

# Contemporary Families: An Equity Lens 2e



# CONTEMPORARY FAMILIES: AN EQUITY LENS 2E

ELIZABETH B. PEARCE

ALEXIS CASTANEDA-PEREZ; WESLEY SHARP; SHONNA DEMPSEY;  
RUTA FAIFAISE; NYSSA CRONIN; MICHAELA WILLI-HOOPER; KATIE  
NIEMEYER; KATHERINE HEMLOCK; JESSICA N. HAMPTON; HANNAH  
MORELOS; CHRISTOPHER BYERS; CASSIE CRUZE; CARLA MEDEL;  
AMY HUSKEY; AND CHESSIE ALBERTI

Linn-Benton Community College  
Albany, Oregon



*Contemporary Families: An Equity Lens 2e* by Elizabeth B. Pearce is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/), except where otherwise noted.

This book includes remixed content. Please note that some sections may have more restrictive licenses, and some all rights reserved content is included under fair use or with permission. More specific information can be found under Licenses and Attributions at the bottom of each section.

# CONTENTS

[3. Connection, Community, Love, and Partnering](#)

[4. Nurturance: Parenting and Caregiving](#)

[5. Routines, Traditions, and Culture](#)

Application and Discussion: Questions to Consider

13

[6. Representation and Belonging in Social Systems](#)

[7. Health and Health Care](#)

[8. Housing](#)

[10. Food and Water](#)

Food and Families

23

Elizabeth B. Pearce and Amy Huskey

Access to Water and Sanitation

46

Elizabeth B. Pearce and Alexis Castaneda-Perez

Systemic Uses of Water

56

Looking Ahead	60
Key Terms	62
Application, Discussion, and Reflection Questions	63
Chapter 10 Feedback Survey	64

## [11. Justice](#)

## [12. Visual Culture \(Creativity, Art and Beauty\)](#)

# 3. CONNECTION, COMMUNITY, LOVE, AND PARTNERING

## Learning Objectives

1. Explain the value of community and connection to individuals using a theory.
2. Explain the differences between sex, gender, and sexuality.
3. Describe the need for and various ways individuals connect with community and in intimate relationships.
4. Describe the multi-directional relationship between social structures and the ways that individuals create community and intimate relationships.
5. Analyze how the government influences partnership, marriage, and break ups.
6. Analyze partnerships and marriage from an equity perspective.
7. Apply theoretical concepts related to choosing a partner(s) to own observations and experiences.



# 4. NURTURANCE: PARENTING AND CAREGIVING

## Chapter Learning Objectives

1. Explain the importance of caregiving relationships using a theory.
2. Describe the demographic changes that affect parenting, grandparenting, and other caregiving relationships.
3. Apply theoretical concepts related to parenting to one's own observations and experiences.
4. Describe the multi-directional relationship between social structures and caregiving relationships.
5. Analyze how the government influences caregiving, parenting and attachment.
6. Analyze parenting and caregiving from an equity perspective.



# 5. ROUTINES, TRADITIONS, AND CULTURE



# APPLICATION AND DISCUSSION: QUESTIONS TO CONSIDER

---



# 6. REPRESENTATION AND BELONGING IN SOCIAL SYSTEMS

## Chapter Learning Objectives

1. Describe the formal processes for representation of all families in the US.
2. Analyze why some families are represented less frequently in social processes such as voting, being elected, and participating in the Census.
3. Discuss barriers to participation in social processes.
4. Name the demographic groups that are best represented and least represented in the US.
5. Explain the connection between social identities and representation.
6. Describe the multi-directional relationship between social structures and the ways that individuals are represented.
7. Analyze representation and belonging from an equity perspective, with a focus on the black feminist critiques.
8. Apply theoretical concepts related to representation and belonging to one's own observations and experiences.
9. Recommend institutional changes to increase participation and equity in social processes.



# 7. HEALTH AND HEALTH CARE

## Chapter Learning Objectives

1. Explain how socially constructed ideas affect health.
2. Describe the advantage of understanding disparities related to social characteristics (race, gender, etc.).
3. Explain why people with mental illness or substance abuse disorders are less likely to get medical care and support.
4. Relate the challenges of meeting basic needs like sleep, exercise, and good diet to family health.
5. Describe the difference between a health care system and health insurance.
6. Examine how family structure, geography and income level overlap affect health care access.
7. Analyze the role of capitalism in the opioid crisis.
8. Apply theoretical concepts related to health care to one's own observations and experiences.



# 8. HOUSING

## Chapter Learning Objectives

1. Define houselessness and housing insecurity.
2. Explain some institutional barriers to home ownership and whom those barriers are most likely to affect.
3. Define redlining and bluelining.
4. Discuss the purpose of the Fair Housing Act and evaluate its success to date.
5. Relate economics and power to home ownership.
6. Analyze how where someone lives relates to other aspects of family life, such as health.
7. Recommend some solutions to the housing challenges that families face in the US.
8. Analyze chapter concepts related to housing to one's own observations and experiences.
9. Describe the multi-directional relationship between social processes and institutions and access to housing.
10. Analyze housing from an equity perspective.



# 10. FOOD AND WATER

## Chapter Learning Objectives

1. Describe the connection between the production of food and equity.
2. Explain the role that government crop subsidies play in nutrition.
3. Discuss the role that tax breaks and food banks play in food insecurity.
4. Identify the forces that influence a family's food purchases.
5. Explain the critical factors related to children and access to nutritious food and clean water.
6. Name the factors that affect a family's access to safe water and sanitation.
7. Describe the government's role in the water and sanitation system.
8. Determine whether access to safe water and sanitation is a human right or not.
9. Describe the multi-directional relationship between social structures and the ways that individuals and families access food and water.
10. Apply theoretical concepts to one's own observations and experiences with food and water.



# FOOD AND FAMILIES

Elizabeth B. Pearce and Amy Huskey

**“I have the audacity to believe that people everywhere can have three meals a day for their bodies, education and culture for their minds, and dignity, equality and freedom for their spirits.” Martin Luther King, Jr.**

Survivalists have a rule of three: you can survive without food for three weeks, without water for three days, without shelter from a harsh environment for three hours, and without air for three minutes.<sup>1</sup> If a human goes without any of these resources for a long enough time, death will eventually be the result. It stands to reason that when we talk about American families’ needs, we would talk about all of these; in this chapter we will look at both food and water.

Abraham Maslow’s Hierarchy of Needs theory (1943) describes these physiological needs as being a key motivator in human behavior.<sup>2</sup> Obtaining food, water, shelter, sleep and oxygen to survive consumes a large amount of our time and resources both directly and indirectly. Think about how much time your family spends working to pay for food. In general, families pay a smaller percentage of their income for food than they did 50 years ago. That’s not because food expenses have decreased, but because



Fig. 10.1 Some of the healthiest foods are the most difficult for families to access.

1. Rule of threes (survival). (2020, February 2). Retrieved February 10, 2020, from [https://en.wikipedia.org/wiki/Rule\\_of\\_threes\\_\(survival\)](https://en.wikipedia.org/wiki/Rule_of_threes_(survival))

2. Maslow's hierarchy of needs. (2020, February 6). Retrieved February 10, 2020, from [https://en.wikipedia.org/wiki/Maslow's\\_hierarchy\\_of\\_needs](https://en.wikipedia.org/wiki/Maslow's_hierarchy_of_needs)

other costs, primarily shelter and health care, have increased. We discuss shelter (housing and living environments) in the Housing chapter. Now consider your family's access to water. While we may not think about paying for it as a percentage of our incomes, access to plentiful, clean, safe water is influenced by where we live. The financial resources that are invested into our community infrastructure, which includes water and sanitation, impact our safety and overall health. Where we live matters when it comes to having available and safe water.

Personal finances are only one part of the cost, benefits, and societal dynamics that play into meeting these basic needs. We must pay attention to where foods come from, business and government investment in food production, and the business of food charity. Time is another cost of food; families decide how much time is spent purchasing, preparing, eating, and cleaning up meals (figure 10.1). Turning on a faucet to access clean, toxin free drinking water requires building, maintaining, and monitoring water and sanitation systems, and this comes at a cost that not all municipalities can afford. While the federal government has invested in water infrastructure, there is not an ongoing commitment, so these needs must be balanced with competing needs such as schools, parks, police, and libraries. There are variations and influences on how food and water needs are met, but ultimately they must be met in some way.

## Producing Food

Prior to the formation of the United States, families found food in a variety of ways, including foraging, hunting, fishing, and growing food. As the country progressed toward a formal organizational structure managed by the Euro-American settlers, Native Americans were restricted to designated reservations, often on land that was not as fertile for farming. Food production via farms became a major economic factor. Industrialization created more efficiencies and more wealth for landowners.

It is important to note that these new ways of sourcing food would not have been possible without three institutional structures:

1. Oppression of the way of life that Native Americans had established here for thousands of years;
2. Enslavement of African immigrants brought to this country for the explicit purpose of free labor without attention to their rights and needs;
3. Laws that controlled immigrants from other countries by limiting who could immigrate by gender, familial, and employment status; laws that discriminate based on nationality and immigration status related to wage, housing options, and kind of employment.

These structures affected the functionality of all families in the United States, favoring White families, especially those who owned land. Which of these structures affect families today? If you answered all three, you are correct. Native Americans are still fighting for rights related to their family needs that have been disrupted and restricted; the aftereffects of slavery, including the restrictions of wealth attainment on Black people, affects

both the families who were able to accumulate wealth and the ones who were not; and current immigration laws still place the needs of the employers first.

## Black Farmers

Black farmers in America have had a long and arduous struggle to own land and to operate independently. For more than a century after the Civil War, deficient civil rights and various economic and social barriers were applied to maintaining a system where many Blacks worked as farm operators with a limited and often total lack of opportunity to achieve ownership and operating independence. Although some formerly enslaved people were deeded land in the famous “Forty Acres and a Mule” division of lands in 1868, the same land was later deeded back to the original Confederate owners and the Black families became sharecroppers rather than owners. Other Black farm owners saw their properties diminished throughout the 20th century as described in this fifteen-minute video.



*One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://openoregon.pressbooks.pub/families2e/?p=256#oembed-1>*

These personal stories help us understand how families that worked hard still were treated unjustly. Black farmers often ended up working for landowners once again. Even as employees, they received less protection than factory and office workers. When Social Security and Unemployment laws meant to protect workers were passed, they excluded people who worked on farms or as domestic help, of which the majority were immigrants and minoritized groups, including African Americans. Diminished civil rights also limited collective action strategies, such as cooperatives and unions.

It is tempting to think that these past laws and practices do not affect us today. Many of the structures survive, however, in both subtle and obvious ways. In addition, because these structures limited access and land ownership in proximity to the vital resources of food and water, Euro-Americans were able to build wealth more quickly and easily than any other group of families. We discuss the institutional factors related to housing, location, and wealth in the Housing chapter.

## Farm and Field Workers

Farm workers are and have been an essential part of the United States economy and food system. They come in varying immigration statuses, United States citizens or residents, folks on guest worker visas, or they could be undocumented workers. The following USDA table describes the demographic characteristics of farm workers in the United States in 2018 from the USDA, collected from data on the American Community Survey (part

of the Census project). The data shows that about 55% of farm laborers are born in countries other than the United States (figure 10.2).

**Figure 10.2 Demographic Characteristics of Farm Workers in the United States in 2018<sup>3</sup>**  
**Note: Counts all private sector wage and salary workers employed in the crop, livestock, and agricultural support industries.**

Item	Farm laborers, graders and sorters	Farm managers, inspectors, and supervisors	All other occupations in agriculture	Agriculture: All occupations	All U.S. private wage and salary workers
Percent female	25	13	32	26	45
Average age in years	39	43	42	40	40
Percent under age 25	22	13	15	19	18
Percent over age 44	38	46	47	41	41
Percent married	47	61	52	51	48
<b>Race/Ethnicity/Ancestry</b>					
Percent White, not Hispanic	32	64	59	43	60
Percent Black, not Hispanic	3	3	5	3	12
Percent other, not Hispanic	2	3	3	2	9
Percent Hispanic: Mexican origin	57	27	28	45	12
Percent Hispanic: Other	7	3	6	6	7
Percent born in U.S. (includes Puerto Rico)	45	76	75	57	80
Percent U.S. citizens	54	84	83	65	90
<b>Education</b>					
Percent lacking high school diploma	48	24	20	38	9
Percent with high school diploma (includes equivalency)	32	31	33	32	29
Percent with at least some college	20	45	47	30	62

Differences in demographics are also evident between crop and livestock workers (not shown in table). A larger

3. U.S. Census Bureau. Farm labor. Economic Research Service. <https://www.ers.usda.gov/topics/farm-economy/farm-labor/>

share of laborers in crops and related support industries are female (28 percent versus 20 percent in livestock). Crop laborers are also less likely to be non-Hispanic White (25 percent versus 48 percent for livestock), and less likely to have been born in the United States (39 percent for crop workers in manual labor occupations versus 60 percent for manual livestock workers). Finally, crop laborers have lower levels of educational attainment: 52 percent lack a high school degree, compared with 37 percent in livestock.

Notably, the U.S. Department of Labor’s National Agricultural Workers Survey (NAWS), discussed below, finds larger shares of foreign-born, Hispanic, and less educated employees among crop and support workers than does the ACS (livestock workers are not surveyed in NAWS). For example, NAWS estimates that in Fiscal Years 2015-16, just 25 percent of crop farm workers in manual labor occupations were U.S. born, compared with 39 percent in the ACS.

Since this data is gathered from a written survey related to the Census, it is important to note that there is likely some underreporting from groups that are the hardest to reach, including people of color, children under five, renters, immigrants, people with limited English proficiency, multiple-family homes, Native tribal and urban communities, disabled people, people who distrust the government, and LGBTQ+ individuals. This is discussed at length in the Representation chapter.

The survey also tells us that the average age for farmworkers is on the rise, and they are more likely to be female. Younger immigrants are less likely to go into farm work than into other professions, so the population is aging. It is hypothesized that as men move toward agricultural employment (rather than working with crops) and there is increased machine usage, women are moving into these jobs.

Immigrants, especially those who are not yet documented or who live in mixed-status families, are more likely to experience poor treatment and be less likely to complain about bad work conditions.

## Field Workers

By Carla Medel, Bachelor’s Degree candidate: Psychology with Spanish and HDFS minors, Oregon State University, 2021.

103 degrees Fahrenheit, picking zucchini, I turn to the sound of “water, water, we need water!” and to the woman with the purple bandana and a hurt shoulder on the ground; she had fainted of dehydration. She sits underneath a tree for 15 minutes with a bottle of water that one of our

coworkers was able to give her and before I even know it, she is back on the field picking zucchini along my side.

That afternoon as I made my way home, I could not help but to begin crying out of frustration. I was only 16 but I knew that what I had just witnessed was not correct. Feeling hopeless, the next day I no longer wanted to go back to work. What I did instead, was go grocery shopping with my mom. When we headed to produce, and I saw people grabbing zucchini, the tears came again. They did not know what those .76¢ zucchini really cost. This is my story, but this is definitely not a unique one. Immigrant farm workers in the United States are treated terribly, and with little to no protection, others are ready to take advantage.

## Food Factory Workers

The recent Coronavirus pandemic has brought necessary attention to the important function of meat production and the preservation of fruits and vegetables in factories. The federal government has determined them to be essential workers. Many of these workers are immigrants and people of color.

The authors of this text plan to elaborate on this group of families in future editions of the text. [For now, this podcast which highlights the experience of a mother supporting a family of five who works in the Smithfield pork plant in South Dakota illustrates the dilemmas an essential worker faces.](#)

## Procuring Food

We'll discuss getting food, and what causes some families to be hungry, or the more technical term, "food insecure." We acknowledge that food insecurity is a symptom of another **social problem**, poverty. First, let's look at some of the systems that affect food availability in the United States.

Equitable access to food is hampered by governmental systems that focus on subsidizing specific farm crops. Federal government subsidies help farmers reduce their risk due to weather, commodities brokers, economic downturns, and changes in demand. There are only five crops that receive these major government subsidies: corn, soybeans, wheat, cotton, and rice. Producers of fruit, vegetables and meat only benefit from crop insurance and disaster relief.<sup>4</sup> Farm subsidies have increased dramatically in the last four years, totaling \$28 billion dollars for a two year period (2018-2020, not including the additional Coronavirus payments authorized in the

---

4. Amadeo, K. (2020, June 29). Farm subsidies with pros, cons, and impact. The Balance. <https://www.thebalance.com/farm-subsidies-4173885>

spring of 2020).<sup>5</sup> This incentivizes the production of certain crops in the United States and provides stability for the families involved in producing those crops.



Fig. 10.3. Fresh produce is more difficult to store and less likely to be available at food banks.

It is more complicated to measure the effects of these subsidies on consumers. We know that these subsidized food crops (corn, soybeans, wheat and rice) are more easily stored and utilized in processed foods, which nutritionists advise should be eaten in the smallest amounts. Crops in their raw forms, such as fruits, vegetables, legumes, meat, and dairy products, provide more health benefits but are not subsidized consistently by the government (figure 10.3). Here we may deduce that governmental subsidies of less healthy crops contributes to food availability and cost, affecting food purchases. Lower income families and those living in food deserts (described in the next section) are most affected.

Another challenge to food accessibility is the societal approach which focuses on governmental programs (such as the Supplemental Nutrition Assistance Program—SNAP, which will be described later) and charity, which in itself has become a business. Grocery stores and other businesses are provided with tax benefits when they overproduce food and donate it to food banks. Andy Fisher, the author of *Big Hunger*, describes hearing from grocery store owners who acknowledge the overproduction of sheet cakes, birthday cakes, pastries, and other baked goods. Consumers do not wish to purchase the last cake on the shelf, and so stores overproduce these items. When they are no longer considered fresh, they are donated to food banks. This is one of the reasons that about 25% of the donations that Food Banks give away consist of food that is categorized as unhealthy.<sup>6</sup>

[Listen to Mr. Fisher describe the complexities of this cycle here.](#)

Not only is overproduction of food supported by tax deductions, but food banks themselves have become multi-million dollar businesses (also described in the above podcast). Food banks serve a charitable purpose that meets an immediate and important need. At the same time, if the real problem—poverty—were addressed, people could have the dignity of providing and choosing the food that is best for their own family.

Poverty affects Americans of every racial-ethnic group, including those descended from European immigrants, but continues to affect the previously mentioned groups (Native Americans, Black or African Ameri-

5. Charles, D. (2019, December 31). Farmers got billions from taxpayers in 2019, and hardly anyone objected. NPR. <https://www.npr.org/sections/thesalt/2019/12/31/790261705/farmers-got-billions-from-taxpayers-in-2019-and-hardly-anyone-objected>

6. Hemmelgarn, M. (2013, January 3). Andy Fisher interview [Audio podcast episode]. In Food Sleuth Radio. <https://exchange.prx.org/pieces/90347-food-sleuth-radio-andy-fisher-interview>

cans, and people descended from Latinx and some Asian countries) in disproportionately larger numbers.<sup>7</sup> The United States is an **individualistic** country and people are sometimes blamed for being poor. This makes the problem of hunger more approachable than the problem of poverty. It is encouraging to note, however, that Americans increasingly understand that poverty stems not from personal shortcomings but from differentiation in circumstance and opportunity. Pew Center survey results released in March, 2020, note that almost  $\frac{2}{3}$  of American adults say that people who are rich have experienced more advantages than those who are poor; only  $\frac{1}{3}$  say that it is because rich people have worked harder. These viewpoints are uneven related to political affiliation and age, with Democrats and younger people more likely to hold the majority view.<sup>8</sup> If more people view poverty as a **social problem** than a personal problem, it is more likely to be solved with a systemic solution.

## Food Deserts

Perhaps you are familiar with this term, or have lived in a food desert. If you travel by bicycle or via public transport, you may be more aware of food deserts in your community. Food deserts are geographic locations where there is not a variety of healthy food readily available (within a mile in urban environments or within 10-20 miles in a rural area). Food deserts occur nationally, with a greater concentration of food deserts in the Midwest and southern states.

---

7. U.S. Census Bureau (2013, February). Poverty Rates for Selected Detailed Race & Hispanic Groups by State and Place: 2007-2011. <https://www.census.gov/library/publications/2013/acs/acsbr11-17.html>

8. Pew Research Center. (2020, March 2). Most Americans point to circumstances, not work ethic, to explain why people are rich or poor. <https://www.pewresearch.org/politics/2020/03/02/most-americans-point-to-circumstances-not-work-ethic-as-reasons-people-are-rich-or-poor/>



Fig. 10.4. Convenience Stores such as this one don't count as grocery stores because they do not sell the healthy fresh foods that nutritionists recommend.

Think about the community that you live in. Where are the grocery stores? Convenience stores don't count, because they do not typically have fresh fruits and vegetables (figure 10.4), although they do sell other items that are food stamp eligible. Are the stores even spaced out amongst the neighborhoods? Probably not, and typically the dearth of stores is in lower income neighborhoods. The same parts of Portland, Oregon that are identified as redlined neighborhoods in the Housing chapter are also food deserts. The Oregon State (OSU) Barometer wrote about food deserts in Corvallis, Oregon, in 2019, pointing out that the majority of grocery stores in Corvallis are clustered around 9th Street and Walnut Boulevard.<sup>9</sup> Two of the four stores that are more

9. Shelby, V. (2019, February 25). Corvallis food deserts make finding nutritious, affordable meals difficult. Daily Barometer. [http://www.orangemedia-network.com/daily\\_barometer/corvallis-food-deserts-make-finding-nutritious-affordable-meals-difficult/article\\_e28ad688-38b0-11e9-a269-8b7ab733184f.html](http://www.orangemedia-network.com/daily_barometer/corvallis-food-deserts-make-finding-nutritious-affordable-meals-difficult/article_e28ad688-38b0-11e9-a269-8b7ab733184f.html)

distantly spaced are among the healthiest, emphasizing organic produce and natural foods, but also the most expensive.

What if there were federal funding to support equitable distribution of grocery stores that had a full selection of healthy foods? In the same way that federal subsidies protect farmers of selected crops from economic problems, they could protect grocery businesses and create greater **equity** for many consumers.

To learn more about food deserts, or to access an interactive map that displays different ways of viewing food deserts, read [NPR's article "How to find a food desert near you"](#) and follow the link to the USDA's Food Atlas.

## Urban Farming: The "Gangsta Gardener"

How can individuals and families impact the trends toward large commercial farms and likelihood that foods are transported thousands of miles rather than being available fresh, locally? One example of someone who is making a difference is Ron Finley, a proponent of urban farming. Formerly best known as a fashion designer for high-end stores and celebrities, he now calls himself the "gangsta gardener" after digging up a strip of earth between his house and the street to plant fruits and vegetables. It turned out that this was illegal in the city of Los Angeles so Finley worked to change the law (Figure 10.X). Since that time he has helped hundreds of families start their own gardens and given a Ted Talk watched by 4.2 million people as of 2022. An article in The Guardian, described him this way:

He has travelled widely talking about his work, including a [Ted Talk](#) watched by 3.5 million people (that's where his nickname comes from, when he says: "Let's all become gangsta gardeners ... If you ain't a gardener, you ain't gangsta"). He likens his work to graffiti, describing Mother Nature as the greatest artist out there. "We did it in LA and we can do it all over the world ... A garden can change people's lives, it can change the destruction of a community," he says in [Can You Dig This?](#), a 2015 documentary about community gardens in South Central, which has music star John Legend among its executive producers (Weston, 2020.)



Figure 10.X Ron Finley has inspired people locally and globally to use urban spaces to grow healthy food.

Finley emphasizes the importance of opportunity as opposed to hope, “It’s the opportunity to make shit happen ... A lot of the governments and municipalities need to put money into this, which they haven’t,” he says.”

## The Poverty Line and Food Costs

How is poverty defined? While there are multiple measures, a common and shared one is the Poverty Threshold, also known as the Poverty Line. While poverty will affect all of the families related to all of the topics in this text, we will discuss it here because it was originally tied to the cost of food, specifically an “economy food plan.” In 1963, the poverty line was designated at three times the economy food plan, and it was assumed “that the housewife will be a careful shopper, a skillful cook, and a good manager who will prepare all the family’s meals at home.”<sup>10</sup>

When U.S. officials became concerned about poverty during the 1960s, they quickly realized they needed to find out how much poverty we had. To do so, a measure of official poverty, or a poverty line, was needed. A government economist, Mollie Orshanky, first calculated this line in 1963 by multiplying the cost of a very minimal diet by three, as a 1955 government study had determined that the typical American family spent one third of its income on food. Thus a family whose cash income is lower than three times the cost of a very minimal diet is considered officially poor.

This way of calculating the official poverty line has not changed since 1963, although the amount is adjusted by inflation. It is thus out of date for many reasons. For example, many expenses, such as heat and electricity, child care, transportation, and health care, now occupy a greater percentage of the typical family’s budget than was true in 1963. In addition, this official measure ignores a family’s non-cash income from benefits such as food stamps and tax credits. As a national measure, the poverty line also fails to take into account regional differences in the cost of living. All these problems make the official measurement of poverty highly suspect. As one poverty expert observes, “The official measure no longer corresponds to reality. It doesn’t get either side of the equation right—how much the poor have or how much they need. No one really trusts the data.”<sup>11</sup>

This is a good time to ask yourself, if you looked at food as a percentage of your budget, would it be the equivalent of 33%? That’s how the poverty line is still calculated.

10. Fremstad, S. (2019, September 16). The official U.S. poverty rate is based on a hopelessly out-of-date metric. Washington Post. <https://www.washingtonpost.com/outlook/2019/09/16/official-us-poverty-rate-is-based-hopelessly-out-of-date-metric/>

11. DeParle, J., Gebeloff, R., & Tavernise, S. (2011, November 4). Bleak portrait of poverty is off the mark, experts say. New York Times, p. A1.



Fig. 10.5. The measure of official poverty began in 1963 and stipulates that a family whose income is lower than three times the cost of a minimal diet is considered officially poor. This measure has not changed since 1963 even though family expenses have risen greatly in many areas.

The poverty line is adjusted annually for inflation and takes into account the number of people in a family: The larger the family size, the higher the poverty line. In 2010, the poverty line for a nonfarm family of four (two adults, two children) was \$22,213. A four-person family earning even one more dollar than \$22,213 in 2010 was not officially poor, even though its “extra” income hardly lifted it out of dire economic straits. Poverty experts have calculated a no-frills budget that enables a family to meet its basic needs in food, clothing, shelter, and so forth; this budget is about twice the poverty line. Families with incomes between the poverty line and twice the poverty line (or twice poverty) are barely making ends meet, but they are not considered officially poor (figure 10.5).

When we talk here about the poverty level, then, keep in mind that we are talking only about official poverty and that there are many families and individuals living in near poverty who have trouble meeting their basic needs, especially when they face unusually high medical expenses, motor vehicle expenses, college debt, or the like. For this reason, many analysts think families need incomes twice as high as the federal poverty level just to

get by.<sup>12</sup> They thus use twice-poverty data (i.e., family incomes below twice the poverty line) to provide a more accurate understanding of how many Americans face serious financial difficulties, even if they are not living in official poverty.<sup>13</sup>

## Food Security and Food Insecurity

Identified in 1995 as a measurable problem, the USDA introduced new language to describe ranges of severity of food insecurity in 2006. The methods used to assess households' food security remained unchanged. Here are the current definitions of food security and food insecurity.

### Food Security

- High food security (old label=Food security): no reported indications of food-access problems or limitations.
- Marginal food security (old label=Food security): one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.

### Food Insecurity

- Low food security (old label=Food insecurity without hunger): reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- Very low food security (old label=Food insecurity with hunger): Reports of multiple indications of disrupted eating patterns and reduced food intake.<sup>14</sup>

According to the USDA, [hunger](#) “... refer(s) to a potential consequence of food insecurity that, because of prolonged, involuntary lack of food, results in discomfort, illness, weakness, or pain that goes beyond the usual uneasy sensation.” Nationally, food insecurity has been a problem as long as it has been measured and the rate has changed very little; the number of food insecure families was 12% in 1995 and was still 11.1% in 2018. Let's look more closely at Oregon, where food insecurity has been one of the toughest challenges to overcome. According to the Oregon Public Health Division, Oregon ranks 13th in the nation for food insecurity among

---

12. Wright, V. R., Chau, M., & Aratani, Y. (2011). Who are America's poor children? The official story. New York, NY: National Center for Children in Poverty.

13. Anonymous. (2016). Social problems: Continuity and change. University of Minnesota Libraries Publishing. <https://open.umn.edu/opentextbooks/textbooks/social-problems-continuity-and-change>

14. Economic Research Service. Department of Agriculture. (2019, September 4). Definitions of food security. Retrieved March 7, 2020, from <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/>

children, and 21st for adults. While efforts have been made to combat hunger in Oregon, it is still a big problem for the state. According to United States Department of Agriculture (USDA) data, more than [one in seven](#) of Oregon households were food insecure between 2014 and 2016.<sup>15</sup> Renters in Oregon had food insecurity rates as high as [one in four](#) between 2015-2017.<sup>16</sup>

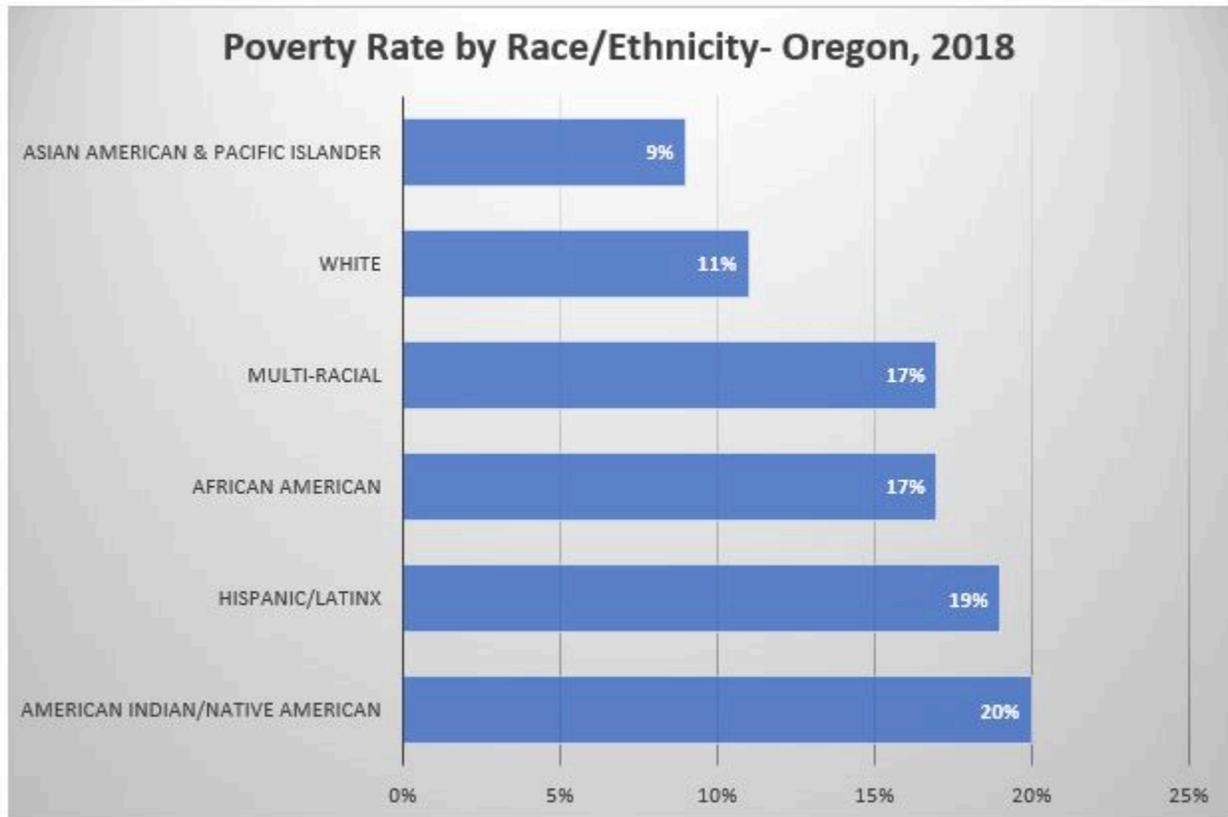


Fig. 10.6 Poverty rate by race/ethnicity, Oregon, 2018.

The Oregon Center for Public Policy says that over 527,000 people in Oregon suffer from food insecurity.

15. Bauer, J. (2018, May 17). Oregon Lags in Fighting Food Insecurity (figure 10.6). Oregon Center for Public Policy. <https://www.ocpp.org/2018/05/17/oregon-food-insecurity-lag/>

16. Edwards, M. (2018, December). Widespread declines, yet persistent inequalities: Food insecurity in Oregon and the U.S. Oregon State University School of Public Policy. <https://liberalarts.oregonstate.edu/sites/liberalarts.oregonstate.edu/files/sociology/oregonhungerreportdec2018.pdf>

3 in 10 food insecure Oregonians make too much \$ to qualify for food assistance.



Figure 10.7 Share of food insecure Oregonians with too much income to qualify for SNAP assistance, 2016.

<sup>17</sup> To put that into perspective, the population of Portland, our largest city, is around 647,800 people. Overall, minorities and single mothers are disproportionately impacted by food insecurity; food insecurity is strongly linked to **socioeconomic status**.

While there are programs to help families who are food insecure, there are still families who are food insecure who do not qualify for any food assistance. (figure 10.7)

## Food Insecurity at Linn-Benton Community College

In a recent survey conducted by the HOPE Center at Temple University, Linn-Benton Community College (LBCC) in Albany, Oregon was one of 400 community colleges queried about food and **housing insecurity** over the past five years. Linn-Benton Community College students participated in 2019, the fifth year of the study. The survey was sent to 5,700 students and 558 students responded.

Forty-eight percent of students reported experiencing food insecurity within the last 30 days, slightly higher than the nation-wide average of community college students (figure 10.8).

17. Bauer, J. (2018, May 17). Oregon Lags in Fighting Food Insecurity. Oregon Center for Public Policy. <https://www.ocpp.org/2018/05/17/oregon-food-insecurity-lag/>

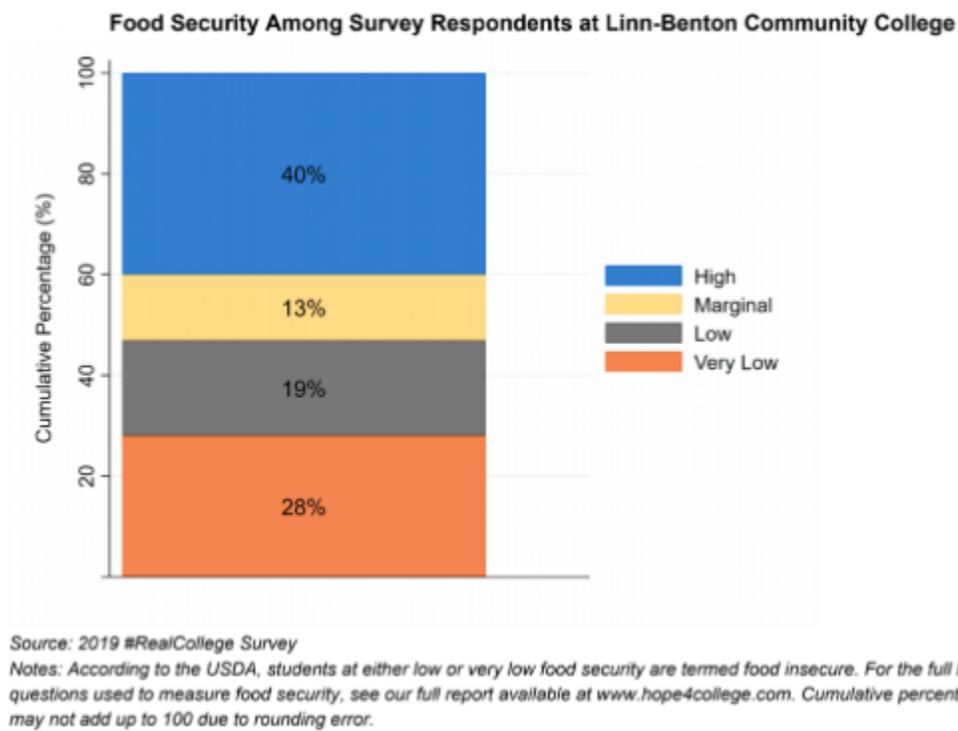


Fig. 10.8 47% of student respondents at LBCC are food insecure.

Sixty-six percent of the students that participated in the survey reported experiencing either food insecurity, **housing insecurity**, or **houselessness** within the past year.<sup>18</sup> Various measures of food insecurity ranged in response from five to 49 percent of LBCC students (figure 10.9).

18. Baker-Smith, C., Coca, V., Goldrick-Rab, S., Looker, Richardson, B., & Williams, T. (2020, February). Hope Center. [https://hope4college.com/wp-content/uploads/2020/02/2019\\_RealCollege\\_Survey\\_Report.pdf](https://hope4college.com/wp-content/uploads/2020/02/2019_RealCollege_Survey_Report.pdf)

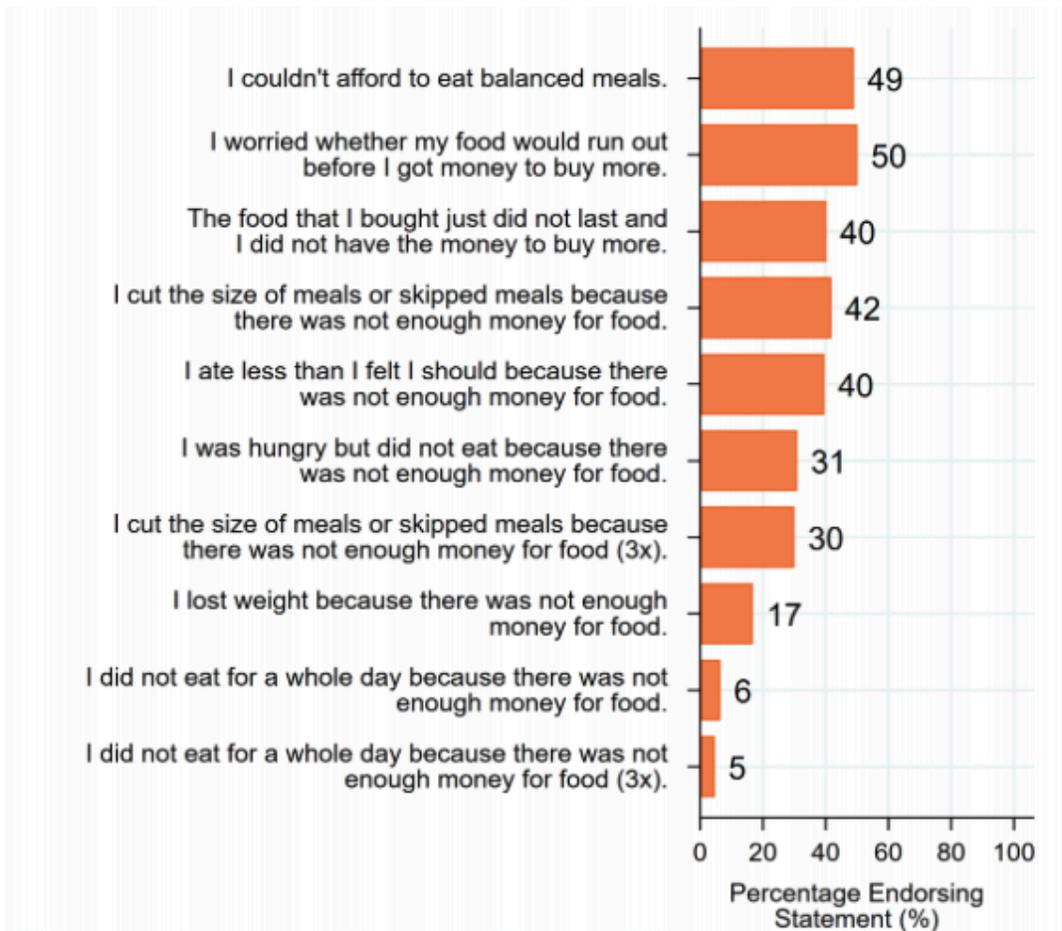


Fig. 10.9. Food insecurity as measured in a variety of ways appears among survey respondents at LBCC.

## Food stamps: Supplemental Nutrition Assistance Program

Many people in the United States rely on the Supplemental Nutrition Assistance Program (SNAP) to provide food for their families. SNAP is a federal program that in some states is supplemented with local funds whose goal is to supplement nutrition and the food budget of families who are moving toward self-sufficiency. According to the 2018 American Community Survey, 12.4% of people in the United States use food stamps and the majority of those families have at least one person working, with  $\frac{1}{3}$  of recipients having two family members working.<sup>19</sup> Oregon has one of the highest usage rates in the country at a rate of fourteen percent. [Here you can see a map of SNAP usage across the country.](#)

In 2019, President Trump proposed dramatic cuts and restrictions to the food stamp program. The rule was finalized by the administration in 2020, but a federal judge blocked its implementation in March, 2020,

19. US Census Bureau. (2020, July 21). Most families that received SNAP Benefits in 2018 had at least one person working. <https://www.census.gov/library/stories/2020/07/most-families-that-received-snap-benefits-in-2018-had-at-least-one-person-working.html>

due to the coronavirus epidemic. Between May and July, 2020, the USDA appealed this judgement. While the SNAP program is currently unchanged, if the proposed work restrictions go into effect, it is estimated that about 700,000 people will lose benefits.<sup>20</sup>

Even without these changes, people on SNAP are having trouble meeting ends meet. Many people find themselves stuck in a seemingly endless cycle of poverty, despite striving for self-sufficiency. [Listen here to a three minute summary of an interview with a woman in 2000 when she used food stamps and then re-interviewed in 2012.](#)

Fraud is often mentioned as a concern when it comes to food stamps, but when recipient and vendor fraud is totaled it is estimated at less than one percent of all funds disbursed. That means that more than 99% of the funds are used correctly.<sup>21</sup> The USDA maintains a webpage that reports on their efforts to stop fraud and to recoup delinquent funds. These authors advocate for the focus to shift toward solving the social problems of poverty and hunger, rather than letting the small amount of fraud distract the country from these efforts.

People struggling to feed themselves and their families face other challenges as well. Accepting governmental assistance and charity is stigmatized. Some families feel too embarrassed to seek or accept needed resources. Constant stress related to food insecurity and choosing which bills to pay contributes to mental health challenges. Do you or someone you know have experience with using SNAP? Click here to read [Voices From 'Hunger In Oregon'](#) for short descriptions from Oregonians who have used this program.

## What are families eating and why?

Hearing the phrase “you are what you eat” might conjure a distinct image in a person’s mind. This phrase is often associated with encouraging a healthy diet to promote an individual’s overall well-being. Yet, food is not only a form of sustenance, but it is also used to communicate culture as well as a way of forming social ties and communicating love.

It is important to recognize the multi-dimensional influence food has on family life, and therefore how it can impact families in various ways. In this chapter, we have focused on the ways that institutional forces and family social class shape access to food. Let’s spend a little time here on other factors that affect food choices; this text will explore more aspects of food and family in the Routines, Traditions, and Culture chapter.

### Early food experiences

The way our family approaches food when we are children affects us the rest of our lives. What we eat matters, as do the social aspects of meals. Some families eat meals together; others eat their meals individually in

---

20. Vesoulis, A. (2020, May 13). The White House Pushes to Curb Food Stamps Amid Record Unemployment Retrieved August 19, 2020, from <https://time.com/5836504/usda-snap-appeal-rule-change/>

21. Constable, S. (2018, April 4). The facts about food stamp fraud. Forbes. <https://www.forbes.com/sites/simonconstable/2018/04/04/the-facts-about-food-stamp-fraud/>

front of devices. People who were not exposed to a variety of foods as children, or who were forced to swallow every last bite of overcooked vegetables, may make limited food choices as adults. Children who do not have practice socializing during meals may not develop social skills or understand dining table social norms.

#### Habits

It can be easy to establish a habit around things we do each day. For example, having a dessert can become a habit. Having a snack after school or a drink with dinner can develop into a habit. Healthy habits such as “an apple a day” can be developed as well and may require intention on the part of the individual.

#### Culture

The **culture** in which one grows up affects how one sees food in daily life and on special occasions. Food and family recipes are important ways to transmit culture across families and from generation to generation. Traditions and celebrations often include food.

#### Geography

Where a person lives influences food choices. For instance, people who live in Midwestern US states have less access to fresh seafood than those living along the coasts.

#### Advertising

The media greatly influences food choice by persuading consumers to eat certain foods. Have you ever found yourself suddenly hungry after watching an advertisement for the local pizza place? The media affects both when we eat and what we eat.

#### Social factors

Any school lunchroom observer can testify to the impact of peer pressure on eating habits, and this influence lasts through adulthood. People make food choices based on how they see others and want others to see them. For example, individuals who are surrounded by others who consume fast food are more likely to do the same.

#### Health concerns

Some people have significant food allergies, to peanuts for example, and need to avoid those foods. Others may have developed health issues which require them to follow a low salt or gluten-free diet. In addition, people who have never worried about their weight have a very different approach to eating than those who have long struggled with excess weight.

#### Emotions

There is a wide range in how emotional issues affect eating habits. When faced with a great deal of stress, some people tend to overeat, while others find it hard to eat at all.

#### Green food/Sustainability choices

Based on a growing understanding of diet as a public and personal issue, more and more people are starting to make food choices based on their environmental impact. Realizing that their food choices help shape the world, many individuals are opting for a vegetarian diet, or, if they do eat animal products, striving to find the most “cruelty-free” or sustainable options possible. Purchasing local and organic food products and items grown through sustainable means also helps shrink the size of one’s dietary footprint.

#### Religion and Belief Systems

People design their diets for various reasons, including religious doctrines, health concerns, and ecological and animal welfare concerns. For example, Jewish people may observe kosher eating practices and Muslim people fast during the ninth month of the Islamic calendar.<sup>22</sup>

### Knowledge

Knowledge about healthful foods and calorie amounts affect food choices. This can be gained through family, peer, or media influence. Cooking knowledge is impactful. For example, knowing how to hydrate dried beans or prepare fresh vegetables could increase consumption of healthier foods. There has been a dramatic increase in television cooking shows in the 21st century, as well as nutrition, recipe, and cooking websites, blogs, and videos. The amount of information can make it hard to choose, but there are many options to learn about nutrition and cooking.

### Time

One thing that contemporary families in the United States have less now than they did fifty years ago is time. This is primarily due to the decreasing number of jobs with enough pay and benefits to support a family and the need for more adults in the house to be working. With less time, efficiencies such as fast food, processed food, and prepared food become more appealing. Having more time means that families have the flexibility to cook and prepare their own food if they choose.

## Children

Several other chapters in this text (Nurturance; and Routines, Traditions, and Culture) will focus more closely on children. But they deserve a special mention when it comes to food, and especially to hunger. Children are heavily impacted by poverty and hunger in the United States. In 2017, 17.5% of all children in the United States lived in poverty; Latine and Black children were more often in poverty than were White children. This contributes to diet deficiency. A high quality diet is a major contributing factor to children's health and well-being and to their health outcomes as adults. Poor eating patterns in childhood are associated with obesity during childhood and adolescence; obese children are more likely to become obese adults. Obesity in children has been increasing dramatically since 1980 and is likely related to diet, physical activity, family environment and other factors. Obesity leads to increased risks for a wide variety of chronic diseases, including diabetes, stroke, heart disease, arthritis, and some cancers.<sup>23</sup>

---

22. Constable, S. (2018, April 4). The facts about food stamp fraud. Forbes. <https://www.forbes.com/sites/simonconstable/2018/04/04/the-facts-about-food-stamp-fraud/>

23. Federal Interagency Forum on Child and Family Statistics. (2019). America's Children: Key National Indicators of Well-Being, 2019. <https://www.childstats.gov/americaschildren/>



Fig. 10.10 Children eating fresh fruit in a child care setting.

Hunger and a poor diet can have other effects on children. Hungry children cannot learn as efficiently as well-nourished children. According to the American Psychological Association (APA), they are more likely to develop anxiety and depression along with other health problems. Brain development, learning, and information processing can all be affected by lack of an adequate diet. Children experience stigma around being food insecure and accessing free and reduced meals, part of the federal response to poverty. For more information on this program, [access the USDA website here](#). Many children receive USDA subsidized meals and snacks in child care and at school (Figure 10.10). Children may feel isolated and ashamed about being poor or about being food insecure, although many children share this experience in the United States.<sup>24</sup>

24. American Psychological Association. (n.d.). What are the psychological effects of hunger on children? Retrieved August 19, 2020, from <https://www.apa.org/advocacy/socioeconomic-status/hunger.pdf>

## References

Weston, P. (2020, April 28). “This is no damn hobby”: The “gangsta gardener” transforming Los Angeles. *The Guardian*. <https://www.theguardian.com/environment/2020/apr/28/ron-finley-gangsta-gardener-transforming-los-angeles>

### Licenses and Attributions

#### Open Content, Shared Previously

“The Poverty Line and Food Costs” is adapted from [Social Problems: Continuity and Change](#) by Anonymous. License: [CC BY-NC-SA 4.0](#).

“What are Families Eating and Why” is adapted from [Human Nutrition](#) by Marie Kainoa Fialkowski Revilla, Alan Titchenal, Allison Calabrese, Cheryl Gibby, & William Meinke. License: [CC BY 4.0](#).

Figure 10.1. [Photo](#) by Keith Weller/USDA. Public domain.

Figure 10.2 [Demographic Characteristics of Farm Workers in the United States in 2018](#) from the U.S. Census Bureau and in the public domain.

Figure 10.3. “[kitchen remodel: 1927 Mission Revival bungalow](#)” by [jlt](#). License: [CC BY-NC-SA 2.0](#).

Figure 10.4. “[Food Desert Challenge: Day 1](#)” by [Mark Bonica](#). License: [CC BY 2.0](#).

Figure 10.X [The Gangsta Gardener, Ron Finley, August 17-20, 2018](#) by U.S. Embassy, New Zealand in the public domain.

Figure 10.5. “[A static caravan park on the cliffs above Beer, Devon, England.](#)” by [Adrian Pingstone](#). Public domain.

Figure 10.10. “[NCES receives fresh fruits & veggies grant](#)” by [North Charleston](#). License: [CC BY-SA 2.0](#).

#### Open Content, Original

Figure 10.6. “Poverty rate by race/ethnicity, Oregon, 2018.” Based on [data](#) from the American Community Survey/Kaiser Family Foundation. License: [CC BY 4.0](#).

Figure 10.7. “Share of food insecure Oregonians with too much income to qualify for SNAP assistance, 2016.” Based on [data](#) from the Oregon Center for Public Policy. License: [CC BY 4.0](#).

#### All Rights Reserved Content

[“How Black Americans Were Robbed of Their Land”](#) (c) *The Atlantic*. License Terms: Standard YouTube license.

Figure 10.8. “Food security among survey respondents at Linn-Benton Community College” in *#2019 RealCollege Survey: Linn-Benton Community College* by [The Hope Center](#). Used with permission.

Figure 10.9. “Food insecurity among survey respondents at Linn-Benton Community College” in *#2019 RealCollege Survey: Linn-Benton Community College* by [The Hope Center](#). Used with permission.

# ACCESS TO WATER AND SANITATION

Elizabeth B. Pearce and Alexis Castaneda-Perez

## Safe Water and Sanitation

For about 100 years, water in the United States has been supported by a federally funded infrastructure that ensures families safe drinking water and sanitation. Water-borne diseases, such as cholera, were virtually eliminated by the provision of this system. Although the effort to create safe water and sanitation was well funded up until the end of the 20th century, there are some geographic areas and groups that are underserved; systems were not funded **equitably** before funding dried up.

Safe water and sanitation can be defined by these three things:

- Access to safe and reliable drinking water;
- A shower, toilet, and tap in the home;
- A reliable system for treating and disposing of wastewater

**Socioeconomic status** is a barrier to safe water access. Challenges in poor communities include contaminated water supplies, housing with lead-infested water, other substandard plumbing issues, and unequal distribution of public drinking water such as water fountains in schools and other public places.

As individuals more regularly carry their water with them, access to a bottle filling station can mean the difference between a one-time purchase or the ongoing expense of hundreds of plastic water bottles (Figure 10.11). Look around your own daily environments; where can you find these stations? Could there be more bottle fillers added and more equitably distributed?



Fig. 10.11. Water bottle filling stations cut down on costs related to disposable bottles.

## Diverse Water Challenges

Almost one third of adults in America are inadequately hydrated. Race is the biggest predictor to lack of water access; African American and Latinx people are more likely to experience lack of adequate hydration as are

lower income people.<sup>1</sup> This graphic from the University of North Carolina describes six access challenges (figure 10.12).



Fig. 10.12 It is eye-opening to realize the number of water access challenges families face in the United States.

There is no centralized government or research entity that collects national data about water and sanitation in the United States, which creates challenges to assessing and meeting needs. In November, 2019, the US Water

1. Brooks, C. J., Gortmaker, S. L., Long, M. W., Craddock, A. L., & Kenney, E. L. (2017). Racial/ethnic and socioeconomic disparities in hydration status among us adults and the role of tap water and other beverage intake. *American Journal of Public Health*, 107(9), 1387–1394. <https://doi.org/10.2105/AJPH.2017.303923>

Alliance and Dig Deep, two organizations dedicated to improving water access for families in the United States, released a comprehensive report analyzing all available data from local, regional and national sources. More than two million Americans lack access to safe water. [Closing the Water Access Gap in the United States: A National Action Plan](#) has five key findings:

1. Federal data doesn't accurately measure the water access gap
2. Race is the strongest predictor of water and sanitation access
3. Poverty is a key obstacle to water access
4. Water access challenges affect entire communities
5. Progress is uneven, and some communities are backsliding.

Along with race and poverty as indicators, the report identifies residents of Puerto Rico, **houseless** people, and members of American Indian communities as having a greater likelihood of lack of access to water and sanitation.<sup>2</sup>

## Case Study: Flint, Michigan

Let's look more closely at a community that has experienced a safe water crisis between 2014 and 2020. For some context, Flint was a booming city with an economy centered around the automotive industry through the late 20th century. In fact, this is where vehicle manufacturer General Motors was founded. Although its industrial prime is past, Flint is still home to roughly 100,000 Americans. According to the [United States census population estimates](#), 53.7% of Flint residents are African American and 40.4% of its population lives in poverty (figure 10.14).<sup>3</sup> The median household income in Flint is about \$24,000-\$27,000 a year.

---

2. US Water Alliance. Dig Deep. (2019, November). Closing the water access gap in the United States. [http://uswateralliance.org/sites/uswateralliance.org/files/Closing%20the%20Water%20Access%20Gap%20in%20the%20United%20States\\_DIGITAL.pdf](http://uswateralliance.org/sites/uswateralliance.org/files/Closing%20the%20Water%20Access%20Gap%20in%20the%20United%20States_DIGITAL.pdf)

3. U.S. Census Bureau. (2020). QuickFacts: Flint City, Michigan [table]. Retrieved February 17, 2020 from <https://www.census.gov/quickfacts/flintcitymichigan>

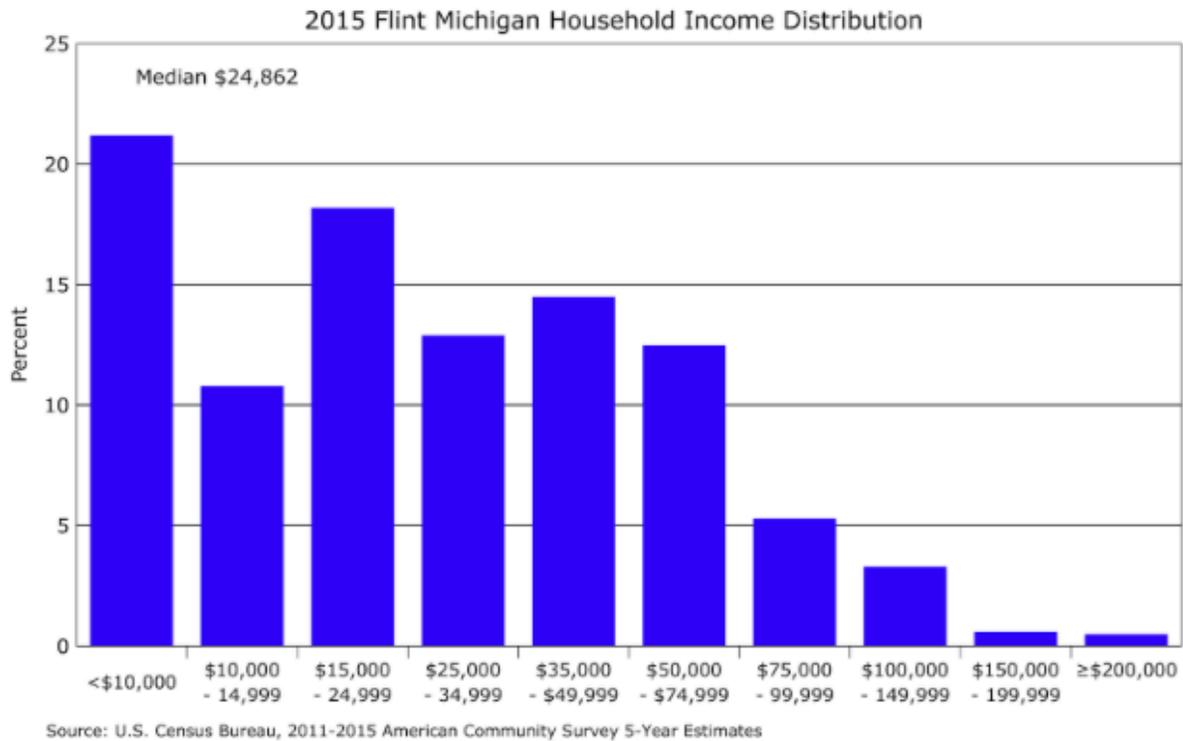


Fig. 10.13. Flint, Michigan has many families who are poor.

## Saving Money

City officials in Flint decided to change its water source in 2014. The city used to get its water from the Detroit Water and Sewage Department. This water was treated and sourced from Lake Huron and the Detroit River. While this worked fine, the city was strapped for cash and in 2011, Flint had a \$25,000,000 deficit.<sup>4</sup> The city declared a state of emergency and was looking for ways to save money. City leaders decided to source water from the Flint River as a cheap and temporary alternative while a pipeline from the Huron River was built. Unfortunately, shortcuts were taken and the water was not treated properly for human consumption, which caused spikes of lead in the water. Immediately after the water source was switched, people noticed that the tap water in Flint was different. The color ranged from yellow to brown, it smelled weird, and it tasted terrible.

## Effects on Families

Dangerous amounts of lead were found in Flint's drinking water. In one home, Virginia Tech researchers

4. City of Flint. (2012, April 15). Quarterly report to the state Treasurer regarding the financial condition of the City of Flint. <https://www.cityof-flint.com/wp-content/uploads/Reports/Quarterly%20Report%20to%20State%20Treasurer%20April%2015,%202012.pdf>

found that the lead levels in the water were between 200 parts per billion (ppb) to 13,200 ppb.<sup>5</sup> Lead amounts above 5,000 ppb are classified by the EPA to be hazardous waste. Children are the most susceptible to the effects of lead. It can lead to many health issues such as anemia, slowed growth, and learning problems. Lead can put pregnant women at risk for miscarriage, as well as causing organ issues in adults. High levels of lead can cause death.<sup>6</sup> An outbreak of Legionnaires' disease is also thought to be caused by the water crisis.<sup>7</sup> According to the CDC, "Legionnaires' (LEE-juh-nares) disease is a very serious type of pneumonia (lung infection) caused by bacteria called Legionella." At least twelve people have died as a result, and numerous criminal and civil lawsuits have been filed against officials. After 18 months of negotiations, a \$600 million settlement to be paid by the state of Michigan was agreed to in August, 2020. More than 80% of that money would go to people who were minors and most affected by the toxins in the water. As of the publication of this text, plaintiffs still had time to decide whether or not to agree to the settlement.

To read more about how to find lead in your home environment and the effects of lead on children, [click here](#) for the CDC's infographic.

## Environmental Justice

According to the [EPA](#), "Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."<sup>8</sup> People of color and low income families are disproportionately being affected by the water crisis in Flint, a classic case of environmental injustice. These families can't easily move or fund a new source of water.

The EPA also emphasizes "the same degree of protection from environmental and health hazards" along with its definition of environmental justice. It is clear that the people of Flint are not receiving the same degree of protection.

Watch this 3 ½ minute video to further understand the definition and history of environmental justice.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://openoregon.pressbooks.pub/families2e/?p=264#oembed-1>

- 
5. Mantha, A. & Roy, S. (2015, August 24). Hazardous waste-levels of lead found in a Flint household's water. <http://flintwaterstudy.org/2015/08/hazardous-waste-levels-of-lead-found-in-a-flint-households-water/>
  6. Environmental Protection Agency. (2019, August 12). Learn about lead. <https://www.epa.gov/lead/learn-about-lead>
  7. AlHajal, K. (2016, January 13). 7 cases, 10 fatal, of Legionella bacteria found in Flint area; connection to water crisis unclear. MLive. [https://www.mlive.com/news/detroit/2016/01/legionnaires\\_disease\\_spike\\_disc.html](https://www.mlive.com/news/detroit/2016/01/legionnaires_disease_spike_disc.html)
  8. Environmental Protection Agency. (2020, February 17). Environmental justice. <https://www.epa.gov/environmentaljustice>

## Institutional Forces

While on the surface it may seem like the crisis in Flint was caused by a singular error (switching the water source), the underlying responsibility is with multiple government policies that are institutionalized. These are the results of over a hundred years of policy that eventually culminated into a health crisis.



Fig. 10.14. General Motors was a highly profitable automaker in the late 20th century.

Earlier we described Flint as a city of industry, home to a rich automotive economy (figure 10.14). The Deindustrialization (The decline of the manufacturing industry) of the United States was hard for everyone who relied on these companies to provide for their families. The decline was reinforced in the 1980s as the manufacturing industry hit a recession. Flint's population shrunk from around 200,000 to just 100,000 residents.<sup>9</sup> Many people who had the means relocated to a different area in search of better opportunities. But then there

9. State of Michigan Department of Technology, Management, and Budget. (2016, April). Demographic and labor market profile: City of Flint. [http://milmi.org/Portals/198/publications/Flint\\_City\\_Demographic\\_and\\_Labor\\_Mkt\\_Profile.pdf](http://milmi.org/Portals/198/publications/Flint_City_Demographic_and_Labor_Mkt_Profile.pdf)

are those who are more or less forced to stay, as relocating can be a risk, as well as being cost-prohibitive. As the overall population of Flint declined, the African American population percentage of Michigan has steadily increased. According to Census data, in 1960 the total percentage of African Americans in Michigan was roughly 9%. As deindustrialization occurs, and people relocate, it jumps to 14% in 2000.<sup>10</sup> Those who remained in Flint were White Americans and African Americans of low income. These two groups are by far the most impacted by the effects of deindustrialization, although this isn't isolated to Flint. (figure 10.15)



Fig. 10.15. Flint is a community filled with diverse and hard-working families.

---

10. Metzger, K. & Booza, J. (2002, February). African Americans in the United States, Michigan and Metropolitan Detroit. Wayne State University. Center for Urban Studies. <http://www.cus.wayne.edu/media/1356/aawork8.pdf>

## Could this Happen in Oregon?



Fig. 10.16. When cities and counties are underfunded, they must choose between programs that serve all families such as water, parks, schools, and libraries.

The decline of deindustrialization can be felt in Oregon as well. Oregon's timber industry faced a massive decline after the 1980s recession.<sup>11</sup> Environmental regulations have affected job availability. We can see many parallels between this situation and other communities who have faced job and company losses. Many towns that were dependent on the income from the timber industry are now left struggling.

Douglas county recently voted to shut down their entire library system.<sup>12</sup> Jackson County and Josephine County have also had to shut down their libraries, although eventually they managed to bring back partial services.<sup>13</sup> Many timber towns depended on a federal pro-

gram that gave \$100,000,000 every year to Oregon counties. Since the program has been discontinued, many counties are having to make sacrifices to keep from going under.<sup>14</sup> Another parallel we can see between the deindustrialization of Michigan and Oregon is people leaving small towns for urban centers, with those remaining mostly being of low income.

Lawmakers in these communities face similar choices as the leaders in Flint, Michigan. When there are fewer taxpayers to fund local services and less federal funding for services that all families can use, programs such as libraries, schools, parks, and even water must be examined as places to save money.

## Looking Ahead

One purpose of analyzing Flint, Michigan as a case study is to give a voice to those impacted by this and similar hardships. To see additional perspective and proposed solutions to these social problems, watch the TED Talk below. LaToya Ruby Frazier was hired to document the unfolding crisis in Flint and relates her history growing

11. Mapes, J. (2019, January 10). Charting the decline of Oregon's timber industry. Oregon Live. [https://www.oregonlive.com/mapes/2012/01/charting\\_the\\_decline\\_of\\_oregon.html](https://www.oregonlive.com/mapes/2012/01/charting_the_decline_of_oregon.html)

12. Friedman, G. R. (2019, January 9). Douglas County libraries to close after voters reject funding (figure 10.16). [https://www.oregonlive.com/politics/2017/03/douglas\\_county\\_libraries\\_to\\_cl.html](https://www.oregonlive.com/politics/2017/03/douglas_county_libraries_to_cl.html).

13. Swinder, S. (2017, April 5). When libraries close, timber counties face tough reality. [https://www.oregonlive.com/pacific-northwest-news/2017/04/when\\_libraries\\_close\\_timber\\_co.html](https://www.oregonlive.com/pacific-northwest-news/2017/04/when_libraries_close_timber_co.html)

14. Mapes, J. (2014, December 10). Federal payments to timber counties die in last-minute congressional maneuvering. Oregon Live. [https://www.oregonlive.com/mapes/2014/12/federal\\_payments\\_to\\_timber\\_cou.html](https://www.oregonlive.com/mapes/2014/12/federal_payments_to_timber_cou.html)

up with environmental racism in Philadelphia to the crisis. She details the experiences of the low-income residents as well as a creative solution that helps.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://openoregon.pressbooks.pub/families2e/?p=264#oembed-2>

The US Water Alliance described at the start of this section has provided the most comprehensive view of water access in the United States and is dedicated to valuing and managing this resource. Via listening sessions and collaborations with businesses, governments, non-profit organizations and individuals all over the country, they have developed a platform of seven big ideas to sustain water resources:

1. Advance regional collaboration on water management
2. Accelerate agriculture-utility partnerships to improve water quality
3. Sustain adequate funding for water infrastructure
4. Blend public and private expertise and investment to address water infrastructure needs
5. Redefine affordability for the 21st century
6. Reduce lead risks, and embrace the mission of protecting public health
7. Accelerate technology adoption to build efficiency and improve water service.

Ideas and organizations such as this one provide leadership so that all families in the United States will have access to safe water and sanitation.

## Licenses and Attributions

### Open Content, Shared Previously

“[A Brief History of Environmental Justice](#)” by [ProPublica](#). License Terms: [CC BY 4.0](#).

Figure 10.11. “[Water Bottle Fountain, Brokeoff Mountain 2015](#)” by [ray\\_explores](#). License: [CC BY 2.0](#).

Figure 10.13. “[Distribution of household income in Flint, Michigan in 2015](#)” by [Delphi234](#). [CC0](#). Data from [US Census](#) in 2015 inflation adjusted dollars.

Figure 10.14. "[1968 General Motors Buick Electra Pontiac Calalina Caprice Olds 98 Fleetwood Advertisement Readers Digest November 1967](#)" by [SenseiAlan](#). License: [CC BY 2.0](#).

Figure 10.15. "[ArtWalk in Flint Michigan Photo by Michigan Municipal League](#)" by [Michigan Municipal League \(MML\)](#) License: [CC BY-ND 2.0](#).

Figure 10.15. "[Library](#)" by [Albuquerque South Broadway Cultural Center](#). License: [CC BY 2.0](#).

Figure 10.17. "[Longview Farm Water Tower](#)" by [Vincent Parsons](#). License: [CC BY-NC 2.0](#).

Figure 10.18. "[water fountains](#)" by [drpavloff](#). License: [CC BY-NC 2.0](#).

Figure 10.19. "[Indoor Shower](#)" by [KevinStandlee](#) is licensed under [CC BY-NC-SA 2.0](#).

### **All Rights Reserved Content**

"[A creative solution for the water crisis in Flint, Michigan | LaToya Ruby Frazier](#)" (c) [TED](#).  
License: Standard Youtube license.

Figure 10.12. "[An Overview of Clean Water Access Challenges in the United States](#)" (c) University of North Carolina Environmental Finance Center. Used under fair use.

# SYSTEMIC USES OF WATER

---

No one argues with the understanding that agriculture, and increasingly aquaculture, which is farming that occurs in the water, are essential to supplying our food to sustain the world's population. Farming is also the world's largest industry, employing over one billion people and generating over one trillion dollars' worth of food annually. Moreover, it is the most significant driver of habitat and biodiversity loss around the world.

Agricultural ecosystems provide essential habitats for many wild plant and animal species. This is especially the case for traditional farming areas that cultivate diverse species. However, rising demand for food and other agricultural products has seen the large-scale clearing of natural habitats to make room for intensive monocultures. Recent examples include the conversion of lowland rainforests in Indonesia to oil palm plantations, and of large areas of the Amazon rainforest and Brazilian savanna to soybean and cattle farms. This ongoing habitat loss threatens entire ecosystems as well as many species. Expanding palm oil plantations in Indonesia and Malaysia, for example, pose the most significant threats to endangered megafauna, including the Asian elephant, Sumatran rhinoceros, and tigers.

Aquaculture is also in direct competition with natural marine and freshwater habitats for space. For example, marine fish farms often need the shelter of bays and estuaries to avoid damage from storms and currents. Also, farmed fish need good water quality, frequent water exchange, and other optimal environmental conditions. However, these locations are also very often ideal for wild fish and other marine life. Some European fish farms have been placed in the migratory routes of wild salmon, while in Asia and Latin America, mangrove forests have been cleared to make space for shrimp farms.

Water resources are impacted by modern agriculture. Globally, the agricultural sector consumes about 70 percent of the planet's accessible freshwater and many big food producing countries like the US, China, India, Pakistan, Australia, and Spain have reached, or are close to reaching, their renewable water resource limits.

## Wasted Water

The leading causes of wasteful and unsustainable water use are:

- leaky irrigation systems
- wasteful field application methods
- cultivation of thirsty crops not suited to the environment.

Unsustainable water use can harm the environment by changing the water table and depleting groundwater supplies. Studies have also found that excessive irrigation can increase soil salinity and wash pollutants and sed-

iment into rivers – causing damage to freshwater ecosystems and species as well as those further downstream, including coral reefs and coastal fish breeding grounds.

Soil carried off in rain or irrigation water can lead to sedimentation of rivers, lakes and coastal areas. The problem is exacerbated if there is no vegetation left along the banks of rivers and other watercourses to hold the soil. Sedimentation causes severe damage to freshwater and marine habitats, as well as the local communities that depend on these habitats. For example, people living in Xingu Indigenous Park in Brazil report declines in fish numbers. This trend is attributed to changes in the courses of waterways resulting from farming-related erosion and the silt deposition this causes. In Central America, plantation soil run-off ends up in the sea, where it affects the Meso-American Reef.

It is not just the eroded soil that is damaging: pesticides and fertilizers carried in rainwater, and irrigation runoff can pollute waterways and harm wildlife. The use of pesticides, fertilizers, and other agrochemicals has increased enormously since the 1950s. For example, the amount of pesticide sprayed on fields has increased 26-fold over the past 50 years.

These chemicals do not just stay in the fields they are applied to. Some application methods, such as pesticide spraying by airplane, lead to pollution of adjacent land, rivers or wetlands. Pesticides often do not just kill the target pest. Beneficial insects in and around the fields can be poisoned or killed, as can other animals eating poisoned insects. Pesticides can also kill soil microorganisms. Also, some pesticides are suspected of disrupting the hormone messaging systems of wildlife and people, and many can remain in the environment for generations.

Unlike pesticides, fertilizers are not directly toxic. However, their presence in freshwater and marine areas alters the nutrient system, and in consequence the species composition of specific ecosystems. Their most dramatic effect is eutrophication, resulting in an explosive growth of algae due to excess nutrients. This depletes the water of dissolved oxygen, which in turn can kill fish and other aquatic life. In this video, Nancy Rabalais explains how farming practices around the Mississippi River, one of the largest rivers in the world affects water resources for fish, aquatic life, and the land surrounding the river. This in turn affects access to water and food for many families in the United States.



*One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://openoregon.pressbooks.pub/families2e/?p=809#oembed-1>*

Food production is one of the primary causes of biodiversity loss through habitat degradation, overexploitation of species such as overfishing, pollution, and soil loss. Even though its environmental impacts are immense, the current food system is expected to expand rapidly to keep up with projected increases in population, wealth, and animal-protein consumption.

## Sustainable Agriculture Movement

A growing movement has emerged during the past two decades to question the role of the agricultural establishment in promoting practices that contribute to these problems. Advocates argue that not only does sustainable agriculture address many environmental and social concerns, but it offers innovative and economically viable opportunities for growers, laborers, consumers, policymakers and many others in the entire food system.

The “food system” extends far beyond the farm and involves the interaction of individuals and institutions with contrasting and often competing goals including farmers, researchers, input suppliers, farmworkers, unions, farm advisors, processors, retailers, consumers, and policymakers. Relationships among these actors shift over time as new technologies spawn economic, social, and political changes.

Regarding food and agricultural policies, new federal, state, and local government policies are needed to simultaneously promote environmental health, economic profitability, and social and economic equity. For example, commodity and price support programs could be restructured to allow farmers to realize the full benefits of the productivity gains made possible through alternative practices.

Tax and credit policies could be modified to encourage a diverse and decentralized system of family farms rather than corporate concentration and absentee ownership. Government and land-grant university research policies could be modified to emphasize the development of sustainable alternatives. Marketing orders and cosmetic standards could be amended to encourage reduced pesticide use. Unfortunately, as long as government subsidies are focused on corn, soybeans, wheat, cotton, and rice, it is difficult for farmers to diversify. Subsidies could also increase consumer power, especially of low income families. If fresh, green foods were of lower cost and more available, all families would have greater access to healthy diets.

Conversion of agricultural land to urban uses is a particular concern, as rapid growth and escalating land values threaten farming on prime soils. At the same time, the proximity of newly developed residential areas to farms is increasing the public demand for environmentally safe farming practices. Comprehensive new policies to protect prime soils and regulate development are needed, particularly in California’s Central Valley. By helping farmers to adopt practices that reduce chemical use and conserve scarce resources, sustainable agriculture research and education can play a crucial role in building public support for agricultural land preservation. Educating land use planners and decision-makers about sustainable agriculture is an urgent priority (University of California at Davis, 2022). This video provides an example of a dairy farm that is both sustainable and profitable.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://openoregon.pressbooks.pub/families2e/?p=809#oembed-2>

Rural communities are often among the poorest locations in the nation. The reasons for the decline are com-

plex, but changes in farm structure have played a significant role. Sustainable agriculture presents an opportunity to rethink the importance of family farms and rural communities. Economic development policies are needed that encourage more diversified agricultural production on family farms as a foundation for healthy economies in rural communities. In combination with other strategies, sustainable agriculture practices and policies can help foster community institutions that meet employment, educational, health, cultural and spiritual needs.

Consumers can play a role in creating a sustainable food system. Through their purchases, they send messages to producers, retailers, and others in the system about what they think is essential. Food cost and nutritional quality have always influenced consumer choices. The challenge now is to find strategies that broaden consumer perspectives, so that environmental quality, resource use, and social equity issues are also considered in shopping decisions.

## References

Welcome | Sustainable Agriculture Research & Education Program, University of California, Davis, CA (2022).

### Licenses and Attributions

#### Open Content, Shared Previously

“Systemic Uses of Water” is adapted from [“Environmental Impact of Agriculture”](#) by R.Adam Dastrup, MA, GISP, [Introduction to Human Geography](#) is licensed under [CC BY 4.0](#) Adaptation: edited for brevity and focus on family life in the United States; references added.

#### All Rights Reserved Content

[The “dead zone” of the Gulf of Mexico](#)| Nancy Rabalais (c) [TED](#). License Terms: Standard YouTube license.

[Sustainable Farming](#) (c) TechKNow. License Terms: Standard YouTube license.

# LOOKING AHEAD

---

## Looking Ahead

There are vertical and urban gardening movements across the country. Vertical and urban gardens bring hope that fresh, green, and healthy foods can be made more available to families in cities via smaller local gardens. In this video, several vertical gardens are explored, including one that is feeding an entire group of children in their preschool in California.



*One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://openoregon.pressbooks.pub/families2e/?p=811#oembed-1>*

One purpose of analyzing Flint, Michigan as a case study is to give a voice to those impacted by this and similar hardships. To see additional perspective and proposed solutions to these social problems, watch the TED Talk below. LaToya Ruby Frazier was hired to document the unfolding crisis in Flint and relates her history growing up with environmental racism in Philadelphia to the crisis. She details the experiences of the low-income residents as well as a creative solution that helps.



*One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://openoregon.pressbooks.pub/families2e/?p=811#oembed-2>*

The US Water Alliance described earlier provides the most comprehensive view of water access in the United States and is dedicated to valuing and managing this resource. Via listening sessions and collaborations with businesses, governments, non-profit organizations and individuals all over the country, they have developed a platform of seven big ideas to sustain water resources:

1. Advance regional collaboration on water management
2. Accelerate agriculture-utility partnerships to improve water quality
3. Sustain adequate funding for water infrastructure

4. Blend public and private expertise and investment to address water infrastructure needs
5. Redefine affordability for the 21st century
6. Reduce lead risks, and embrace the mission of protecting public health
7. Accelerate technology adoption to build efficiency and improve water service.

Ideas and organizations such as this one provide leadership so that all families in the United States will have access to safe water and sanitation.

### **Licenses and Attributions All Rights Reserved Content**

[Vertical Farming](#) (c) TechKnow. License Terms: standard YOUTUBE license.

[A creative solution for the water crisis in Flint, Michigan| Latoya Ruby Frazier](#) (c) Ted. License Terms: Standard YOUTUBE license.

# KEY TERMS

---

Environmental justice, food desert, food insecurity, food security, food stamps, poverty line, sanitation, share-cropper, socioeconomic status, Supplemental Nutrition Assistance Program (SNAP), US Department of Agriculture (USDA), wastewater

# APPLICATION, DISCUSSION, AND REFLECTION QUESTIONS

---

1. How is the production of food tied to equity?
2. What role do government crop subsidies play in nutrition?
3. What role do tax breaks and food banks play in food insecurity?
4. How do food costs and the poverty line interact?
5. What influences a family's food purchases? How does what you've read relate to your own family's experience with food?
6. What are the factors that affect a family's access to safe water and sanitation?
7. What role does the government play in the water and sanitation system?
8. Are safe water and sanitation a human right?

# CHAPTER 10 FEEDBACK SURVEY

---



Did you like reading this chapter? Want to help us make it better? Please take a few minutes to complete the [Chapter Feedback Survey](#) Your feedback matters to the textbook authors!

**Created by Shilpa Ahuja  
from the Noun Project**

# 11. JUSTICE

This chapter was created with selected essays by three student authors: Alexis Castenada-Perez, Christopher Byers, and Carla Medel. The balance of the book consists of either collaborative writing among student authors and myself or my individual writing based on substantive brainstorming and research conducted by the research librarian, Michaela Willi-Hooper, the student authors, and myself. But when it comes to justice, I wanted you to read directly the words of students and what matters to them. Going forward, I will add to this chapter with additions by other students. You will read my introduction and then each of the individual students will speak to a meaningful aspect of justice, their experience writing the text, and their developing understanding of social justice.

–Elizabeth B. Pearce

## Chapter Learning Objectives

1. Define justice.
2. Discuss how justice applies to families in the US.
3. Describe how intersections of race, ethnicity, gender, immigration, and socioeconomic status create different experiences of justice.
4. Describe how the founding documents of our country define justice.
5. Analyze experiences of justice and injustice in your own family.
6. Identify diverse topics related to justice.



# 12. VISUAL CULTURE (CREATIVITY, ART AND BEAUTY)

## Chapter Learning Objectives

1. Describe the value of creativity, art, and beauty to families in the US.
2. Explain how art as representation shapes the history of the US and current experiences.
3. Analyze the unique challenges and gifts of protest and public art.
4. Examine the role of dominant culture in defining “art.”
5. Explain how socially constructed ideas about beauty affect American families.
6. Describe how visual culture affects family outcomes.
7. Analyze the effects of intersectionality on potential creators, artists, and art-lovers.
8. Describe the multi-directional relationship between social structures and the ways that individuals experience and access creativity, art, and beauty.
9. Analyze visual culture from an equity perspective.
10. Apply theoretical concepts related to creativity, art, and beauty to one’s own observations and experiences.