

Methodology

Survey Design

The Yolo Food Bank (YFB) Food Access Survey was developed in collaboration between YFB and the Institute for Social Research (ISR). The survey includes questions to assess use of charitable food services, food assistance, access to culturally appropriate foods, food security, general health, and demographics. Some of the survey questions were developed specifically for the YFB Food Access Survey, some were replicated from other population surveys (e.g., the California Health Interview System), and the survey included the United States Department of Agriculture (USDA) 6-item food security measure.

Survey Population and Recruitment

In order to recruit a representative sample from the Yolo County adult population, ISR and YFB used two recruitment methods: address-based sampling (ABS), and convenience sampling. For ABS recruitment, ISR contracted with Marketing Systems Group (MSG) to obtain a United States Postal Service list of addresses for all occupied permanent residences in Yolo County. All addresses were sent an invitation letter that briefly described the survey, and provided link to access the survey online (including a QR code for easy mobile device access), with a unique, one-time use survey code which ties responses to sampled residences and prevented fraudulent multiple survey taking. Respondents could also request a paper survey by emailing or calling ISR, and then a paper copy with a paid returned envelope was provided by mail. The invitation letter provided information in English and Spanish, with a link to an online version of the letter in Russian, Chinese, and Farsi.

For convenience sampling, YFB and its partners recruited Yolo County residents from their community events and through their services, including services at institutional residences such as nursing homes and homeless shelters. ISR provided a separate online survey link and electronic versions of the paper survey for print out to differentiate between the ABS and convenience samples. Addresses for convenience sample respondents were matched back to the ABS sample to when possible to facilitate weighting and remove duplicate surveys.

Regardless of recruitment method, respondents needed to be 18-years-old or older and be a resident of Yolo County (determined by address; homeless residents were provided with the YFB address to use for eligibility). The online and paper versions of the survey were available in English, Spanish, Russian, Chinese, and Farsi. Following data collection, six eligible respondents were randomly selected to receive a \$100 gift card.

Data Collection

The invitation letter to participate in the survey was mailed to 77,409 addresses on April 5th, 2023, and data collection occurred from April 6th to May 18th 2023. The survey took approximately 15 minutes to complete on a smart phone or personal computer. A total of 3,978 eligible respondents' individuals completed 85% or more of the survey and are included in the

survey results; 3,829 were recruited through ABS and 149 through convenience sampling (60 were matched back to an ABS address). This represents a response rate of 5.1% of the ABS sample. The overall margin of error for the survey is +/- 1.5%.

Data Weighting

ISR contracted MSG to conduct survey weighting. The survey was weighted to account for varying response rates across key socio-demographic characteristics and recruitment methods to ensure the findings are representative of Yolo County's adult population. Specifically, data weighting accounted for sex, age, race, ethnicity, household income, education, home ownership, and marital status to the United States Census Bureau's American Community Survey (ACS; 2021). To calibrate between recruitment methods (i.e., to account for differences in likelihood of recruitment to participate in the survey), three calibration questions were utilized: average number of hours of TV watching time per day, average number of hours on the internet per week, and how often the respondent tries new products compared to others. Like the weighting demographics, these calibration questions were taken from the ACS. The weights allow for viewing data aggregated to either the number of survey respondents or the Yolo County population. Any missing data was imputed prior to weighting.