

FOOD INSECURITY OF RESTAURANT WORKERS

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EXECUTIVE SUMMARY

SETTING THE TABLE: FOOD INSECURITY AND PRECARIOUS EMPLOYMENT

The restaurant industry is one of the nation's largest sectors of employment with 10 million workers,¹ as well as one of the fastest growing since the Great Recession of 2008-2009.² Yet the restaurant sector features some of the lowest paying jobs in the country, accounting for almost half of American workers earning at or below the federal minimum wage,³ and employs more than 60 percent of all tipped workers.⁴ The federal minimum wage for tipped workers has remained at a mere \$2.13 an hour since 1991.^{5,6}

Precarious employment conditions dominate the restaurant industry: restaurant workers face low wages, lack of protection from termination, and lack of access to social protection and benefits. Approximately 90 percent of restaurant workers lack common employee benefits such as paid sick leave and medical benefits. Gender and racial segregation in the industry keep women and people of color disproportionately concentrated in the lowest-paying positions.⁷ Furthermore, union affiliation (i.e. membership or coverage under collective bargaining agreements) in food service/restaurants is only 1.8 percent—a much lower rate compared to food processing industries, where the overall rate of union coverage is 16 percent.⁸

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Cover photo by the Restaurant Opportunities Center of New York

It should present little surprise that many workers in the food system face serious challenges to feeding themselves and their families. Overall, 30 percent of the 20 million food system workers in the United States—those who plant, harvest, process, pack, ship, stock, sell, prepare, and serve—are food insecure, double the rate of food insecurity in the overall U.S. workforce.⁹ Food security—defined by the United States Department of Agriculture (USDA) as access by all people at all times to enough food for an active, health life—requires the ready availability of nutritionally adequate and safe foods, and the assured ability to acquire acceptable foods in socially acceptable ways.^{10,11}

The paradox of hungry workers in the food system reflects the broader context of poverty and inequality in the United States, where approximately 50 million people—14.5 percent of the population—are considered to be food insecure.¹² Adults who experience food insecurity are at greater risk for chronic disease, depression, and anxiety, while children who are food insecure struggle with greater levels of anxiety, cognitive problems, and aggression.¹³ The magnitude of food insecurity makes it a leading public health problem.

This report is the first of its kind, presenting findings on the role that employment conditions have in affecting workers' food security in the restaurant industry—the segment of the food system that employs the greatest number of workers. This report also provides recommendations for policymakers, employers, and consumers to improve the food security of restaurant workers. It is based on surveys of 286 restaurant workers in New York City and the San Francisco Bay Area during 2011-2014.

Details pertaining to survey design, data collection, and data analysis are provided in the full report.



FINDINGS – RAISE INDUSTRY STANDARDS TO INCREASE FOOD SECURITY

Precarious employment conditions make it difficult for many restaurant workers to meet their basic needs. The findings of this study demonstrate how increasing wages, improving benefits, and addressing racial/ethnic and gender segregation in the industry has the potential to increase food security among workers. The findings from this study point to important differences in food security among restaurant workers by gender, race/ethnicity, geography, employment conditions, and labor affiliation.

Of the 286 restaurant workers surveyed for this report:

- **32 percent** would be considered food insecure by the USDA definition—this is twice the overall rates of food insecurity in New York City (NYC) and the San Francisco Bay Area
- **36 percent** felt that their incomes did not allow for adequate access to culturally appropriate foods
- **20 percent** relied on federal food assistance programs (SNAP or WIC)
- **22 percent** often relied on restaurant food because they did not have enough time to cook at home
- **28 percent** often relied on restaurant food because they could not afford to buy enough food
- **49 percent** in NYC did not consider the “family meal” provided by their employer at work to be nutritious (question not asked in the Bay Area)
- **79 percent** of NYC respondents wanted to eat more fruits and vegetables than they presently did (question not asked in the Bay Area)
- **Workers in the San Francisco Bay Area were 17 percent less likely overall to be food insecure than those in New York City** after controlling for differences in workers’ demographics, work experience, labor affiliation, and region.^a One possible factor is the difference in minimum wages at the state level. At the time of the survey, the minimum wage for both tipped and non-tipped workers in California was \$8 whereas the tipped and non-tipped minimum wages in New York State were \$5 and \$7.25, respectively.
- **Organic and “sustainable” do not translate into better outcomes for workers. Bay Area restaurant workers who served organic or sustainable ingredients were 22 percent more likely to be food insecure** compared to other Bay Area restaurant workers after controlling for demographic characteristics.^a
- Documented immigration status is a more significant determinant of food security than citizenship or country of birth. **Undocumented immigrant restaurant workers were 25 percent more likely to experience food insecurity** on average compared to documented immigrants and US citizens together after controlling for age, race, gender, marital status, and survey region.^a

FOOD SECURITY AND EMPLOYMENT CONDITIONS

- Employment conditions leading to **HIGHER RISK OF FOOD INSECURITY**^a
 - Frequent occurrence of wage theft (“often”)
 - Frequent occurrence of tip theft (“often”)
 - Lack of or inconsistency in overtime pay (“never” or “sometimes”)
 - Variable work schedule (i.e., changes monthly or weekly)

^a Results are significant at the 95 percent confidence level ($p \leq 0.05$) at minimum. Marginal effects estimates are from logistic regression predicting food insecurity status as a function of demographic characteristics and survey region. Further details are provided in the full report and online appendix at www.foodfirst.org/publications/food-insecurity-of-restaurant-workers.

THE NYC EARNED SICK TIME ACT

On April 1, 2014, after years of organizing by ROC-NY and allies, New York City enacted its first-ever paid sick days law. The law guarantees up to 5 paid sick days for most workers.

For more information about the paid sick days law, visit www.rocny.org. At the time surveys were conducted for this report, NYC did not have a law mandating paid sick days.



• Employment conditions leading to **LOWER RISK OF FOOD INSECURITY**^a

- Full-time status with an employer
- Having paid time off or paid sick days
- On-going job training that teaches workers new skills needed for promotion
- Having employer-provided health insurance or being able to afford private health insurance
- Workers with wages of at least \$15/hour were less likely to rely on Federal food programs than those making less, holding other employment conditions constant

EMPLOYMENT CONDITIONS AND LABOR AFFILIATION

Workers employed in restaurants with higher standards of employment practices at the workplace level—guaranteed through union contracts or through participation in the High Road program^b of the Restaurant Opportunities Center of New York (ROC-NY)—on the whole reported better employment conditions than other workers.

Union members and High Road restaurant employees surveyed were significantly^c:

- More likely to receive paid sick days, vacation days, and time off
- More likely to have health insurance
- More likely to have received job training and teaching skills needed for promotion
- More likely to consistently receive time-and-a-half overtime pay
- Less likely to experience wage theft and tip theft

FOOD SECURITY AND LABOR AFFILIATION

Union members and employees of ROC-NY High Road restaurants reported significantly lower prevalence of food insecurity than other workers who were not affiliated with a union, collective bargaining agreement, or a High Road restaurant – 33 percent of unaffiliated workers were food insecure compared to 10 percent of union members and 28 percent of High Road employees. Controlling for demographic variables, restaurant industry experience, and job category^c:

^b The New York City Restaurant Industry Roundtable is a collaboration of restaurant owners, workers, consumers, and ROC-NY. The Roundtable awards High Road status to restaurants with exemplary practices in the following areas: paid sick days, access to affordable health care, opportunities for career mobility and advancement, and lowest non-tipped wage at least 25 percent higher than the New York State minimum wage.

^c Results are significant at the 95 percent confidence level ($p \leq 0.05$) for Fisher's exact tests comparing employment conditions across groups. Further details are provided in the full report and online appendix at www.foodfirst.org/publications/food-insecurity-of-restaurant-workers.

- Union members were 27 percent less likely to be food insecure compared to unaffiliated workers. ROC-NY High Road restaurant workers were 15 percent less likely to be food insecure compared to unaffiliated workers. Altogether, these workers were 19 percent less likely to be food insecure.
- Union members and High Road restaurant workers were significantly less likely to rely on public food assistance programs.
- Union members and High Road restaurant workers were significantly less likely to have frequently relied on consuming restaurant food at work because they were unable to afford to buy enough food for home.

RECOMMENDATIONS

POLICYMAKERS SHOULD:

1. Increase the minimum wage and eliminate the sub-minimum wage for tipped workers at the federal, state, and local levels. Federal, state, and local policymakers should raise the minimum wage to \$15 and index it to automatically rise with inflation.
2. Guarantee rights to common employee benefits such as paid sick leave, paid family and medical leave, and other medical benefits.
3. Reduce occupational segregation by developing greater pathways for career mobility in the restaurant industry.
4. Increase penalties and enforcement for employers who engage in wage theft and other illegal practices.
5. Guarantee the right to organize to all workers, and protect against retaliation for organizing.
6. Initiate and support further study and dialogue. The causes and effects of food security among restaurant workers are complex and deserve ongoing study and discussion.

EMPLOYERS SHOULD:

1. Enhance employees' food security by increasing wages and expanding benefits.
2. Develop schedules that meet both employers' and workers' needs.
3. Adopt and clearly communicate, including in writing, company policies and procedures. Policies should address wages, benefits, anti-discrimination, and harassment to protect the well-being and security of all workers.
4. Respect the internationally recognized workers' right to freedom of association and collective bargaining. Ensuring workers' right to organize would likely result in greater food security.

CONSUMERS SHOULD:

1. Patronize unionized and High Road restaurants that voluntarily provide higher wages, better benefits, and opportunities for all workers to advance.
2. Speak to employers every time you buy food or eat out. Let employers know that you care about the economic security and food security of the restaurant's employees.
3. Support restaurant workers who have filed legal charges or have active campaigns against exploitation at their restaurants.
4. Let policymakers know that you will not tolerate poverty wages, lack of basic health benefits, including paid sick days, and wage theft in the restaurant industry.
5. Help educate other consumers and food justice advocates about the need to ensure that restaurant workers and all food chain workers and their families have food security.

I. INTRODUCTION

The food service sector is a vital segment of the United States economy and one of the nation's largest sectors of employment with over 10 million workers.¹⁴ The restaurant industry in particular has been one of the fastest growing segments of the economy since 2000 and especially during the Great Recession of 2008.¹⁵ In 2013, job growth in the industry hit an 18-year high of 3.7 percent. Looking ahead, employment in food preparation and serving occupations is projected to grow 9 percent between 2012 and 2022.¹⁶ These trends reflect broader changes in the economy including growth in service sector jobs, precarious employment, and flexible labor practices.^{17,18,19,20} Understanding the paradox of food insecure and hungry workers in the food system requires a better understanding of the employment conditions that workers experience on a daily basis.

The restaurant sector features some of the lowest paying jobs in the country, accounting for almost half of American workers earning at or below the federal minimum wage,²¹ and employs more than 60 percent of all tipped workers.²² The federal minimum wage for tipped workers has remained unchanged since 1991 at a mere \$2.13 an hour.^{23,24} In addition, approximately 90 percent of restaurant workers lack common employee benefits such as paid sick leave and medical benefits. Gender and racial segregation in the industry keep women and people of color disproportionately concentrated in the lowest-paying positions.²⁵ In addition to low wages, lack of schedule control, job instability, and nonstandard work hours are common employment conditions experienced by a majority of restaurant workers.²⁶

These precarious employment conditions²⁷ (see Box 1, “Precarious Employment for Restaurant Workers”) make it difficult for many workers to meet their own basic needs.²⁸ This has major consequences for public welfare programs—for example, front-line employees in food service establishments participate in the Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps) at twice the rate of the general population.²⁹ Given the sizeable share of Americans who make up the restaurant industry's workforce, it is crucial to understand how restaurant workers' livelihoods and daily struggles are connected to employment conditions in this growing industry.

BOX 1. PRECARIOUS EMPLOYMENT FOR RESTAURANT WORKERS

Precarious employment conditions include nonstandard employment, low wages, poor protections from termination of employment, and lack of access to social protection and benefits. Precarious employment conditions have become increasingly prevalent and are concentrated among workers in lower-paid occupations and among women, people of color, and immigrants.^{30,31,32}

The majority of workers in restaurant occupations face precarious employment conditions. In 2012, the Restaurant Opportunities Centers United (ROC-UNITED) interviewed thousands of workers in the top restaurant markets nationwide on the conditions of the restaurant industry compiling surveys of restaurant workers around the country. The study revealed that a majority of restaurant workers did not have health insurance, paid vacation days, paid sick days, and had gone to work while sick.³³ More recently, a survey of human resource practices in the restaurant industry documented that the majority of restaurant workers receive low wages, few benefits, and insufficient work hours. As a result of these precarious employment conditions, the industry is characterized by relatively high levels of worker turnover and workforce instability,³⁴ while the majority of restaurant workers struggle to meet their basic needs for food, transportation, housing, and utilities.³⁵

Such conditions impact worker health directly and indirectly.³⁶ At the individual level, perceived job insecurity is a significant predictor of subsequent food insecurity and health, even when controlling for social, demographic and job characteristics, and various personal health variables.^{37,38,39,40} Individuals facing precarious employment may experience negative physical and mental health outcomes—including less healthy eating practices⁴¹—due to increased stress,⁴² work-life conflict,⁴³ feeling powerless over their work situation,⁴⁴ and feeling uncertain about their future prospects.⁴⁵ Quantitative studies using cross-country data have suggested positive correlations between countries' health outcomes and indicators of social redistributive policies, employment protection, and union strength.^{46,47,48}

FOOD INSECURITY: AN OCCUPATIONAL HEALTH HAZARD

The United States Department of Agriculture (USDA) identifies food security—access by all people at all times to enough food for an active, health life—as an important condition for a population to be healthy and well-nourished. At a minimum, food security includes: 1) the ready availability of nutritionally adequate and safe foods, and 2) the assured ability to acquire acceptable foods in socially acceptable ways.^{49,50} Food insecurity is present when these conditions are not met (see Box 2, “How is Food Security Measured?”).

The magnitude of food insecurity makes it a leading public health problem in the United States. Today, approximately 50 million people in the United States are food insecure.⁵¹ Adults who experience food insecurity are at greater risk for chronic disease, depression, and anxiety, and children who are food insecure struggle with greater levels of anxiety and cognitive problems. Since 2008, the rates of food insecurity experienced among households have risen at an unprecedented rate.⁵² The proportion of households experiencing food insecurity has increased by 30 percent from 11.1 to 14.5 percent and the proportion of those experiencing very low food security has risen by 40 percent from 4.1 to 5.78 percent. Households with incomes at or below 185 percent of the poverty threshold, those with children, those headed by a single woman or a single man, black households,

BOX 2. HOW IS FOOD SECURITY MEASURED?

Since the 1980s, the United States Department of Agriculture (USDA) has monitored the extent and severity of food insecurity among U.S. households through an annual, nationally representative supplement to the Current Population Survey sponsored by the USDA'S Economic Research Service.

TABLE 1. USDA DEFINED LEVELS OF FOOD SECURITY

Food Secure	Food Insecure
<i>High food security:</i> no reported indications of food access problems or limitations.	<i>Low food security:</i> reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
<i>Marginal food security:</i> one of two reported indications - typically anxiety over food sufficiency of shortage of foos in the house. Little or no indications of changes in diet.	<i>Very low food security:</i> Reports of multiple indications of disrupted eating patterns and reduced food intake.

The USDA food security questionnaire does not consider non-financial factors that may affect the ability of households to meet their food needs such as time constraints, the availability of and proximity to grocery stores and markets, or employment conditions. The USDA survey also lacks questions regarding the types of food either consumed or available to household members. For these reasons, this study's participatory action research approach sought to include input from worker-researchers to develop questions regarding other pertinent aspects of food security.

and those with less formal education are more likely to experience food insecurity than their respective counterparts.⁵³

According to the Food Chain Workers Alliance's analysis of the USDA's Current Population Survey Food Security Supplement from 2010, 30.5 percent of all food system workers experienced "very low" to "marginal food security"—twice the rate of the U.S. workforce.⁵⁴ Studies have also documented rates of food insecurity among farmworkers of at least three times greater than that of the general U.S. population.^{55,56,57} However, little has been reported on food insecurity among workers in the restaurant industry—the segment of the food system that employs the greatest number of workers.

While some studies indicate that income may be the strongest predictor of food security⁵⁸, the link between food security and employment conditions goes beyond wages. Other employment conditions such as multiple job-holding, and part-time, variable and/or uncertain work hours are also associated with an increased risk of food insecurity.⁵⁹

According to the National Restaurant Association, the trade association that represents the interests of employers in the restaurant industry, half of all adults in the U.S. have worked in the restaurant industry at least once during their life and a third worked their first job in a restaurant.⁶⁰ Considering the significant share of restaurant workers in the overall economy, precarious employment conditions faced by workers in the industry effectively put a large proportion of the U.S. population's health and well-being at risk.

ORGANIZING WORKERS IN THE RESTAURANT INDUSTRY

Organized workers in the food system are more likely to experience better employment conditions compared to workers who are not organized. To start, unionized food system workers have higher wages than their non-union counterparts. Data from the Bureau of Labor Statistics show that union grocery store workers make three dollars more per hour than non-union grocery store workers.⁶¹ Union workers also earn higher incomes in the food service industry than their non-union counterparts. According to Bureau of Labor Statistics data from 2013, median weekly earnings of union members in the food service industry were 30.3 percent higher than those of their non-union counterparts. Workers who were not dues-paying members but whose jobs were covered by a union contract also benefitted significantly from union presence, receiving median weekly earnings that were 29.5 percent higher than those of non-union workers.⁶²

BOX 3. TAKING THE HIGH ROAD

The New York City Restaurant Industry Roundtable is a collaboration of restaurant owners, workers, consumers, and ROC-NY. As a group, the Roundtable works to develop strategies to help restaurants take the high road to profitability and create a better restaurant industry that benefits workers, consumers, and employers. Each year, the Roundtable awards High Road status to local restaurants with exemplary practices that value their workers.

Each High Road restaurant is a member of the Roundtable and is acknowledged for practices such as:

- Promoting a safe and healthy work environment (through one or more of the following):
 - o paid sick days to allow workers to care for self or family
 - o access to affordable health care options
 - o other employee benefits such as other forms of paid time off and retirement plans
- Creating opportunities for career mobility and advancement.
- Having a lowest non-tipped wage that is 25 percent higher than the New York State minimum wage.

In addition, each High Road restaurant commits to and implements the following values:

- Complies with all city, state, and federal laws governing employment, as well as requirements set forth by the NYC Department of Health and Mental Hygiene and the Occupational Safety and Health Administration.
- Creates a respectful work environment free from hostility or abuse
- Offers a regularly updated employee manual and establishes a neutral grievance procedure
- Makes training, reference materials, and the opportunity to be promoted available to all staff.

For a full list of NYC High Road restaurants, visit www.rocny.org.

Rates of union representation in food service/restaurant and agriculture industries are much lower, 1.8 percent and 1.2 percent, respectively, compared to the rate of 16 percent in food processing industries.^{63,64} Higher rates of unionization along the middle of the industrial food chain—food processing, slaughterhouse, and meatpacking—mirror the high levels of firm concentration in those segments of the food system.⁶⁵

The relatively diffuse structure of the restaurant industry (comprised predominantly of a large number of independent small businesses) has necessitated different approaches to organizing workers outside of, yet in some instances complementary, to the traditional union model. Restaurant workers working with the Restaurant Opportunities Centers of New York (ROC-NY) have won more than \$6 million in financial settlements for unpaid wages and improvements in workplace policies including raises and sick days.⁶⁶ In support of these efforts, this collaborative study provides an exploratory look at the relationship between employment conditions and food security as well as the food security implications of higher employment standards at the workplace level for workers belonging to unions such as UNITE HERE and for employees at restaurants credited with ROC-NY's High Road status (see Box 3, "Taking the High Road").

THIS REPORT: FOOD INSECURITY AND RESTAURANT WORKERS

The ability of restaurant workers to feed themselves and their families food that is nutritionally adequate, safe, and socially acceptable is critical to the sustainability of local communities, of the restaurant industry, and of the national economy. This research report offers the first comprehensive look at the extent of food insecurity among restaurant workers and how employment conditions affect the ability of restaurant workers to feed themselves and their families in one of the nation's largest and fastest growing industries. This report provides recommendations for employers, policymakers, and consumers to ensure just and equitable conditions for the people who make the food system work.



II. STUDY OVERVIEW

PURPOSE OF STUDY

The study is motivated by four general questions regarding restaurant workers' employment conditions and food security.

1. What food security issues are of particular importance to restaurant workers?
2. What impact do restaurant workers' employment conditions have on their food security?
3. Do union members and employees of High Road restaurants have better employment and working conditions than unaffiliated workers?
4. Are union members and employees of High Road restaurants more likely food secure than unaffiliated workers?

STUDY DESIGN

As part of a participatory action research approach (See Box 4, "Participatory Action Research"), restaurant worker-researchers contributed to the study design, identified additional dimensions of food security to measure not captured by the USDA Short Form Food Security Questionnaire, and conducted survey data collection.

The study evaluates the independent effects of various employment conditions (overview provided in subsection Survey Questionnaire) on workers' food security while controlling for differences in workers' individual demographic characteristics and survey region.

The study also evaluates differences in prevalence of food insecurity between workers employed in restaurants with ostensibly higher standards of employment practices instituted at the workplace level—either through union contracts or through participation in ROC-NY's High Road program—and unaffiliated workers while controlling for demographic variables. However, ROC the Bay had not officially designated any High Road restaurants in the Bay Area at the time of the survey collection.

BOX 4. PARTICIPATORY ACTION RESEARCH

This study was guided by a participatory action research (PAR) framework wherein those directly affected by the issues being studied participate and/or lead in the formulation and implementation of research for the purpose of effecting social change. Restaurant workers themselves played key roles throughout the course of the research project, determining relevant research questions, providing input on the design of the survey questionnaire, and conducting surveys in the field.

The study was led by investigators from Food First, the Restaurant Opportunities Center of New York (ROC-NY), and the Food Chain Workers Alliance (FCWA). Worker-researchers affiliated with ROC-NY and ROC the Bay, the research and policy coordinator of ROC the Bay, and a UNITE HERE Local 100 organizer conducted surveys for this report. In 2011, the team convened for an introductory webinar and for training workshops to review and adapt the proposed research design. The group discussed the survey questionnaire, site selection, project timeline, and expected outcomes.

Restaurant worker-researchers reflected on the USDA's definition of food security and household food security questionnaire, considering the appropriateness and limitations of the definition and the questionnaire to assess restaurant worker's food security. As a result, additional measures of food were added to the survey, which included fruit and vegetable intake, skipping meal breaks, reliance on eating restaurant food due to lack of time or money, and ability to afford culturally appropriate food.

ROC-NY and ROC the Bay had final say on which issues were most relevant to their current work and how the results would be used in their respective local contexts.

SAMPLING STRATEGY

Survey data were collected from a carefully designed survey of 286 restaurant workers from 2011-2014 based on oversampling of union workers in New York City and a demographic sample in the San Francisco Bay Area.

In New York City, members and staff of ROC-NY and UNITE HERE Local 100 surveyed 135 restaurant workers from 2011 to 2013. The sample included 16 union members and 18 employees of High Road restaurants. The remainder of surveys in NYC were drawn from restaurants comparable to those union and High Road restaurants on the basis of social geography criteria to ensure fair context comparisons (e.g., neighborhood, restaurant segment, price range, and number of employees).

In the San Francisco Bay Area, ROC the Bay members and volunteers surveyed over 150 restaurant workers from 2013 to 2014. The sample included 4 union members. (See Box 5, "Breakdown of Union and High Road Restaurants")

SURVEY QUESTIONNAIRE

Restaurant workers provided anonymous and confidential responses to questions about their demographic characteristics, employment conditions, and food security. Where noted in the report, some findings presented may pertain only to data from New York City or the Bay Area. Surveys were

administered in person verbally via semi-structured interviews by worker-researchers and by staff of ROC-NY, ROC the Bay, and UNITE HERE Local 100. Participants were recruited outside of their workplace in between shifts and during breaks. The survey was administered in languages common to restaurant workers including English, Spanish, French, and Vietnamese. To maximize the response rate, surveys were conducted in the field at locations determined on an ad hoc basis.

The survey contained questions related to the four modules described below.

- *Food security and food access variables:* USDA Short Form Food Security Questionnaire on financial access to food (dichotomous variable), ability to afford culturally-appropriate food (dichotomous variable), reliance on restaurant food for meals due to time or income constraints (dichotomous variables), fruit and vegetable intake (count variable), reliance on public and private food assistance programs (dichotomous variable) (see Box 2, "How is Food Security Measured?" in Section I)
- *Employment and work variables:* full-time status, multiple job-holding, variable work hours, paid sick leave and vacation days, on-job training, internal promotion, skipping meal breaks, hourly wages and tips, wage theft, tip theft, overtime pay, health insurance, job position category, years of restaurant industry experience
- *Workplace level variables:* membership in a labor union or coverage under a collective bargaining agreement, employment at a ROC-NY High Road restaurant
- *Demographic variables:* age, gender, race, marital status, immigration status, US vs. foreign-born

BOX 5. BREAKDOWN OF UNION AND HIGH ROAD RESTAURANTS

Restaurants are overwhelmingly non-union due to the structure of the industry—hence the alternative approach that has been developed through the Restaurant Opportunities Center model. In order to adequately assess the relationship between food security and labor organization, the survey was designed to oversample workers from unionized and ROC-NY High Road restaurants relative to their overall shares within the industry.

Union workers were recruited from eight restaurants in total—four in New York City and four in the Bay Area. Of these, seven belonged to the fine-dining segment. Employees of High Road restaurants were recruited from seven restaurants in New York City, of which five belonged to the fine-dining segment. At the time of the survey, the nascent ROC the Bay organization had not officially designated any restaurants in the San Francisco Bay Area with High Road status.

Of the 11 NYC restaurants represented that were either union or High Road, six were independently owned. One was located inside a hotel and two others were located at the Rockefeller Center. Details on ownership and institutional setting were not recorded for surveys in the Bay Area.

DATA ANALYSIS

Data analysis was performed using statistical software package Stata 11. Statistical methods used for this report include the following:

<i>Mann-Whitney U test</i>	non-parametric test for the difference in the mean of a variable (ex: USDA food security score) between 2 independent groups (ex: front of house vs. back of house workers)
<i>Kruskal-Wallis test</i>	non-parametric test for the difference in the mean of a variable (ex: USDA food security score) across more than 2 independent groups (ex: frequency of wage theft)
<i>Fisher's exact test</i>	test for relationship between two categorical variables (ex: having paid sick days and union membership)
<i>Logistic regression</i>	probabilistic model to predict outcome of a dichotomous variable (ex: dependent variable is equal to 0 if food secure and equal to 1 if food insecure) as a function of multiple explanatory variables (ex: employment conditions and demographic variables), allowing for estimation of marginal effects
<i>Ordered logistic regression</i>	equivalent to logistic regression but allows the response variable to take on three or more ordered categories (ex: levels of food insecurity increasing in severity)

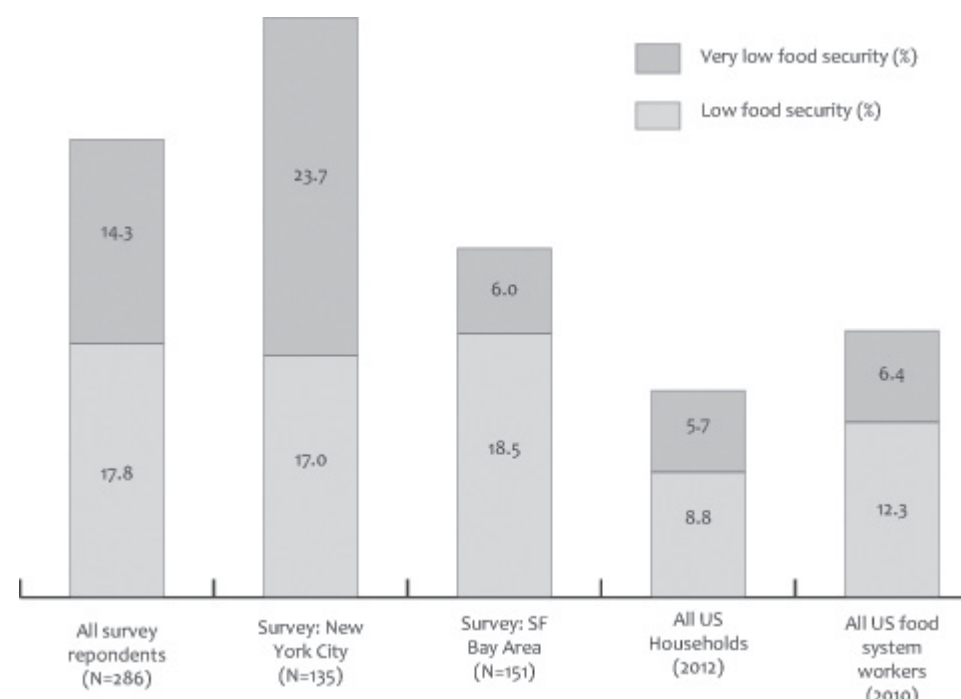
Detail results tables for statistical tests and regression models are provided in the online appendix at www.foodfirst.org/publications/food-insecurity-of-restaurant-workers.



III. FINDINGS

What food security issues are of particular importance to restaurant workers? Food security entails more than simply having enough money to meet subsistence levels of food consumption. Reflecting concerns voiced by restaurant worker-researchers, the survey results show that many restaurant workers could not meet their basic food needs in terms of income, access to healthy food, access to culturally appropriate food, and having enough time to cook meals at home. Due to the small sample size, raw percentages from the survey may not be representative of all workers in the restaurant industry. Sample demographics are presented in Table 2 in the Appendix.

Figure 1. Food insecurity rates among restaurant workers



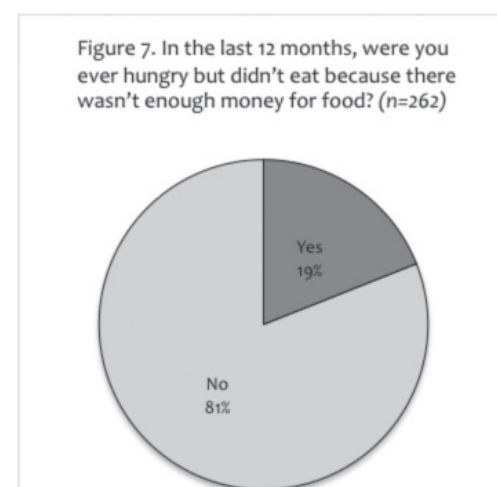
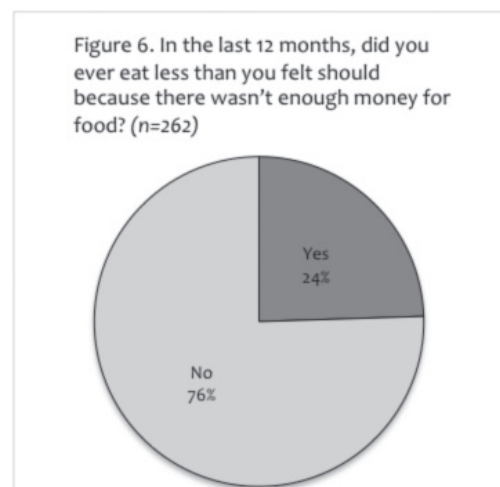
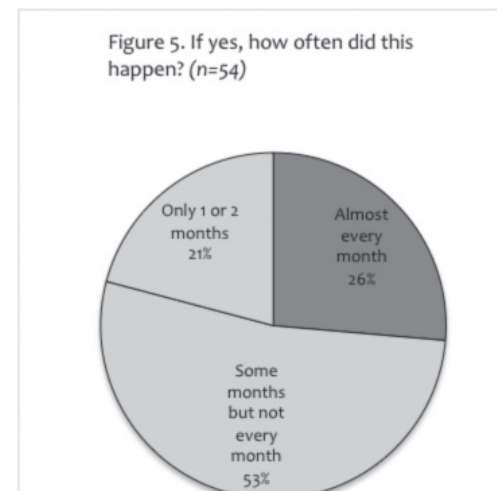
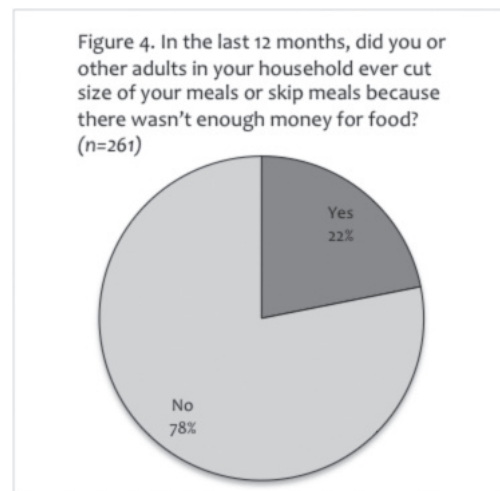
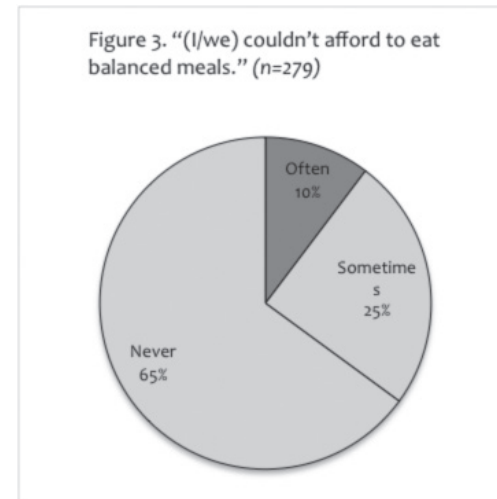
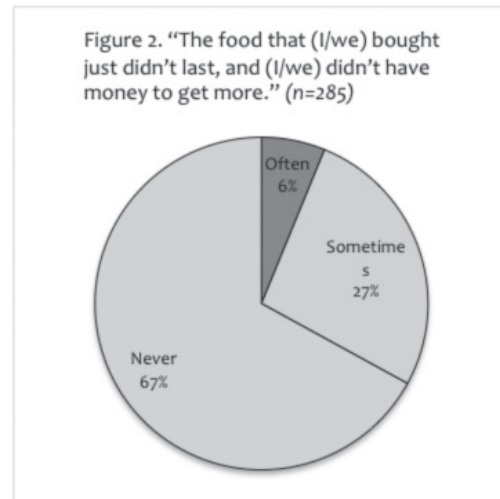
Sources: *Food Chain Workers Alliance (2013), †USDA ERS (2012).

Of the 286 restaurant workers surveyed:

- **32 percent** were considered food insecure as defined by the USDA
 - Compared to: 16 percent of NYC residents and 11-16 percent of residents across Bay Area counties
- **36 percent** felt that their income did not allow them adequate access to culturally appropriate foods
- **20 percent** relied on federal food assistance programs (SNAP or WIC)
- **28 percent** often relied on restaurant food at/from work because they could not afford to buy enough food for home
- **22 percent** often relied on restaurant food at/from work because they did not have enough time to cook at home

- Many restaurants provide “family meals” to their employees during breaks between shifts—**49 percent** of NYC respondents reported that they did not consider the “family meal” usually provided by their respective employers to be a nutritious one (question not asked in the Bay Area)
- **79 percent** of NYC respondents wanted to eat more fruits and vegetables than they presently did (question not asked in the Bay Area)

RESPONSES TO THE USDA FOOD SECURITY QUESTIONNAIRE



FOOD SECURITY AND DEMOGRAPHICS^d

Regional differences

- **Workers in the Bay Area were 17 percent less likely to be food insecure than those in NYC** after controlling for demographics, work experience, labor affiliation, and region. One possible factor is the difference in state minimum wage laws. At the time of survey, the California state minimum wage was \$8 whereas the New York state tipped and non-tipped minimum wages were \$5 and \$7.25, respectively.
- Organic and “sustainable” do not translate into better outcomes for workers. Controlling for other variables, **Bay Area workers in restaurants serving organic or sustainable ingredients were 22 percent more likely to be food insecure** than other Bay Area workers.

Race and immigration status

- Results suggest that legal immigration status is a greater determinant of food security than race, citizenship, and country of birth. **Undocumented workers were 25 percent more likely to experience food insecurity** compared to documented immigrants and US citizens after controlling for other individual characteristics and survey region.
- A significantly greater proportion of non-white restaurant worker respondents were food insecure compared to white respondents. In particular, **Latino respondents were food insecure at twice the rate** compared to those of other races. However, these results are not significant after controlling for undocumented immigration status.
- A significantly smaller proportion of U.S. citizens surveyed were food insecure compared to non-citizens. However, the difference is no longer significant after controlling for undocumented immigration status. Similarly, a significantly smaller proportion of U.S.-born workers were food insecure than foreign-born workers. However, the difference is not significant after controlling for undocumented status.

FOOD SECURITY AND EMPLOYMENT CONDITIONS

What impact do restaurant workers’ employment conditions have on their food security? The data suggest that employment conditions have an important effect on food security and that the wages are only one part of the picture. The following employment conditions have statistically-

^dMarginal effects estimates are from logistic regressions predicting workers’ food insecurity status as a function of demographic characteristics and survey region work experience, labor affiliation. Results were significant at the 95 percent confidence level ($p < 0.05$) at minimum. Detailed results are provided in Tables 4 and 9 online at www.foodfirst.org/publications/food-insecurity-of-restaurant-workers.

Table 3. Food insecurity among restaurant workers by geography and demographics

	Percent food insecure (USDA definition)
Total	32%
<i>Region*</i>	
New York	41%
Bay Area	25%
<i>Race (not mutually exclusive)</i>	
Asian*	16%
Black	30%
Latino*	46%
White*	24%
Other	44%
<i>Sex*</i>	
Female	27%
Male	36%
<i>Head of household</i>	
Female	43%
Male	38%
<i>Age group</i>	
<25	30%
25-34	36%
35-44	30%
>44	31%
<i>Immigration and legal status</i>	
Born outside US	42%
Born in US	26%
US citizen*	25%
Non-US citizen (all)	51%
Documented	39%
Undocumented*	67%

*Statistical significance at .05 level versus comparison group(s) for Fisher’s exact test

significant marginal effects on the likelihood of a worker being food insecure, independent of their correlations with (i.e., controlling for the separate effects of) other employment conditions.^c

Employment conditions independently associated with **HIGHER RISK OF FOOD INSECURITY:**

- Frequent occurrence of wage theft (“often”)
- Frequent occurrence of tip theft (“often”)
- Lack of or inconsistency in overtime pay (“never” or “sometimes”)
- Variable work schedule (i.e., schedule changes at least monthly)

Employment conditions independently associated with **LOWER RISK OF FOOD INSECURITY:**

- Full-time status with an employer
- Having paid time off or paid sick days
- On-going job training teaching new skills needed for promotion
- Having employer-provided health insurance or being able to afford private health insurance
- Workers with wages of at least \$15/hour were less likely to rely on Federal food programs than those making less, controlling for other employment conditions constant^f

FOOD SECURITY AND LABOR ORGANIZATIONS

Are union workers and High Road restaurant workers more likely food secure than their unaffiliated counterparts? While most of these workers surveyed were in NYC, the data show strong evidence that union workers and High Road restaurant workers are more food secure than unaffiliated workers whose workplaces were neither covered by a union nor a High Road partner of ROC-NY.

Table 5. Food (in) security among organized workers, high road restaurant employees, and unaffiliated workers

USDA Food Security Levels		Percent %	Union		High Road		Unaffiliated	
Food secure	High food security		90.0	80.0	72.2	50.0	67.0	58.4
	Marginal food security	10.0		22.2	8.6			
Food insecure	Low food security	10.0	0.0	27.8	22.2	33.1	18.0	
	Very low food security		10.0	5.6	15.0			

Union members and employees of High Road restaurants reported significantly higher rates of food security than unaffiliated workers (see Table 5). After controlling for demographic variables, restaurant industry experience, and job category using logistic regression:^g

^g Results are significant at the 95 percent confidence level ($p \leq 0.05$) at minimum. Logistic regression models predicted food insecurity as a function of employment conditions as well as job position, years of experience, demographic, and survey region control variables. Marginal effects estimates from regressions for NYC and SF Bay Area, separate and combined, are presented in Tables 6 and 7 of the Appendix online at foodfirst.org.

^f Results from logistic regression predicting Federal food assistance usage are in Table 8 online at foodfirst.org.

- Union members and ROC-NY High Road restaurant workers were 27 percent and 15 percent less likely, respectively, to be food insecure compared to unaffiliated workers. Altogether, they were 19 percent less likely to be food insecure than unaffiliated workers.
- Union members and ROC-NY High Road restaurant workers were significantly less likely to rely on restaurant food because they were unable to afford enough food.
- Union members and ROC-NY High Road restaurant workers were significantly less likely to rely on public food assistance programs.

EMPLOYMENT CONDITIONS AND LABOR ORGANIZATIONS

What explains the pattern of higher levels of food security among union members and High Road restaurant employees compared to that of other restaurant workers? The survey results show that union members and ROC-NY High Road restaurant workers on the whole reported better employment conditions. Compared to unaffiliated workers, a significantly greater proportion of union members and High Road restaurant workers surveyed^h:

- Received paid sick days, vacation days, and time off
- Had health insurance
- Received job training on skills needed for promotion
- Consistently received time-and-a-half pay
- Experienced wage theft and tip theft less often

Finally, the data suggest that the implications of workplace-level employment standards and worker organizations for food security extend beyond the particular employment conditions assessed in this study. Even after accounting for the effects of individual workers’ specified employment conditions, years of restaurant work experience, demographic characteristics and survey region, unionized restaurants workers and High Road restaurant employees were 23 percent and 14 percent less likely, respectively, to be food insecure compared to workers whose workplaces were not organized by a labor union or associated with ROC-NY.ⁱ In other words, the overall impact of worker organizations on restaurant workers’ ability to meet their basic food needs is much greater than that captured by this study.



^g Results are significant at the 95 percent confidence level ($p \leq 0.05$) at minimum. Regression models predicted food security variables as functions of labor affiliation as well as job position, years of experience, demographic, and survey region control variables. Marginal effects estimates are provided in Tables 9 and 10 of the Appendix online at www.foodfirst.org/publications/food-insecurity-of-restaurant-workers.

^h Statistical significance of differences in employment conditions between union and High Road workers versus other workers was determined using Fisher’s exact or Mann-Whitney U tests. Percentages are presented in Table 11 of the Appendix online at www.foodfirst.org/publications/food-insecurity-of-restaurant-workers. ⁱ Marginal effects estimates from logistic regression are provided in Table 7 online at www.foodfirst.org/publications/food-insecurity-of-restaurant-workers.

IV. ADVANCING FOOD JUSTICE FOR FOOD WORKERS: RECOMMENDATIONS FOR POLICYMAKERS, BUSINESSES, AND CONSUMERS

POLICYMAKERS SHOULD:

1. Increase the minimum wage and eliminate the sub-minimum wage for tipped workers at the federal, state, and local levels. As this report's findings demonstrate, restaurant workers in San Francisco, which has a higher minimum wage than New York City and no sub-minimum wage, were less likely to be food insecure than their counterparts in New York City. Federal, state, and local policymakers should raise the minimum wage to \$15 and index it to automatically rise with inflation to move toward a livable wage. Federal policymakers should eliminate the sub-minimum wage for tipped workers, so that all restaurant workers are guaranteed at least the full minimum wage. State and local policymakers should also raise the minimum wage to at least \$15, or more where appropriate, and index state and local minimum wages to automatically rise with inflation. State and local policymakers should also eliminate sub-minimum wages for tipped workers. Raising the minimum wage would increase wages, reduce poverty, and increase food security for millions of restaurant workers.
2. Guarantee rights to paid sick leave, paid family and medical leave, and other medical benefits. Policymakers should establish a national standard that guarantees workers nine paid sick days each year to be used to recover from their own routine illness, access preventive care, or provide care for a sick or injured family member. In developing paid sick days standards, policymakers should not carve out or compromise the rights of restaurant

workers and other shift workers. Policymakers should also establish a national paid family and medical leave insurance fund to ensure that all workers have income and job security during family or medical leave. In the absence of federal action, state and local policy makers should fill the void by guaranteeing paid sick leave and paid family and medical leave on the state and local levels.

3. Reduce occupational segregation by developing greater pathways for career mobility in the restaurant industry. Policymakers should increase funding for programs to educate employers about laws barring discrimination on the basis of race, gender, and national origin. Greater government enforcement of federal, state, and local equal opportunity laws is needed to ensure that workers of color and women do not face illegal barriers to advancing to livable wage jobs in the restaurant industry. Policymakers should increase funding also for job training programs that are open to all workers, including undocumented workers, to help give workers the tools they need to advance to livable-wage jobs in the restaurant industry.
4. Increase penalties and enforcement for employers who engage in wage theft and other illegal practices. Rampant wage theft in the restaurant industry reduces restaurant workers' take-home pay, resulting in increased food insecurity. Policymakers should increase funding for enforcement of existing labor laws. Policymakers should also use regulatory levers such as food safety and liquor licenses to ensure that employers are complying responsibly with basic employment laws.
5. Guarantee the right to organize to all workers, and protect against retaliation for organizing. Organized restaurant workers have higher rates of food security than non-organized workers. To promote food security, governments, employers, and non-governmental organizations should facilitate and support organizing among restaurant workers.
6. Initiate and support further study and dialogue. The causes for high rates of food insecurity among restaurant workers are complex and deserve ongoing study and discussion. This report is a preliminary assessment of food insecurity among restaurant workers in two cities. Similar studies documenting the causes and effects of food security among restaurant workers and other food chain workers across the country are needed in order to fully understand the complexities of this issue. Policymakers should prioritize these studies by allocating funds to expand food insecurity research nationally.

EMPLOYERS SHOULD:

1. Enhance employees' food security by increasing wages and expanding benefit. Employers should ensure that workers in all positions are able to feed themselves and their families. In the absence of laws guaranteeing the right to paid sick days and paid family and medical leave, employers should provide these benefits nonetheless.
2. Develop schedules that meet both employers' and workers' needs. Employers should create a workplace culture in which schedules are predictable and made available to workers in advance so that workers can plan for personal and family needs, such as meals, childcare arrangements, or medical appointments. Employers should also eliminate on-call shifts.
3. Adopt and clearly communicate, including in writing, company policies and procedures. Policies should address wages, benefits, anti-discrimination and harassment to protect the well-being and security of all workers.
4. Respect the internationally recognized workers' right to freedom of association and collective bargaining. Ensuring workers' right to organize would likely result in increased food security.

Consumers should:

1. Patronize unionized and High Road restaurants that voluntarily provide higher wages, better benefits, and opportunities for all workers to advance.
2. Speak to employers every time you buy food or eat out. Let employers know that you care about the economic security and food security of the restaurant's employees.
3. Support restaurant workers who have filed legal charges or have active campaigns against exploitation at their restaurants. Restaurant workers who experience wage theft and other illegal practices on the job are more likely to be food insecure. Supporting workers' struggles against exploitation means supporting food security for the workers and their families.
4. Let policymakers know that you will not tolerate poverty wages, lack of basic health benefits, including paid sick days, and wage theft in the restaurant industry. Urge policymakers to raise the minimum wage to at least \$15 per hour, eliminate the sub-minimum wage for tipped workers, and use regulatory levers such as liquor licensing laws to ensure that employers are complying with employment laws.
5. Help educate other consumers and food justice advocates about the need to ensure that restaurant workers and all food chain workers and their families have food security.

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ENDNOTES

¹ Bureau of Labor Statistics U.S. Department of Labor, “Occupational Employment and Wages, May 2013,” n.d., <http://www.bls.gov/oes/current/oes350000.htm>.

² Restaurant Opportunities Center United (ROC-UNITED), Behind the Kitchen Door: A Multi-site Study of the Restaurant Industry, 2011., n.d., <http://rocunited.org/2011-behind-the-kitchen-door-multi-site-study/>.

³ U.S. Department of Labor, Bureau of Labor Statistics, Characteristics of Minimum Wage Workers, 2013, April 9, 2014, <http://www.bls.gov/cps/minwage2013.pdf>.

⁴ Restaurant Opportunities Center United (ROC-UNITED), Recipe for Success: Abolish the Subminimum Wage to Strengthen the Restarurant Industry, 2014.

⁵ U.S. Department of Labor, Wage and Hour Division, “Fact Sheet #15: Tipped Employees Under the Fair Labor Standards Act,” July 2013.

⁶ Restaurant Opportunities Center United (ROC-UNITED), Behind the Kitchen Door: A Multi-site Study of the Restaurant Industry, 2011.

⁷ Ibid.

⁸ U.S. Department of Labor, Bureau of Labor Statistics, Union Members Summary, Economic News Release, January 24, 2014.

⁹ Food Chain Workers Alliance, The Hands That Feed Us: Challenges and Opportunities for Workers Along the Food Chain, June 6, 2012.

¹⁰ Alisha Coleman-Jensen, Mark Nord, and Anita Singh, Household Food Security in the United States in 2012 (USDA Economic Research Service, September 2013).

¹¹ Gary Bickel et al., Guide to Measuring Household Food Security, Revised 2000, Measuring Food Security in the United States: Reports of the Federal Interagency Food Security Measurement Project (Alexandria, VA: USDA Food and Nutrition Service, March 2000), <http://www.fns.usda.gov/fsec/FILES/FSGuide.pdf>.

¹² Coleman-Jensen, Nord, and Singh, Household Food Security in the United States in 2012.

¹³ Craig Gundersen, “Food Insecurity Is An Ongoing National Concern.,” *Advances in Nutrition* 4 (n.d.): 36–41.

¹⁴ U.S. Department of Labor, “Occupational Employment and Wages, May 2013.”

¹⁵ Restaurant Opportunities Center United (ROC-UNITED), Behind the Kitchen Door: A Multi-site Study of the Restaurant Industry, 2011.

¹⁶ Richard Henderson, Employment Outlook: 2010–2020., *Monthly Labor Review* (U.S. Department of Labor, Bureau of Labor Statistics, January 2012).

¹⁷ Arne L. Kalleberg, “Nonstandard Employment Relations: Part-time, Temporary and Contract Work,” *Annual Review of Sociology*, 2000, 341–65.

¹⁸ Theodore, “Political Economies of Day Labour.”

¹⁹ National Employment Law Project, The Low-Wage Recovery and Growing Inequality.

²⁰ Dixon et al., “Flexible Employment, Flexible Eating and Health Risks.”

²¹ U.S. Department of Labor, Bureau of Labor Statistics, Characteristics of Minimum Wage Workers, 2013.

²² Restaurant Opportunities Center United (ROC-UNITED), Recipe for Success: Abolish the Subminimum Wage to Strengthen the Restarurant Industry.

²³ U.S. Department of Labor, Wage and Hour Division, “Fact Sheet #15: Tipped Employees Under the Fair Labor Standards Act,” July 2013.

²⁴ Restaurant Opportunities Center United (ROC-UNITED), Behind the Kitchen Door: A Multi-site Study of the Restaurant Industry, 2011.

²⁵ Restaurant Opportunities Center United (ROC-UNITED), Behind the Kitchen Door: A Multi-site Study of the Restaurant Industry, 2011.

²⁶ Lee J Batt R and Lakhani T, High Road 2.0: A National Study of Human Resources Practices, Turnover, and Customer Service in The Restaurant Industry, January 2014., n.d., <http://rocunited.org/a-national-study-of-human-resource-practices-turnover-and-customer-service-in-the-restaurant-industry/>.

²⁷ Carles Muntaner et al., “Unemployment, Informal Work, Precarious Employment, Child Labor, Slavery, and Health Inequalities: Pathways and Mechanisms,” *International Journal of Health Services* 40, no. 2 (January 2010): 281–95, doi:10.2190/HS.40.2.h.

²⁸ Restaurant Opportunities Center United (ROC-UNITED), The Third Shift Childcare Needs and Access for Working Mothers in Restaurants, 2013., n.d., <http://rocunited.org/the-third-shift/>.

²⁹ Sylvia Allegretto et al., Fast Food, Poverty Wages: The Public Cost of Low-wage Jobs in the Fast-food Industry (University of California, Berkeley, Center for Labor Research and Education and the University of Illinois at Urbana-Champaign Department of Urban & Regional Planning, October 2013).

³⁰ S Matthews, O Manor, and C Power, “Social Inequalities in Health: Are There Gender Differences?,” *Social Science & Medicine* (1982) 48, no. 1 (January 1999): 49–60.

³¹ V Borg and T S Kristensen, “Social Class and Self-rated Health: Can the Gradient Be Explained by Differences in Life Style or Work Environment?,” *Social Science & Medicine* (1982) 51, no. 7 (October 2000): 1019–30.

³² Jane E. Ferrie et al., “Future Uncertainty and Socioeconomic Inequalities in Health: The Whitehall II Study,” *Social Science &*

Medicine 57, no. 4 (August 2003): 637–46, doi:doi: 10.1016/S0277-9536(02)00406-9.

³³ Restaurant Opportunities Center United (ROC-UNITED), Behind the Kitchen Door: A Multi-site Study of the Restaurant Industry, 2011.

³⁴ Batt R and Lakhani T, High Road 2.0: A National Study of Human Resources Practices, Turnover, and Customer Service in The Restaurant Industry, January 2014.

³⁵ Restaurant Opportunities Center United (ROC-UNITED), The Third Shift Childcare Needs and Access for Working Mothers in Restaurants, 2013.

³⁶ M. Kivimaki, “Temporary Employment and Risk of Overall and Cause-specific Mortality,” *American Journal of Epidemiology* 158, no. 7 (October 2003): 663–68, doi:10.1093/aje/kwgl85.

³⁷ L Joelson and L Wahlquist, “The Psychological Meaning of Job Insecurity and Job Loss: Results of a Longitudinal Study,” *Social Science & Medicine* (1982) 25, no. 2 (1987): 179–82.

³⁸ Heaney, “Chronic Job Insecurity Among Automobile Workers.”

³⁹ Sarah A. Burgard, Jennie E. Brand, and James S. House, “Perceived Job Insecurity and Worker Health in the United States,” *Social Science & Medicine* 69, no. 5 (September 2009): 777–85, doi:10.1016/j.socscimed.2009.06.029.

⁴⁰ Alisha Coleman-Jensen, “Working for Peanuts: Nonstandard Work and Food Insecurity Across Household Structure,” *Journal of Family and Economic Issues* 32, no. 1 (March 1, 2011): 84–97–97.

⁴¹ Dixon et al., “Flexible Employment, Flexible Eating and Health Risks.”

⁴² Wayne Lewchuk et al., “From Job Strain to Employment Strain: Health Effects of Precarious Employment,” *Just Labour* 3, no. Fall (2003): 23–35.

⁴³ Philip Bohle et al., “Working Hours, Work-life Conflict and Health in Precarious and ‘Permanent’ Employment,” *Revista de Saúde Pública* 38 (December 2004): 19–25, doi:10.1590/S0034-89102004000700004.

⁴⁴ Muntaner et al., “Unemployment, Informal Work, Precarious Employment, Child Labor, Slavery, and Health Inequalities.”

⁴⁵ Ferrie et al., “Future Uncertainty and Socioeconomic Inequalities in Health: The Whitehall II Study.”

⁴⁶ Vicente Navarro et al., “The Importance of the Political and the Social in Explaining Mortality Differentials Among the Countries of the OECD, 1950-1998,” *International Journal of Health Services: Planning, Administration, Evaluation* 33, no. 3 (2003): 419–94.

⁴⁷ Haejoo Chung and Carles Muntaner, “Political and Welfare State Determinants of Infant and Child Health Indicators: An Analysis of Wealthy Countries,” *Social Science & Medicine* (1982) 63, no. 3 (August 2006): 829–42, doi:10.1016/j.socscimed.2006.01.030.

⁴⁸ Carles Muntaner et al., “Economic Inequality, Working-class Power, Social Capital, and Cause-specific Mortality in Wealthy Countries,” *International Journal of Health Services* 32, no. 4 (2002): 629–56.

⁴⁹ Coleman-Jensen, Nord, and Singh, Household Food Security in the United States in 2012.

⁵⁰ Bickel et al., Guide to Measuring Household Food Security, Revised 2000.

⁵¹ Coleman-Jensen, Nord, and Singh, Household Food Security in the United States in 2012.

⁵² Craig Gundersen, “Food Insecurity Is An Ongoing National Concern.”

⁵³ Ibid.

⁵⁴ Food Chain Workers Alliance, The Hands That Feed Us: Challenges and Opportunities for Workers Along the Food Chain.

⁵⁵ Sara A.; Thomas A. Arcury Quandt and Jessie D. Davis, “Household Food Security Among Migrant and Seasonal Latino Farmworkers in North Carolina,” *Public Health Reports* 119 (2004): 568–76.

⁵⁶ Strohlic R Wirth C and Getz C, Hunger in the Fields: Food Insecurity Among Farmworkers in Fresno County. California (California Institute for Rural Studies, November 2007), <http://www.cirsinc.org/index.php/publications/archives/category/8-rural-health.html#>.

⁵⁷ Lisa Kresge and Chelsea Eastman, Inreasing Food Security Among Agricultural Workers in California’s Salinas Valley (California Institute for Rural Studies, June 2010).

⁵⁸ M. Weigel et al., “The Household Food Insecurity and Health Outcomes of U.S.–Mexico Border Migrant and Seasonal Farmworkers,” *Journal of Immigrant and Minority Health* 9, no. 3 (July 1, 2007): 157–69–169.

⁵⁹ Kristen Borre, Luke Ertle, and Mariaelisa Graff, “Working to Eat: Vulnerability, Food Insecurity, and Obesity Among Migrant and Seasonal Farmworker Families,” *American Journal of Industrial Medicine* 53, no. 4 (2010): 443–62, doi:10.1002/ajim.20836.

⁶⁰ National Restaurant Association, “Pocket Factbook,” 2014.

⁶¹ U.S. Department of Labor, Bureau of Labor Statistics, “Current Population Survey, Merged Outgoing Rotation Groups 2010-2012,” n.d.

⁶² U.S. Department of Labor, Bureau of Labor Statistics, Union Members Summary.

⁶³ Ibid.

⁶⁴ U.S. Department of Labor, Bureau of Labor Statistics, “Food Processing Occupations,” in *Occupational Outlook Handbook 2010-2011*, Bulletin 2800 (Washington, D.C.: U.S. Dept. of Labor Bureau of Labor Statistics, 2010), 730.

⁶⁵ Mary Hendrickson and Bill Heffernan, Concentration of Agricultural Markets (Department of Rural Sociology, University of Missouri-Columbia, April 2007).

⁶⁶ Restaurant Opportunities Center United (ROC-UNITED), “Workplace Justice,” accessed May 15, 2014, <http://rocunited.org/our-work/workplace-justice/>.



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