterol/dyslipidemia.

Based on the survey's weighted results, an estimated 36% of the adult population of Hawai'i had hypertension. This estimate is very close to the 2023 estimate by BRFSS at 32% of adults in Hawai'i (Hawaii Health Matters 2023). Household food insecurity was similar for those reporting hypertension (33%) as compared to those reporting no hypertension (32%).

There were 85 respondents who reported a heart attack, coronary heart disease, angina, congestive heart failure, or another heart condition. When extrapolated to the state, this is 6% of adult residents. Household food insecurity was similar for those reporting these conditions (38%) as compared to those not reporting these conditions (32%). The difference was not statistically significant.

A third of respondents reported high cholesterol/dyslipidemia, which translates to about 32% of the adult population of the state when applying the sample weights. This estimate is similar to the 2023 estimate by BRFSS at 38% of adults in Hawai'i. Interestingly, food insecurity was estimated to be higher in households in which the reference person did not report high cholesterol/dyslipidemia (35%) than in households in which the reference person did report one of these conditions (26%). Again, the difference was not statistically significant.

## Diabetes

One hundred and fifty-one respondents reported that a doctor had told them they had type II diabetes. Extrapolated to the state, this is 13% of the adult population. This estimate is similar to the 2023 estimate by BRFSS at 11% of adults in Hawai'i. There was no



statistically significant difference in household food security by the diabetes status of the respondent (37% among those with diabetes and 32% among those without it).

## Anxiety and Depression

Anxiety and depression were prevalent in this sample, with 208 (21%) respondents reporting that a doctor had diagnosed them with one or both of these conditions. Extrapolated to the state, this is about a quarter of the adult population. The reference person was significantly more likely to report having been diagnosed by a doctor with anxiety or depression if they were in a food insecure household (37%) compared to a food secure household (20%, see figure 21).

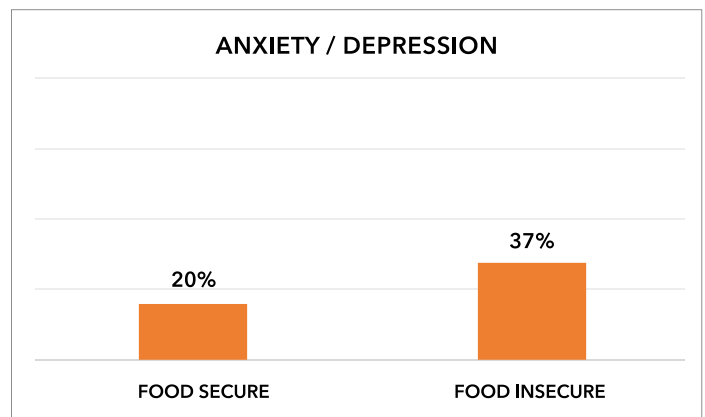


Figure 21: Proportion of adults in Hawai'i estimated to have anxiety or depression according to household food insecurity status (weighted percents)

## Overweight and Obese

Overweight and obesity were common with a quarter of the sample reporting that a doctor had told them that they had either of these. Extrapolated to the state's adult population, this is 23%. There was no association between a reference person being overweight or obese and household food insecurity.

## Gastrointestinal Problems

Ten percent of the sample reported that a doctor had told them they had gastrointestinal problems. Extrapolated statewide, this is about 11% of adults. The reference person was significantly more likely to report having been diagnosed by a doctor with gastrointestinal problems if they were food insecure (17%) compared to food secure (8%, see figure 22).

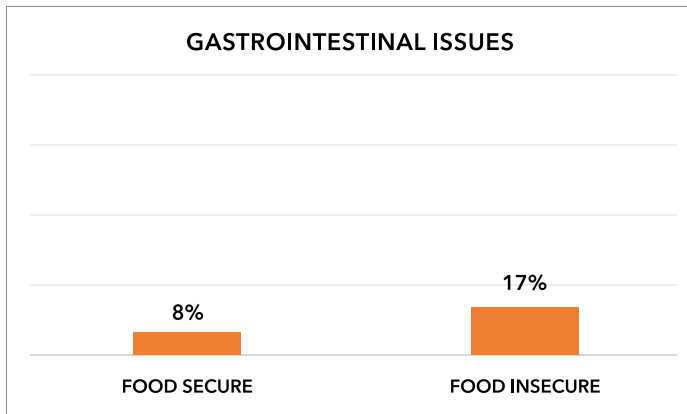


Figure 22: Proportion of adults in Hawai'i estimated to have gastrointestinal problems according to food security status (weighted percents)

## Lung Disease

Seventy respondents (7% of sample) reported some form of chronic lung disease, such as chronic bronchitis, emphysema, or asthma. Extrapolated statewide, the estimate is 8% of the adult population. While weighted estimates of household food insecurity were higher if the reference person had chronic lung disease (44%), the difference between this group and those not reporting chronic lung disease (31%), was not statistically significant. This may have been due to the relatively few respondents reporting chronic lung disease.

## Food allergies and eating disorders

Very few respondents—about 2% of the sample—reported food allergies (n=24) and eating disorders (n=19). As such, analysis of these numbers was not performed.

## Cumulative Chronic Conditions

The number of reported chronic conditions for each respondent can be summed in order to capture data on individuals with multiple conditions. Among those who resided in food insecure households between mid-2024 and mid-2025, it was estimated that a greater proportion

of them had four or more health conditions than those who resided in food secure households. Likewise, those residing in food insecure households were less likely to have no doctor-diagnosed health conditions than those residing in food secure households (Figure 23). However, the results were not statistically significant, likely due to small numbers of respondents in each group.

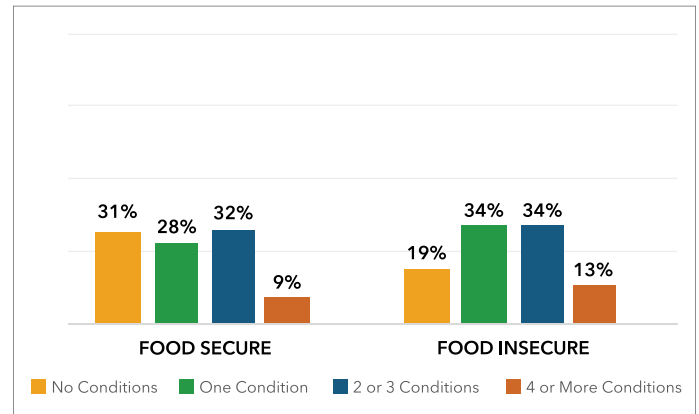


Figure 23: Estimated percentage of the number of health conditions according to food security status (weighted percents).

## Health conditions or concerns that prevented going to the store

Survey respondents were asked if they had health conditions or concerns that prevented them from going to the store for food. These included mobility limitations, breathing difficulties, mental health conditions, fear of falling, safety concerns, other unspecified concerns. Those reference persons residing in food insecure households were significantly more likely to report health conditions or concerns that prevented them from going to the store for food, as compared to those residing in food secure households (figure 24).

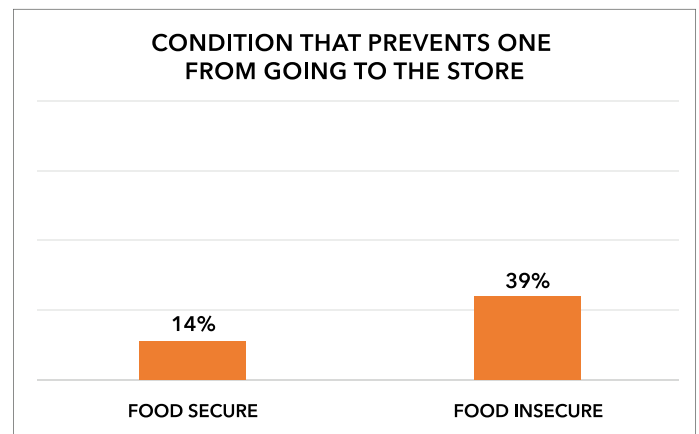


Figure 24: Proportion with health concerns that prevents a person from going to the store for food according to food security status (weighted percents)



For each of the specific health conditions asked about in the survey, such as mobility limitations or fear of falling, the number of respondents indicating these conditions/concerns was fairly small. Mobility limitations were the most common, with 62 respondents indicating they had mobility issues that made it hard for them to get around and go places. This extrapolates to about 6% of the adult population of Hawai'i.

Household food insecurity was higher for those reporting mobility issues than not, but the difference was not statistically significant. For all other conditions or concerns, food insecurity was higher among those reporting these than those not reporting these and, in some cases, –breathing difficulties, safety, and unspecified concerns--the results were statistically significant. However, the numbers of respondents reporting these individual conditions and concerns were very small and the results are not presented. When considered overall, the results provide evidence that health conditions and/or concerns that limit mobility in the community, specifically going to the store to get food, likely contribute to food insecurity.

**Time travelled to get food**

Respondents were asked to report approximately how much time per week they spent travelling to get a week's worth of food for the household (less than 30 minutes, 30 minutes to 1 hour, 1-2 hours, 3 or more hours). There was no association between travel time and food insecurity. Household food insecurity values varied from 29% (lowest estimate) for those who travelled 1-2 hours per week to 36% (highest estimate) for those who travelled 30 minutes or less per week. The other categories of times fell in between these two estimates.

**Delaying or skipping filling prescriptions, going to the doctors, or getting recommended care**

There was a statistically significant association between having ever delayed or skipped filling a prescription, going to the doctors, and getting a recommended medical test or procedure to save money and household food insecurity. Those residing in food insecure households were estimated to be much more likely to delay or skip medical treatment or care than those from food secure households (figure 25). This association was statistically significant.

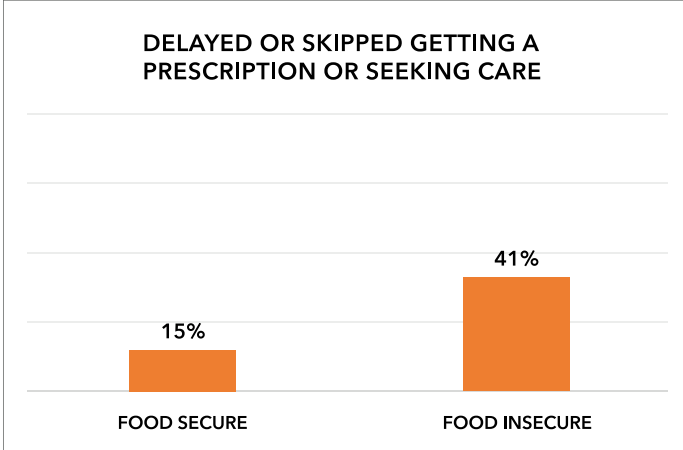


Figure 25: Delaying or skipping medical treatment or care according to food security status (weighted percents)



# RESOURCES FOR GETTING FOOD WHEN IN NEED

Respondents to the survey were asked if they knew a place in their community where they could get free groceries or meals if they needed it. Based on the weighted survey results, 49% of Hawai'i residents were aware places in their community where they could get free food when in need. Results differed strongly by county with far more awareness in Kaua'i than in Honolulu County, for example (figure 26). Statewide, there was no difference in knowledge of where to go for free groceries or meals and household food security status. In Maui County, while not statistically significant at alpha 0.05, individuals living in food insecure households were notable less likely to know where to get free food or meals (58%) than individuals living in food secure households (76%). The situation in Maui County may be unique because so many people needed and used food assistance after the Lahaina fires, and use of these resources may have contributed to food security in some households. Similar large differences in knowledge of where to go and food security status were not observed for the other counties.

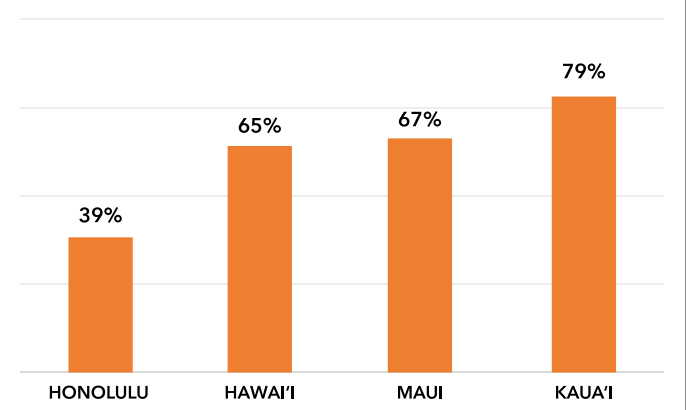


Figure 26: Respondent awareness of where to get free groceries or meals if they needed it (weighted percents)

Respondents were also asked how comfortable they would feel getting free groceries or meals from a food pantry or other place in the community that helps with free food, should they need help getting food for their household. Based on the weighted survey results,

an estimated 9% of Hawai'i residents were not at all comfortable, 26% not too comfortable, 36% somewhat comfortable, and 30% very comfortable. There were notable differences by county (figure 27). Those in Kaua'i County and Maui County appear the most comfortable with getting free meals or groceries from the charitable food network if they needed help for their household, as compared to residents of Honolulu and Hawai'i Counties. For example, when examining the responses "somewhat" or "very comfortable" together; 70% of residents of Maui and Kaua'i Counties were either somewhat or very comfortable getting free food or groceries from the charitable food network, while 65% of Honolulu residents and 62% of Hawai'i County residents were either somewhat or very comfortable.

Statewide, comfort level with seeking free groceries or meals was not associated with household food security status. Because there were four response categories, the numbers of respondents by county were too few to analyze comfort level by food insecurity status.

Finally, respondents were asked why they answered the way they did to the question, "If you needed help getting food for your household, how comfortable would you feel getting free groceries or meals from a food pantry or other place in your community that helps

with free food?" This was an open-ended question in which respondents could write in their answers.

For those who responded that they were not at all comfortable, many cited shame or embarrassment as reasons why. Judgement by others was highlighted, "Afraid of being judged because I do not look "in need" and I drive a (old and used) Lexus." Many mentioned their pride, especially about self-sufficiency and independence. Some cited concerns that they would be taking from others in even more need: "Proud. I'm usually the one helping and being on the other end is hard. I say, there are people that need the help more than me."

At the other extreme, a number of those who stated they would feel very comfortable indicated familiarity with food banks, for example, "I used to volunteer at the Food Bank" and "The church I attend works with the Food Bank every first Saturday of the month and we hand out food to feed 300 families. I have gotten food for families I know that need help." Others indicated they currently needed the help or have needed the help in the past, "I've done it in the past when my kids were little and we were poor. I work at a school and we hand out food to the families there. My son has benefitted as well" or "We've been doing it for a long while, we don't have a choice."

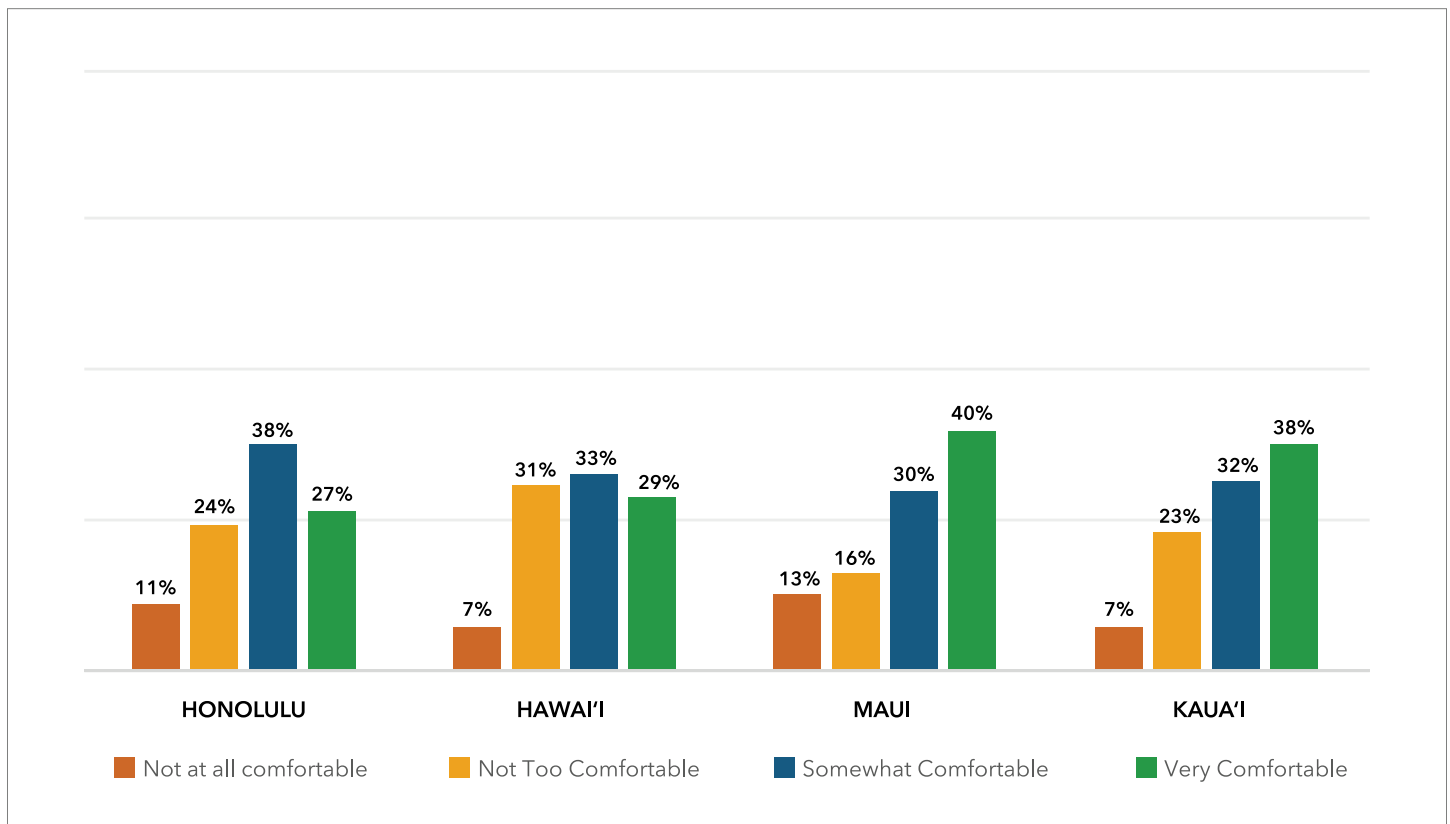


Figure 27: Comfort level with getting free groceries or meals if household needed them, by county (weighted percents)



## CONCLUSION

In 1996, the US signed the Declaration of Rome at the 1996 International Food Summit. In doing so, it pledged to reduce hunger, in each of its jurisdictions, by at least half (Bickel et al. 2000). More recently, in 2022, the first White House Conference on Hunger, Nutrition, and Health took place in more than 50 years. This Conference developed an agenda to achieve the goal of ending hunger in the US (Fleischhacker et al. 2025). The latter responded to an unsettling trend of increasing food security in the US, with the estimates from 2023 being statistically significantly higher than those of the preceding three years (Fleischhacker et al. 2025).

There is also evidence in Hawai'i of food insecurity increasing over time. In 2018, statewide food insecurity was estimated at 22% ST. This report and the one preceding it (Hawai'i Foodbank 2024) obtain estimates of around a third of households in the state experiencing food insecurity at least once in the 12 months prior to survey administration. Several other estimates in Hawai'i

between 2018 and 2023 paint a picture of increasing statewide food insecurity over time (Pirkle and Sentell 2020; 2021; Barile et al. 2021; Juarez, Bond-Smith, et al. 2025; Aloha United Way et al. 2025). There are important limitations to the various surveys conducted prior to those commissioned by the Hawai'i Foodbank in 2023 and the Hawai'i Foodbank, Hawai'i Foodbank Kaua'i, Maui Food Bank, and The Food Basket in 2024; most notably, none of them used the US-HFSSM, which is the gold standard assessment tool.

The Hawai'i Foodbank, Hawai'i Foodbank Kaua'i, Maui Food Bank, and The Food Basket are committed to providing high quality estimates of food insecurity statewide in order to guide their programmatic efforts and to evaluate program successes and shortcomings. The 2023 State of Food Insecurity in Hawai'i report (Hawai'i Foodbank 2024) and this current report are demonstrations of that commitment. Unfortunately, the results of both surveys, which use the gold standard US-



HFSSM, demonstrate that household food insecurity in Hawai'i is unacceptably high and may be tracking in the wrong direction. Specifically, statewide food insecurity may be increasing in households with children.

Continued statewide monitoring of food insecurity is essential for identifying needs and adapting food support programs to meet community needs. However, with a third of the population of the state experiencing food insecurity, as least once in the prior year, monitoring and adaptation of programs are insufficient for addressing the problem.

Structural solutions are essential for reducing food insecurity in Hawai'i. Critically, Hawai'i is the mostly costly state in the US to live, with salaries incongruent with the elevated costs of living in the state (World Population Review, n.d.; "Cost Of Living By State Statistics & Trends In 2023 - Forbes Advisor," n.d.). This reality is captured in the 2025 ALICE report, which aims to capture financial hardship using indicators of household costs and income (United for ALICE, n.d.). An estimated 45% of households in Hawai'i are below the ALICE threshold for financial hardship. This means they are forced to make deeply challenging choices such as whether to buy food or fill a prescription (United for ALICE, n.d.). Results from this report on food insecurity in 2024/25 already show that households are making such decisions. Food insecure households were much more likely than their food secure counterparts of skip important medical appointments or to fill prescriptions.

A strong social safety net is an essential component to statewide and national food security. Programs like SNAP and WIC protect families in need and provide a buffer against food insecurity, such as when a household member loses a job or medical bills are high. Research

suggests that individuals who receive SNAP benefits have better health and lower rates of food insecurity than those who are eligible, but do not receive these benefits (Rae 2025). Unfortunately, the megabill passed by Congress on July 4, 2025 will result in the largest cut in funding to SNAP in its history (Center on budget and policy priorities 2025). Similarly, this same bill will cut federal health program spending by more than \$1 trillion over the next decade, with nearly 80% of this spending cut coming from Medicaid. These are the largest cuts to federal support for health programs in US history (Rae 2025). This combination of cuts to SNAP and health programs, especially Medicaid, will amplify risks to the most vulnerable populations, by greatly reducing access to food assistance and essential health coverage (Rae 2025). Based on the results of this survey of food insecurity in Hawai'i, and the 2023 report, those most at risk are families with children. Given the already very high levels of food insecurity in the state and the especially heavy burden on households with children, current cuts in the federal social safety net will undoubtedly result in more food insecure households in the state and place more demands on schools and the charitable network to support those most in need.

Unfortunately, cuts to social safety net programs like SNAP and Medicaid are being intensified by federal funding cuts affecting philanthropic social support mechanisms like the charitable food network. The Kaiser Family Foundation reports that food bank managers across the US have struggled with rising demand since the covid-era emergency SNAP benefits ended two years ago and food prices have increased (Rodriguez 2025). Recent federal funding cuts to food distribution programs are compounding the challenges facing foodbanks (Rodriguez 2025). For example, in March 2025, the US Department of Agriculture cut \$500 million from the Emergency Food Assistance Program. This program buys food from domestic producers and sends it to foodbanks nationwide (Rodriguez 2025).

The Hawai'i Foodbank, Hawai'i Foodbank Kaua'i, Maui Food Bank, and The Food Basket are facing the same challenges as those nationwide as they struggle with unprecedented demand (Hawai'i Appleseed, n.d.). They are currently serving the same numbers of people as during the height of the pandemic and twice as many people as prior to the pandemic (Hawai'i Appleseed, n.d.). The steep cuts to Medicaid will drive many local families to poverty as they struggle to cover health expenses, while the cuts to SNAP will restrict access to vital food support when it is most needed. It is inevitable in the current context that demand for support from the charitable food network will increase. Meeting those needs will require innovative local solutions and partnerships.

# BIBLIOGRAPHY

- Aloha United Way, United for ALICE, and Financial Health Network. 2025. Alice in Hawai'i: 2024 Facts and Figures. <https://www.auw.org/about/alice-initiative/alice-reports/>.
- Barile, Jack, Omar Bird, Brad Nakamura, Anna Pruit, Yan Yan Wu, and Wei Zhang. 2021. Addressing Hunger & Food Insecurity among Hawai'i's Families. Prepared for the College of Social Sciences, University of Hawai'i at Mānoa, and First Insurance Company of Hawai'i. [https://drive.google.com/file/u/0/d/1e3MkhACuaFYxULdsfwx56Jp1psCMAm4t/view?pli=1&usp=embed\\_facebook](https://drive.google.com/file/u/0/d/1e3MkhACuaFYxULdsfwx56Jp1psCMAm4t/view?pli=1&usp=embed_facebook).
- Bickel, Gary, Mark Nord, Cristofer Price, William Hamilton, and John Cook. 2000. Guide to Measuring Household Food Security, Revised 2000. Measuring Food Security in the United States: Reports of the Federal Interagency Food Security Measurement Project. U.S. Department of Agriculture, Food, and Nutrition Service. <https://fns-prod.azureedge.us/sites/default/files/FSGuide.pdf>.
- Center on budget and policy priorities. 2025. "By the Numbers: Harmful Republican Megabill Takes Food Assistance Away From Millions of People | Center on Budget and Policy Priorities." May 19. <https://www.cbpp.org/research/food-assistance/by-the-numbers-harmful-republican-megabill-takes-food-assistance-away-from>.
- Committee on World Food Security. 2012. Global Strategic Framework for Food Security and Nutrition. First Version. Rome, Italy. <https://www.fao.org/3/ME498E/ME498E.pdf>.
- "Cost Of Living By State Statistics & Trends In 2023 - Forbes Advisor." n.d. Accessed February 5, 2024. <https://www.forbes.com/advisor/mortgages/cost-of-living-by-state/>.
- Fleischhacker, S, Kuman Chandran, Caree Cotwright, et al. 2025. "Progress to Implement the National Strategy on Hunger, Nutrition, and Health at the US Department of Agriculture." *Nutrition Today* 60 (1): 10-19. <https://doi.org/10.1097/NT.0000000000000726>.
- Food and Agriculture Organization (FAO). n.d.-a. "Right to Food." Right To Food. Accessed September 8, 2025. <https://www.fao.org/right-to-food/en>.
- Food and Agriculture Organization (FAO). n.d.-b. "USA | The Right to Food around the Globe." Accessed September 8, 2025. <https://www.fao.org/right-to-food-around-the-globe/countries/usa/en/>.
- Grafeld, Shanna, Kirsten L. L. Oleson, Lida Teneva, and John N. Kittinger. 2017. "Follow That Fish: Uncovering the Hidden Blue Economy in Coral Reef Fisheries." *PLOS ONE* 12 (8): e0182104. <https://doi.org/10.1371/journal.pone.0182104>.
- Hawai'i Appleseed. n.d. "Four Hawaii Nonprofits Receive Investments as SNAP Cuts Loom." Accessed September 13, 2025. <https://hiappleseed.org/in-the-news/four-hawaii-nonprofits-receive-investments-as-snap-cuts-loom>.
- Hawai'i Foodbank. 2024. The State of Food Insecurity in Hawai'i. <https://hawaiifoodbank.org/food-insecurity/>.
- Hawaii Health Matters. 2023. "Indicators: Adults with High Blood Pressure in Hawaii (2023)." <https://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=253&localeId=14>.
- Hawaii Health Matters. n.d. "Indicators: Adults Who Receive Food Stamps or SNAP in Hawaii (2022)." Accessed September 11, 2025. <https://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=14881&localeId=14>.
- Juarez, Ruben, Daniela Bond-Smith, Carl Bonham, et al. 2025. Hawai'i's Health and Wellbeing Journey over Time: Monitoring Equity and Access. UHERO: The Economic Research Organization at the University of Hawai'i. <https://uhero.hawaii.edu/wp-content/uploads/2025/05/HawaiisHealthAndWellbeingJourneyOverTime.pdf>.
- Juarez, Ruben, Krit Phankitnirundorn, Samia Valeria Ozorio Dutra, Daniela Bond-Smith, Alison G. Lee, and Alika K. Maunakea. 2025. "Health and Social Support in the Aftermath of the Maui Wildfires." *JAMA Network Open* 8 (8): e2525430. <https://doi.org/10.1001/jamanetworkopen.2025.25430>.

- Leung, Cindy W., and June M. Tester. 2019. "The Association between Food Insecurity and Diet Quality Varies by Race/Ethnicity: An Analysis of National Health and Nutrition Examination Survey 2011-2014 Results." *Journal of the Academy of Nutrition and Dietetics* 119 (10): 1676-86. <https://doi.org/10.1016/j.jand.2018.10.011>.
- Long, Christopher R., Brett Rowland, Pearl A. McElfish, Britni L. Ayers, and Marie-Rachelle Narcisse. 2020. "Food Security Status of Native Hawaiians and Pacific Islanders in the US: Analysis of a National Survey." *Journal of Nutrition Education and Behavior* 52 (8): 788-95. <https://doi.org/10.1016/j.jneb.2020.01.009>.
- Marques, Emanuele S, Michael E Reichenheim, Claudia L De Moraes, Marina MI Antunes, and Rosana Salles-Costa. 2015. "Household Food Insecurity: A Systematic Review of the Measuring Instruments Used in Epidemiological Studies." *Public Health Nutrition* 18 (5): 877-92. <https://doi.org/10.1017/S1368980014001050>.
- Men, Fei, and Valerie Tarasuk. 2022. "Classification Differences in Food Insecurity Measures between the United States and Canada: Practical Implications for Trend Monitoring and Health Research." *The Journal of Nutrition* 152 (4): 1082-90. <https://doi.org/10.1093/jn/nxab447>.
- OHCHR. n.d. "OHCHR and the Right to Food." Accessed February 2, 2024. <https://www.ohchr.org/en/food>.
- Pirkle, Catherine M., Michel Lucas, Renée Dallaire, et al. 2014. "Food Insecurity and Nutritional Biomarkers in Relation to Stature in Inuit Children from Nunavik." *Canadian Journal of Public Health = Revue Canadienne De Sante Publique* 105 (4): e233-238. <https://doi.org/10.17269/cjph.105.4520>.
- Pirkle, Catherine M, and Tetine L Sentell. 2020. One in Five Hawai'i Residents Indicate That They Do Not Have Enough Money for Food. SMS Community Pulse. <https://doi.org/10.13140/RG.2.2.13093.52968>.
- Pirkle, Catherine M, and Tetine L Sentell. 2021. Hawai'i Residents Continue to Struggle to Afford Food in 2021. SMS Community Pulse. <https://doi.org/10.13140/RG.2.2.26790.65605>.
- Rabbitt, Matthew P, Madeline Reed-Jones, Laura J Hales, and Michael P. Burke. 2024. Household Food Security in the United States in 2023. No. 337. Economic Research Service, United States Department of Agriculture.
- Rae, Matthew. 2025. "The Implications of Federal SNAP Spending Cuts on Individuals with Medicaid, Medicare and Other Health Coverage." KFF, June 26. <https://www.kff.org/medicaid/the-implications-of-federal-snap-spending-cuts-on-individuals-with-medicaid-and-other-health-coverage/>.
- Rodriguez, Jazmin Orozco. 2025. "Federal Cuts Gut Food Banks as They Face Record Demand." KFF Health News, May 1. <https://kffhealthnews.org/news/article/food-banks-snap-benefits-federal-cuts-rural-needs/>.
- Stupplebeen, David A, Michelle Quensell, Nicole Kahielani Peltzer, and Catherine McLean Pirkle. n.d. Food Insecurity in Hawai'i Using a Population-Based Sample: A Data Brief. University of Hawaii at Manoa. [https://www.hawaiihealthmatters.org/content/sites/hawaii/2018\\_Food\\_Insecurity\\_Data\\_Brief.pdf](https://www.hawaiihealthmatters.org/content/sites/hawaii/2018_Food_Insecurity_Data_Brief.pdf).
- United for ALICE. n.d. "The State of ALICE in Hawai'i." Accessed September 1, 2025. <https://www.unitedforalice.org/key-findings/hawaii>.
- U.S. Department of Agriculture. 2023. Thrifty Food Plan Cost Estimates for Alaska and Hawaii. FNS-989. USDA, FNS. <https://doi.org/10.52570/TFP.AKHI.2023>.
- World Population Review. n.d. "Cost of Living Index by State 2025." Accessed September 1, 2025. <https://worldpopulationreview.com/state-rankings/cost-of-living-index-by-state>.

