# Issues of Food Access and Food Insecurity in the United States: Causes, Effects, and Implications Associated with Minority Populations

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## TABLE OF CONTENTS

## INTRODUCTION

The issue of access to sufficient amounts of affordable, nutritious, and preferred food remains a global problem. However, although 98 percent of food insecure individuals live in developing countries, food insecurity is prevalent even in food-rich nations such as the United States. This paper explores the parameters of food insecurity in the U.S. through the lens of equity and social justice, and the disparity people of color confront in the system responsible for cultivating, sustaining, regulating, and distributing the nation's food supply.

## FOOD SECURITY DEFINED

According to the Food and Agriculture Organization of the United Nations (FAO)(2003) food security exists "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern" (Food and Agriculture Organization of the United Nations [FAO], 2003). This definition offers clues to the many ways that individuals can be food insecure: they may not have physical access to food (food is not available or it is not available on a consistent basis); there may be social or cultural reasons why they do not have sufficient food; they may lack the economic resources to access food; or, the available food may be unsafe or unhealthy.

The World Health Organization (WHO) defines food security as the situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Based on this definition, the WHO identifies four food security dimensions: food availability, economic and physical access to food, food utilization, and stability over time (World Health Organization, 2019).

The WHO (2019) further delineates these food security dimension: 1) "availability" addresses whether or not food is actually or potentially physically present, including aspects of production, food reserves, markets and transportation, and wild foods; 2) "access" suggests if food is actually or potentially physically present, the next question is whether or not households and individuals have sufficient access to that food; 3) "utilization" addresses if food

is available and households have adequate access to it, the next question is whether or not households are maximizing the consumption of adequate nutrition and energy. Sufficient energy and nutrient intake by individuals is the result of good care and feeding practices, food preparation, dietary diversity and intra-household distribution of food. Combined with good biological utilization of food consumed, this determines the nutritional status of individuals; and 4) "stability" is present if the dimensions of availability, access and utilization are sufficiently met, stability is the condition in which the whole system is stable, thus ensuring that households are food secure at all times. Stability issues can refer to short-term instability (which can lead to acute food insecurity) or medium- to long-term instability (which can lead to chronic food insecurity). Climatic, economic, social, and political factors can all be a source of instability (WHO, 2019).

Andress and Fitch (2016) observe that the conceptualization of the food environment, including the different features of food access, have evolved over time to now include factors related to the availability, accessibility, affordability, acceptability, and accommodation of food (Caspi et al., 2012). A*vailability* (Are there sources for food?) is conceived as the adequacy of the supply of healthy food (e.g., presence of certain types of restaurants near people's homes, or the number of places to buy produce). *Accessibility* (Can individuals get to or make use of the food that is available?) refers to the geographic location of the food supply and ease of getting to that location. *Affordability* (Are individuals able to pay for the food that is available?) refers to food prices and peoples' perceptions of worth relative to food cost. *Acceptability* (Does the food available meet community standards?) is about an individual's attitude regarding the attributes of their local food environment and whether the given supply of products meets their personal standards. Lastly, *accommodation* (Do food sources respond to needs?) refers to how well local food sources accept and adapt to residents' needs (i.e., store hours or types of payment accepted).

The United States Department of Agriculture (USDA) provides dietary and nutrition guidance to policymakers and others who participate in programs to help citizens gain access to a healthy diet. To be effective, these guidelines must intersect with the five factors defined above.

## WHAT CONSTITUTES A HEALTHY AND NUTRITIONALLY ADEQUATE DIET?

Every five years since 1980, the USDA publishes a new edition of its *Dietary Guidelines for Americans* (DGA) which includes recommendations about the components of a healthy and nutritionally adequate diet. This publication is intended for policymakers and health professionals who design and implement food and nutrition programs that feed the American people, such as USDA's National School Lunch Program and School Breakfast Program. However, it is also useful for policymakers and others who want to evaluate food access and develop appropriate interventions to address food insecurity, food deserts, and hunger in America's communities (USDA, 2015).

The 2015 DGA reflects the USDA's determination that people do not eat individual dietary components, such as food groups and nutrients in isolation, but rather in combination. The totality of the diet forms an overall eating pattern, whose components can have interactive and potentially cumulative effects on health. A healthy eating pattern is not a rigid prescription, but rather, an adaptable framework in which individuals can enjoy foods that meet their personal, cultural, and traditional preferences and fit within their budget. The 2015 DGA focuses on the food and nutrient characteristics of several examples of eating patterns that translate and integrate the recommendations in overall healthy ways to eat (USDA, 2015).

The DGA acknowledges that the U. S. is a highly diverse nation, with people from many backgrounds, cultures, and traditions, and with varied personal preferences. And, although individuals ultimately decide what and how much to consume, their personal relationships, the settings in which they live, work, and shop, and other contextual factors strongly influence their choices. The DGA also acknowledges that income and life circumstances play a major role in food and physical activity decisions (USDA, 2015).

The DGA stipulates that nutritional needs should be met primarily from foods. All forms of foods, including fresh, canned, dried, and frozen, can be included in healthy eating patterns. It offers five overarching guidelines and several key recommendations with specific nutritional goals and dietary limits (USDA, 2015).

The key recommendations include the suggestion to "consume a healthy eating pattern that accounts for all foods and beverages within an appropriate calorie level." A healthy eating pattern limits saturated fats and trans fats, added sugars, and sodium (USDA, 2015).

The pattern includes:

- A variety of vegetables from all of the subgroups—dark green, red, and orange, legumes (beans and peas), starchy, and other;
- Fruits, especially whole fruits;
- Grains, at least half of which are whole grains;
- Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverages;
- A variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products; and
- Oils (USDA, 2015).

Although the DGA provides the nutritional framework to accompany the factors of food availability, accessibility, affordability, acceptability, and accommodation, and if all of these work together effectively and efficiently, hunger should not be an issue. However, hunger is generally associated with social practices and political policies rather than the sufficiency of the food supply.

In 2005, the American Planning Association developed a food policy guidance document to help local and regional planning professionals address food access issues when they work with governments, businesses, and residents to develop economically and otherwise viable communities.

## AMERICAN PLANNING ASSOCIATION (APA) FOOD POLICY GUIDANCE

Prior to 2005, the American Planning Association (APA) did not officially address food issues in its policy guidance to the professional planning community. There are several reasons why planners gave food issues less attention than long-standing planning topics such as economic development, transportation, the environment, and housing. These include the view that the food system only indirectly touches on the built environment, a principal focus of planning's interest—it instead represents the flow of products from production, through processing, distribution, and consumption. Also, that the food system does not fall under the traditional purview of planners, such as dealing with public goods like air and water, and

planning for services and facilities such as public transit, sewers, highways, and parks (APA, 2007).

In 2007, the APA addressed the intersection of food access and planning in its *Policy Guide on Community and Regional Food Planning*; the Guide offers seven general policies and suggests the roles planners can play. These policies support strengthening the local and regional economy by promoting local and regional food systems. The policies also support food systems that improve the health of the region's residents, that are ecologically sustainable, equitable and just, and that preserve and sustain the diverse traditional food cultures of Native American and other ethnic minority communities. Finally, the policies support the development of state and federal legislation to facilitate community and regional food planning.

Several converging factors explain the heightened awareness among planners that the food system is significant, including the recognition that food system activities take up a significant amount of urban and regional land; planners can play a role to help reduce the rising incidence of hunger and obesity; the food system represents an important part of community and regional economies; the food Americans eat takes a considerable amount of fossil fuel energy to produce, process, transport, and dispose of; farmland in metropolitan areas, and therefore the capacity to produce food for local and regional markets, is being lost at a strong pace; pollution of ground and surface water, caused by the overuse of chemical fertilizers and pesticides in agriculture, adversely affects drinking water supplies; access to healthy foods in low-income areas is an increasing problem for which urban agriculture can offer an important solution; and, many benefits emerge from stronger community and regional food systems (APA, 2007).

Planning activities that affect the food system and its links with communities and regions include the use of growth management strategies to preserve farm and ranch land, recommending commercial districts where restaurants and grocery stores can be located, and suggesting policies to encourage community gardens and other ways of growing food in communities. Economic development planners may support the revitalization of main streets with traditional mom-and-pop grocery stores, or devise strategies to attract food processing plants or distribution centers to industrial zones. Transportation planners may create transit

routes connecting low-income neighborhoods with supermarkets, and environmental planners may provide guidance to farmers to avoid adverse impacts on lakes and rivers (APA, 2007).

The APA Policy Guide seeks to strengthen connections between traditional planning and community and regional food planning by offering two overarching goals for planners: 1) help build stronger, sustainable, and more self-reliant community and regional food systems; and, 2) suggest ways the industrial food system may interact with communities and regions to enhance benefits such as economic vitality, public health, ecological sustainability, social equity, and cultural diversity (APA, 2007).

Several common planning themes thread through all the policies:

1. The importance of community participation in all aspects of planning;
2. The usefulness to all general policies of common planning activities in research, plan-making, plan-implementation, conflict resolution, and consensus building;
3. Recognition that all planning occurs in a political context and that political support may be garnered more easily for some issues than others; and
4. The existence of tensions between and among general policies, which will require dialogue among stakeholders in particular communities and regions to resolve (APA, 2007).

Three of the seven broad APA policies are particularly relevant to this paper's topic. These are "Food System and Social Equity," "Native/Ethnic Food Cultures," and "Comprehensive Food Planning and Policy." Food System and Social Equity addresses hunger and food security, emergency food assistance, supplemental nutrition programs, supermarket initiatives, vacant urban land for growing food (recognizing that inner cities have significant amounts of vacant land that, when used for vegetable gardening by low-income residents, produce multiple health, social, and economic benefits), and immigrants as food sector workers (recognizing that many are undocumented, receive below-minimum wages, experience substandard living conditions, and make up a large portion of the food insecure).

Native/Ethnic Food Cultures addresses food issues faced by native American communities, native food planning, ethnic cuisines, and locally sourced ethnic foods (missing from the policies are references to minorities such as African Americans and individuals of Hispanic origin). Finally, Comprehensive Food Planning and Policy addresses food policy councils (broadly representative of groups in the local and regional food system, and affiliated

with either city, county, or state governments, working to strengthen local and regional food systems), and community-based food projects (APA, 2007).

The policies recognize specific trends related to the food system's impacts on localities and regions, including:

- Greater concentration of ownership within the system, which means that decisions affecting communities are increasingly made by absentee business owners. For example, in 2019, the top five food retailers (Walmart/Sam's Club, Kroger, Costco, Albertsons, and Ahold Delhaize) accounted for 44.5 percent of sales, up from 24 percent in 1997 (Peterson, 2020).
- Vertical integration leading to increased consolidation of different activities such as food production, processing, and distribution under the control of single entities;
- Mergers of chain supermarkets that often result in the closure of stores, thereby reducing residents' access to healthy food, and a lowering of the tax base and employment opportunities;
- Globalization of the food system brings consequences such as the loss of older local food system infrastructure, and threats to the survival of many U.S. farms. In 2018, the value of food imported into the U.S. (a six percent increase relative to 2017) exceeded the value of food exported (an increase of one percent) from the U.S. by $21 billion (USDA Economic Research Service, 2020a). Globalization contributes to greater consumer ignorance about the sources of their food, how it is produced, and with what impacts on communities and the environment, leading to difficulty in the preservation of land and the natural and built resources upon which local agriculture depends;
- Loss of the mid-size farm that threatens rural communities by making them more economically insecure and changes land stewardship practices handed down over generations. Gross cash farm income (GCFI) includes income from commodity cash receipts, farm-related income, and Government payments. Family farms (where the majority of the business is owned by the operator and individuals related to the operator) of various types together accounted for nearly 98 percent of U.S. farms in 2018. Small family farms (less than $350,000 in GCFI) accounted for 90 percent of all U.S. farms. Large-scale family farms ($1 million or more in GCFI) accounted for about 3 percent of farms but 46 percent of the value of production (USDA Economic Research Service, 2020b).
- Loss of farmland in metropolitan areas that threatens our capacity to obtain fresh and local food;
- Aging of farmers reflects the weakening of "family farm" institutions, including intergenerational transfer of farm assets. Consequences with implications for planning include the acceleration of the conversion of agricultural land and the consolidation of agricultural land into larger operations;
- Low commodity prices leading to the food industry's heavy use of products such as high fructose corn syrup and hydrogenated vegetable oils, which are linked with obesity and related illnesses;
- The increased incidence of obesity and diet-related disease;

- Increased wastes at each point of the food system use up local landfill capacity, or if incinerated, increase air pollution; and
- Ecological crises including extinction of species, declining aquifers, and deforestation.

The APA Policy Guide recognizes that government policies sometimes exacerbate these trends due to the increasing political influence of food industry giants and encourages the industrial food system to provide multiple benefits to local areas.

## HUNGER

Is hunger biologically inevitable because there are too many people and not enough food? According to Minister (2015),

> Hunger and malnutrition are not randomly distributed but are concentrated among certain groups … these patterns are not the results of biological or environmental bad luck, but social practices and political policies that have made and continue to make certain groups economically vulnerable and food insecure. Contemporary hunger is a sociopolitical phenomenon, not a biological one. In the modern world, hunger is not just about the relation between a person and food, but about the relations between people (Minister, 2015, p. 22).

Hunger is due to a lack in the ability to procure food, through economic exchange or otherwise, and not due to a lack of food. Economic theory alone cannot explain why certain groups systematically lack the ability to procure enough food (Minister, 2015). Hunger is not the result of anonymous market forces any more than it is simple biology. It is instead the result of social and political power relations, including the power to make specific economic and social policies that are adopted and perpetuated because they benefit certain powerful interests (Minister, 2015).

At current levels of food production, if calories were distributed equally across the globe, each person would daily have 2,700 kcal--enough to maintain a healthy life (FAO 2013). However, calories are not distributed equally. Also, much food goes to waste in the developed world. According to the U. S. Environmental Protection Agency (EPA), food waste accounted for 41 million tons (22 percent) out of the 250 million tons of municipal solid waste in the United States in 2017 as measured before recycling (EPA, 2020). Less than 3 percent of this food waste was recovered and recycled, with the remainder going to landfills or incinerators.

More food reaches landfills and incinerators than any other single material in our everyday trash. Additionally, Buzby, Wells and Hyman (2018) estimate that in 2010, 31 percent or 133 billion pounds of the 430 billion pounds of food produced was not available for human consumption at the retail and consumer levels (i.e., one-third of the food available was not eaten). This resulted in an estimated uneaten 141 trillion calories per year, or 1,249 calories per capita per day (Buzby, Wells, & Hyman, 2018).

Dieterle (2015) observes that globally, poverty is the leading cause of hunger—most who are food insecure are so because they lack the resources to access healthy, nutritious food. He also suggests that poverty and hunger reinforce each other, with chronic hunger impacting the ability to function, and thus, the ability to learn and work, which further compromises the ability to undertake the tasks necessary to feed oneself.

## EXTENT OF THE FOOD INSECURITY/HUNGER PROBLEM

While some countries have made progress over the last two decades in the fight against poverty and hunger, there has only been a small decline in the number of people who do not have enough food to eat (WHO, 2019) and this trend is prone to reversal. Even though we currently generate more than enough food to feed the world, at least 821 million people globally (one in nine) are malnourished or undernourished and go to bed hungry (World Food Programme, 2019). Almost half of all child deaths worldwide are attributable to undernutrition (UNICEF, 2019) and in total around 25,000 people die each day from hunger, malnutrition, and related diseases (Thurow & Kilman, 2009).

Although 98 percent of food insecure individuals live in developing countries, food insecurity is prevalent even in food-rich nations such as the United States. The USDA estimates that in 2018, 88.9 percent of U.S. households were food-secure (United States Department of Agriculture [USDA], Economic Research Service, 2019).  However, the remaining 11.1 percent of U.S. households (14.3 million) were food-insecure (those with low and very low food security) at least some time during the year, meaning they lacked access (physical or financial) to obtain enough food for an active, healthy life for all household members (Coleman-Jensen, Rabbit, Gregory & Singh, 2018). The decline from 2017 (11.8 percent) was statistically significant and

continued a decline from a high of 14.9 percent in 2011 to pre-recession (2007) levels (Coleman-Jensen, et al., 2018).

In 2018, 4.3 percent of U.S. households (5.6 million households) had very low food security, not significantly different from 4.5 percent in 2017. In this more severe range of food insecurity, the food intake of some household members was reduced, and normal eating patterns were disrupted at times during the year due to limited resources (Coleman-Jensen, et al., 2018).

Children were food-insecure at times during 2018 in 7.1 percent of U.S. households with children (2.7 million households), not significantly different from 7.7 percent in 2017. These households with food insecurity among children were unable at times to provide adequate, nutritious food for their children (Coleman-Jensen, et al., 2018).  More than one of every five American children live in one of these food-insecure households, which is down from 11.8 percent in 2017 and from a peak of 14.9 percent in 2011 (Coleman-Jensen, et al., 2018).

Geographical areas with high instances of food insecurity are often known as "food deserts." There are numerous factors that contribute to the occurrences of defined areas where residents routinely encounter obstacles to access to healthy and affordable food.

## FOOD DESERTS

The expression "food desert" was first used during a 1990's study in Glasgow by the Low Income Project Team of the Nutrition Task Force of Great Britain (Shaw, 2014). The team described food deserts as "areas of relative exclusion where people experience physical and economic barriers to accessing healthy food" (Beaumont, Lang, Leather, & Mucklow, 1995). Distance is the primary physical barrier: access to healthy food is limited because the nearest grocer is too far away to be easily accessible. Food deserts have been identified in many developed countries; however, the most extensive research on and mapping of food deserts has occurred in the United States (Mulligan, Tsai, & Whitacre, 2009).

The USDA classifies an urban area as a food desert if at least 20 percent of the population lives below the poverty level and there is no mainstream grocery store selling fresh and nutritious food within one mile. Rural areas are classified as food deserts if the nearest mainstream grocer is more than ten miles away (Ploeg, Nulph, & Williams, 2011).

Mari Gallagher's (2007) Research & Consulting Group uses a different measure than does the USDA. Instead of measuring distance from a grocer, they use a metric that determines "food balance." The Food Balance Score of an area is determined by the distance to the nearest grocer (or other venue where one can purchase fresh, healthy food) divided by the distance to the closest fringe food location. The idea is that it indicates the level of difficulty in choosing a healthy food venue over a fringe food location.

However, the measurable distance does not tell the whole story; multiple factors can mediate one's physical distance from a grocer, if one must walk (Shaw, 2014). Walking to the nearest grocery store might require climbing a steep hill or crossing one or more busy roads, with no sidewalk, or pedestrian pathway, along the most direct route. Heavy grocery bags can impact one's ability to walk long distances to purchase food, especially if one is disabled. The route to the grocer may be through an area that is unsafe at certain times of the day. In rural areas, public transportation may not be available or, if available, may not be reliable. Those who do not have a car or cannot drive may be unable to reach a grocer that stocks healthy food options, even if there is such a grocer within the ten-mile radius (Dieterle, 2015a). Although the USDA classifications therefore might underestimate the number of people who do not have ready access to healthy, affordable food, its criteria reveal 23.5 million U. S. residents live in food deserts (USDA, 2020).

The WHO (2019) lists four facets of food security: food availability, economic and physical access to food, food utilization, and stability over time. Dieterle (2015a) points out that when there are physical barriers to accessing healthy food, food is essentially unavailable, resulting directly in food insecurity. On the other hand, unhealthy food is often readily available in areas classified as food deserts. Fast food restaurants and "fringe" food establishments (gas stations, liquor stores, party stores, dollar stores, convenience stores, etc.) are common in food deserts (Gallagher, 2007). Such establishments typically carry only a small selection of processed food products which tend to be unhealthy: they are almost always high in salt, fat, and sugar and have limited nutritional value (Gallagher, 2007) Thus, the "food" available in food deserts is not sufficient for food security (Dieterle, 2015a).

## MINORITY FOOD INSECURITY

Poverty levels and unemployment rates are higher in food desert tracts, while median family incomes are substantially lower (Dutko, Ver Ploeg, & Farrigan, 2012). People of color suffer from food insecurity at a much higher rate in the U.S. than do whites, and most food deserts in the U.S. are found in areas that are predominantly nonwhite (Dutko, Ver Ploeg, & Farrigan, 2012). The proportion of minorities in urban food deserts is 53 percent higher than in urban nonfood deserts; in rural areas, the minority population is 65 percent higher in food desert tracts than in nonfood deserts tracts (Dutko, Ver Ploeg, & Farrigan, 2012).

Those in Hispanic and black households experience food insecurity at a rate that is much higher than the national average and more than double that of white households (Coleman-Jensen, et al., 2018). In fact, more than one out of four black households in the U.S. was food-insecure at some point in 2018 (Coleman-Jensen, et al., 2018).

A 2013 study determined that neighborhoods in the U.S. that are predominantly African American, regardless of income, suffer from the most limited access to venues that sell fresh, healthy food (Bower, Thorpe, Rohde, & Gaskin, 2014). In other words, when comparing census tracts of equal poverty levels and considering economically similar neighborhoods, those that are predominately black have more limited access to healthy food than those that are predominantly white or Hispanic; black neighborhoods had the fewest supermarkets and white neighborhoods had the most (Bower, et al., 2014; Dutko, Ver Ploeg, & Farrigan, 2012). The authors conclude that poverty level and race are independent indicators of supermarket availability, and that poor African American neighborhoods face a "double jeopardy" (Bower, et al., 2014).

## THE IMPLICATIONS OF FOOD DESERTS AND MINORITY POPULATIONS

When people hear the term "food desert," many imagine a barren, empty place; focusing on what is missing in a neighborhood is central to food desert definitions and often results in a narrow focus on supermarkets (Hunter & Robinson, 2016). Reese (2019) points out the USDA's Food Access Research Atlas (USDA, 2020) (a food desert mapping tool) gives a broad view of supermarket access in any given city, state, or region. However, noticeably absent are demographics such as race that shift the perspective from what is missing to a view of the

systemic patterning of food inequities alongside the racial composition of neighborhoods (Reese, 2019).

She notes that a 2006 study features a map that demonstrated the correlation between the lack of grocery store locations and black communities in Chicago, but the mainstream narrative became one of "food deserts" as the problem of "communities who lacked a grocery store" within a radius of a certain number of miles. In the assessment of the problem, race was minimized or erased in how the study was framed and disseminated, and subsequent interventions corresponded only to the narrow definitions of the problem (Reese, 2019).

Some authors describe "food desert" as a neutral term that maintains the status quo of avoiding talk about systematic racism, and leads food activists to lend charitable support to manage the symptoms of the condition, instead of analyzing the structural causes of the condition (Sbicca, 2012; Bradley & Galt, 2014). Others believe the term is inaccurate and racist, but agree it obscures the processes that led to unequal access and reflects a long-standing interest in uncritical and negative evaluations of black communities and people (Cox, 2015; Hunter & Robinson, 2018).

Karen Washington, the founder of Black Urban Growers (BUGS) (2020), an organization dedicated to supporting and advocating for black farmers and black leadership in the food movement, offers "food apartheid" as an alternative to food desert. She believes if we are to be successful advocates for a better food system, we must take an intersectional approach. "'Food apartheid' looks at the whole food system, along with race, geography, faith, and economics," she says (Brones, 2018). Washington calls food desert an "outsider term," that also "makes us think of an empty, absolutely desolate place. But when we're talking about these places, there is so much life and vibrancy and potential."

Some activists and scholars, instead of "food desert," use the earlier term "supermarket redlining" as an alternative. Eisenhauer (2001) cites articles in The Progressive Grocer and Newsweek that identify the practice of grocery stores consciously avoiding low-income areas as supermarket redlining but doesn't have traction in public or academic use. Kwate, Loh, and White (2013) explicitly connect the practice of avoiding certain neighborhoods to race, defining retail redlining as "spatial discrimination whereby retailers, particularly chain stores, fail to

serve neighborhoods or target them for unfavorable treatment based on the racial composition of the customers and/or the store operators."

Reese (2019) suggests mainstream notions of "nothingness,"--that black communities are deserted, empty, and lacking--have become internalized by many communities, creating "harmful regurgitations of narratives perpetuated within and about the black communities" (Reese, 2019, p. 9).

George A. Kaplan, commenting in a report by the Mari Gallagher Research and Consulting Group on food access in Chicago, says:

> "The word desert is also a verb--to leave someone without help or in a difficult situation and not come back. The verb desert focuses on action and agency, emphasizing that the lack of access to good food in some areas is not a natural, accidental phenomenon but is instead the result of decisions made at multiple levels by multiple actors. By focusing on this meaning, we can find room for changes to be effected, for different decisions to be made in the future, for movement toward actions that can improve access to healthy food for those who have been deserted" (Gallagher, 2006).

The deficit model outlined by scholars has shortcomings and consequences. As scholarly and public attention shifted more toward access inequities, researchers, policy makers, and community-based organizations and activists turned to terms such as food desert, that overemphasizes lack and very rarely examines agency or resilience among community members (Cox, 2015; Hunter & Robinson, 2018).

## ASSUMPTIONS AND NARRATIVES ABOUT BLACK COMMUNITIES AND THEIR ACCESS TO FOOD

Ashante M. Reese, in her *Black food geographies: race, self-reliance, and food access in the nation's capital* (2019) names anti-blackness as one of the root causes of the disinvestment of grocery stores in minority neighborhoods. She speaks directly with members of a Washington, D.C. community about how they experience food access and the critical ways in which they create their own foodways and interventions. She focuses on the dominant narratives about black communities working toward a more just food system, and suggests that particular narratives help frame an understanding of the conditions and systems at play on the ground in real time and subsequently influence how community-based solutions around systemic change are lifted up and resourced (Reese, 2019). She believes at their worst,

dominant narratives perpetuate narrow analyses that often individualize community-based assessments of their own conditions and subsequently diminish support for community-based assertions of their own power and solutions (Reese, 2019).

Reese (2019) notes that black communities are studied, assessed, and analyzed, with solutions or even narratives surfacing that have broad, far-reaching implications. They are analyzed by the media, the academy and research institutions, those with political power, and within consolidated corporate power that influences both media and politics. (Reese, 2019).

Black communities are also hindered by social science legacies of writing about them as static, unchanging, and without agency (Hunter & Robinson, 2018). Mainstream dominant narratives rarely afford black communities the dignity or humanity of nuance (Reese, 2019). The assumption of lack becomes "inscribed in their bodies, evident in the ways nonprofits, advocates, researchers, and policymakers frame residents' lack of knowledge or will to access or eat healthier foods, rather than locating the deficiencies in the ways white supremacy has shaped neighborhood food spaces" (Reese, 2019, p. 46).

Analyses frequently point out the overabundance of corner stores, fast-food restaurants, and liquor stores in neighborhoods that have few grocery stores. This approach avoids evaluation of other forms of food retail or ways of procuring food, which risks creating a neatly packaged product with little understanding of the macro or micro processes that shape food access (Short, Guthman, & Raskin, 2007; Cox, 2015). These conclusions can negatively impact the efficacy of food access interventions.

Dara Cooper, with the National Black Food and Justice Alliance (NBFJA) (2020), describes her experience in local food policy meetings with grocers:

> " … who are spouting off some of the most racist, dehumanizing, xenophobic stereotypes around violence, theft, and safety to justify their decision to disinvest in black communities. These stereotypes and assumptions also extend to other policies, such as the numerous attempts to restrict choices of people who use the Supplemental Nutrition Assistance program (SNAP), ignoring the structural composition of communities, and solely basing their advocacy around assumptions that low-income communities have no wherewithal to make good decisions on how to spend their resources" (Cooper, 2019, pp. xii-xiii).

Cooper describes further the assumptions emanating from erroneous beliefs about black communities:

"I have witnessed too many organizations, policymakers, and others making many assumptions surrounding low-income and black communities' understanding of health (or lack thereof), which in turn has driven policy and programmatic remedies built on the erroneous belief that communities have no knowledge, skills, or histories with good food and health. I can't count how many times in the past fifteen years I have heard questions or comments that suggest black communities don't want healthy food" (Cooper, 2019, p. xiii).

Food justice is ultimately about racial justice, because race and racism not only structure everyday experiences, but also influence the (under)development of neighborhoods and the implementation of policies that disproportionately disenfranchise black communities. Documenting these inequities and eradicating them is essential as we work toward a more just food system. Inequities shape food consumption by black residents, but they also bear witness to ways of living and being--black ways of living and being--that are inseparable from how black residents understand food access (Reese, 2019).

## MINORITY FOOD PRODUCTION

According to Liu (2012), structural racial inequalities are prominent in every facet of contemporary food systems, from employment, to land ownership, to food access. People of color employed in food production, processing, distribution, retail, or service are largely concentrated in low-wage and dangerous jobs. For example, 65 percent of U.S. farm workers are Latino (Liu, 2012), with Blacks and Latinos comprising 62 percent of the meatpacking and poultry-processing workforce--both extremely dangerous jobs (Editors, 2011).

In 1920, one in seven farms in the United States was operated by African Americans, but by 2007, this number had declined to one in seventy (Panchang, Field, & Bell, 2013). Black farmland loss can be attributed to a combination of macro- and micro-factors including non-participation in farm programs (Gilbert et al., 2002), the dominating growth of agribusiness (Pilgeram, 2012; Tajik and Minkler, 2007), and systematic discrimination in the USDA (Farquhar and Wing, 2008; Gilbert et al., 2002; Tajik and Minkler, 2007).

The USDA's practice of denying loans, grants, land use, disaster relief, and technical support to African American and other minority farmers while approving the same for white farmers created, sustained, and expanded significant disparities (Hinson & Robinson, 2008). Further, it was common practice to deny credit to anyone who participated in or assisted

activities associated with the civil rights movement, or who was a member of the NAACP, or who registered to vote or even signed a petition (Tyler & Moore, 2013). These policies allowed plantation owners to survive the loss of its free labor force and later allowed white farmers more options when adapting to industrialization, scientific advancement, and increasingly complex regulations (Washington & Williams, 2019).

Existing racial disparities were exacerbated when banks and insurance companies used tactics like "redlining" to systemically deny financial backing to people of color (Washington & Williams, 2019). These things combined to create the disparity people of color confront today in the system responsible for cultivating, sustaining, regulating, and distributing the nation's food supply (Hilmers et al., 2012), and many of the causes can be traced back to systemic barriers created more than 150 years ago (Washington & Williams, 2019). Other contributing factors to black land loss include mortgage payments and foreclosures, farm taxes, forced sales due to economic and personal reasons, natural disasters, low commodity prices, lack of interest in farming by new generations, career opportunities in other disciplines, and culturally negative opinions about farming (Dieterle, 2015).

According to the USDA's National Agricultural Statistics Service, in 2017 there were 45,508 black farmers, which was an increase of two percent from 2012, the last time it conducted its agricultural census. About 3.2 million farmers are white, or 95 percent. More striking, farm ownership is declining faster for black farmers, down about three percent since 2012, compared to a decline of 0.3 percent for white growers (National Agricultural Statistics Service, 2017).

The systemic lack of opportunities for minorities to produce food is part of the larger ethical issues of "food justice" and/or "food sovereignty."

## FOOD JUSTICE/FOOD SOVEREIGNTY

According to Dieterle (2015), the phrase "food justice" is often invoked to highlight a range of ethical issues concerning food, including "food production and the rights of agricultural laborers, inequities in food distribution, increased obesity rates among the poor and lack of access to healthy nutritious foods as the primary cause of such increases, the corporatization of

the food system, the unsustainable nature of our current methods of food production, and the

lack of democratic control over how food is grown, harvested, and distributed" (Dieterle, 2015).

The United Nations Declaration of Human Rights recognizes the right to food as a

human right:

> Everyone has the right to a standard of living adequate for the health and well-being of
> himself and of his family, including food, clothing, housing and medical care and
> necessary social services, and the right to security in the event of unemployment,
> sickness, disability, widowhood, old age or other lack of livelihood in circumstances
> beyond his control (United Nations, 1948).

According to Dieterle (2015a), food deserts are a serious matter of justice. "On a

Rawlsian theory of justice, for example, a sketch of the argument would go something like this:

one cannot participate as a free and equal citizen when one is food insecure" (Dieterle, 2015a,

p. 40). Access to nutritious food is a precondition for the attainment of all primary goods, and

Dieterle believes food distribution should be subject to the "difference principle." According to

Rawls, "Social and economic inequalities are to be arranged so that they are both (a)

reasonably expected to be to everyone's advantage, and (b) attached to positions and offices

open to all" (Rawls, 1971, p. 213). The distribution of food should benefit everyone, and any

inequality in its distribution should be to the benefit of the least well off (Dieterle, 2015a).

The distribution of food does not benefit everyone. Food insecurity is a direct result of

food deserts. Food deserts harm the least well off disproportionately. More than half of the

23.5 million U.S. residents living in food deserts are in a low-income category (USDA, 2020). The

current distribution of food does not benefit the least well off, but, instead, makes life more

difficult for the least well off. The argument for the injustice of food deserts is straightforward

from the Rawlsian perspective:

> The idea is that when one lives in food insecurity, one's energy and resources must be
> devoted to self-preservation. Under such conditions, it would be difficult to assert one's
> rights, participate in civil society, enjoy freedom of movement, have free choice among
> occupations, etc. In short, one could not pursue one's conception of the good life if one
> is living in food insecurity (Dieterle, 2015a, p. 52)

Dieterle (2015a) also believes the argument is also fairly clear-cut from a utilitarian

theory of justice. The net balance of social utility that results from the current distribution of

food is negative. Not only are the inhabitants of food deserts harmed by the current distribution but given the health outcomes associated with food deserts and food insecurity, the consequences for public health are quite dire. Individuals who reside in such communities bear the costs of food deserts because the quality of available food has a profound and negative impact on their health. Indirect costs are borne by the healthcare industry (which must treat diseases that result from poor diets), by employers (through lost productivity), and by taxpayers and governmental agencies (who in some cases shoulder the financial burden of the health effects of food deserts) (Gallagher, 2006).

Finally, Dieterle (2015a) believes a libertarian would find food deserts not a matter of justice, but the direct outcome of private property rights and capitalistic free markets. Grocery stores went where the money was: to the suburbs (Karpyn & Treuhaft, 2013). Dieterle argues that one who holds a theory of justice that depends on or substantially includes a Lockean theory of property has reason to support limitations on property rights to address the problem of food access (Dieterle, 2015a).

According to Dieterle (2015), the local food movement is seen by some as the solution to current injustices in our food system. However, locavorism in developed countries tends to be a movement embraced primarily by white, upper-middle-class individuals and tends to reflect white culture and values (Guthman, 2011). The nostalgic vision of farming so prevalent in narratives surrounding "local food" ignores much of the unjust history of farming practices in the West. According to Guthman, in the United States, "land was virtually given away to whites at the same time that reconstruction failed in the South, Native American lands were appropriated, Chinese and Japanese were precluded from land ownership, and the Spanish-speaking Californios were disenfranchised of their ranches" (Guthman, 2011, p. 276). It should be clear why the nostalgia for agricultures of the past is not embraced by all. Local food narratives tend to erase the histories of those who were ostracized, marginalized, and disenfranchised (Dieterle, 2015).

Not only are food deserts and food insecurity serious matters of justice, they can also lead to chronic diseases, health risks, and high costs to the medical system and employers.

## DIET- AND OBESITY-RELATED DISEASE AND MEDICAL COSTS

Today, about half of all American adults have one or more preventable, chronic diseases, many of which are related to poor quality eating patterns and physical inactivity, leading to obesity-related conditions (USDA, 2015). Rates of these chronic, diet-related diseases (such as diabetes) continue to rise, and they come not only with increased health risks, but also at high cost (USDA, 2015). According to the American Diabetes Association (2018), the total estimated cost of diagnosed diabetes in 2017 was $327 billion ($245 billion in 2012), including $237 billion in direct medical costs ($176 billion in 2012) and $90 billion in reduced productivity ($69 billion in 2012).

According to the Centers for Disease Control and Prevention (2020), from 1999–2000 through 2017–2018, the prevalence of obesity increased from 30.5 percent to 42.4 percent, and the prevalence of severe obesity increased from 4.7 percent to 9.2 percent. Obesity-related conditions include heart disease, stroke, type 2 diabetes, and certain types of cancer—some of the leading causes of preventable, premature death.

BMI is the tool most used to estimate and screen for overweight and obesity in adults and children. For most people, BMI is related to the amount of fat in their bodies and is defined as weight in kilograms divided by height in meters squared. For adults ages 20 and older, the BMI ranges for overweight and obesity are: 1) 18.5 to 24.9=normal weight; 2) 25 to 29.9=overweight; 3) 30+ =obesity; and 40+ =extreme obesity (National Institute of Diabetes and Digestive and Kidney Diseases, 2020).

The prevalence of obesity differed among adults by race and Hispanic origin in 2017–2018:

- Non-Hispanic black adults had the highest prevalence of obesity compared with all other race and Hispanic-origin groups.
- The prevalence of obesity was highest among non-Hispanic black adults (49.6% percent). It was lowest among non-Hispanic Asian adults (17.4 percent) compared with non-Hispanic white (42.2 percent) and Hispanic (44.8 percent) adults;
- Among men, the prevalence of obesity was lowest in non-Hispanic Asian (17.5 percent) compared with non-Hispanic white (44.7 percent), non-Hispanic black (41.1 percent), and Hispanic (45.7 percent) men, but there were no significant differences among non-Hispanic white, non-Hispanic black, and Hispanic men;
- Among women, the prevalence of obesity was higher among non-Hispanic black women than all other groups (56.9 percent); the lowest prevalence was among non-Hispanic

Asian women (17.2 percent), compared to non-Hispanic white (39.8 percent) and
Hispanic women (43.7 percent);

- Non-Hispanic black women had a higher prevalence of obesity than non-Hispanic black
men; and.
- There were no significant differences in prevalence between men and women among
non-Hispanic white, non-Hispanic Asian, or Hispanic adults (National Center for Health
Statistics, 2020).

According to the Centers for Disease Control and Prevention (2020a), obesity and its
associated health problems have a significant economic impact on the U.S. healthcare system.
Medical costs associated with overweight and obesity may involve both direct and indirect
costs (Wolf & Colditz, 1998). Direct medical costs may include preventive, diagnostic, and
treatment services related to obesity. Indirect costs relate to morbidity and mortality costs, and
include productivity measures such as "absenteeism" (costs due to employees being absent
from work for obesity-related health reasons) and "presenteeism" (decreased productivity of
employees while at work) as well as premature mortality and disability (Hammond & Levine,
2010).

According to Biener, Cawley, and Meyerhoefer (2017), based on data from the Medical
Expenditure Panel Survey (MEPS), between 2005 and 2010, the amount by which obesity raised
medical costs per obese adult rose from $3,070 to $3,508 (both measured in year 2010 dollars),
an increase of 14.3 percent. During that same period, the aggregate costs of obesity in the
adult, noninstitutionalized population of the U.S. rose from $212.4 billion to $315.8 billion
(both in 2010 dollars), an increase of 48.7 percent; this large increase is due to three factors: 1)
an increase in costs per obese individual; 2) an increase in the population, so even if the
prevalence of obesity remained constant there would be more obese individuals; and 3) an
increase in the prevalence of obesity.

In 2013, obesity raised the annual medical care costs of obese adults by an average of
$3,429. The share of total healthcare spending of non-institutionalized adults that is devoted to
treating obesity-related illness rose from 20.6 percent in 2005 to 27.5 percent in 2010 to 28.2
percent in 2013.

Inadequate food systems and impaired access to adequate amounts of nutritious food,
can also result in hunger, which can significantly impact a person's lifetime successes. The

effects of the concentration of food insecurity in low income minority communities have much more significant ramifications than mere hunger and the discomfort that accompanies it.

## CONSEQUENCES OF HUNGER

Washington and Williams (2019) believe America's history of racism created and sustains America's racially disparate food system, and racial inequity in food security helps perpetuate disparities in the operation and outcomes of other systems, such as criminal justice and education. They posit that by addressing racial disparities in the U.S. food system, we have the potential to positively impact the disparities in America's other interconnected systems. (Washington & Williams, 2019).

Poverty is a potent predictor of functional problems in children (Gupta et. al., 2007). One of the reasons for that is the fact that children living in households below the poverty line are likely to experience hunger. A study published by the American Academy of Pediatrics shows that hunger can lead to reduced cognitive abilities, reduced attentiveness, and increased behavioral issues (Kleinman et al., 1998). It is accepted there is a correlation between hunger and school performance; hungry students are more inattentive and disruptive in class, leading to repeated disciplinary challenges that can land them in special education, detention, or alternative schools. Others are suspended, expelled, or end up dropping out and languishing on living room sofas, street corners, and in minimum wage jobs (Washington & Williams, 2019).

Children in situations where the access to food is not secure are thus at significantly greater risk of falling behind both socially and academically, and access to food has the power to either amplify the potential trajectory of a child's life or diminish it, and to significantly impact a person's lifetime successes (Washington & Williams, 2019).

Programs like the USDA's School Breakfast Program that supplements state operation of nonprofit breakfast programs in schools (USDA, 2018a) and the National School Lunch Program which uses a similar scheme to provide nutritionally balanced, low-cost, or free lunches to children each school day (USDA, 2018b) have sought to combat this very issue. Initiatives to provide breakfast and lunch to school children have not only been implemented by the federal government, but have also been championed by private entities, such as the Black Panther Party which created the "Free Breakfast Program" in 1969, to provide breakfast for children

from low-income households each day in Oakland, California (Milkman, 2016). The Department of Health and Human Services' Head Start Program and other pre-K programs are additional proof of the generally held understanding that early academic success can serve as an indicator for future social, professional, and financial achievements (Washington & Williams, 2019).

The World Hunger Education Service (2018) asserts that poverty and hunger exist in a cyclical relationship in that hunger causes poor health and mental function, which in turn, decreases the ability to learn and work, which causes poverty. Poverty is a cause of hunger, and hunger is a cause of poverty. The cycle the disparities create aggravate the smaller systems that combined to create those disparities in the first place. It is the self-perpetuating nature of this problem that makes it the most dangerous; therefore, racially equitable food systems are necessary for creating a racially equitable society at large.

Dramatic changes in the U.S. food system, including the emergence of the full-service grocery store, the loss of the family- and minority-owned farming, consolidation of various components of the supply chain, and changes in the urban/suburban/rural landscape, also contributed to racially inequitable food access.

## THE EVOLUTION OF THE SUPERMARKET AND THE IMPACT ON LOCAL FOOD ACCESS

The nature of food access in the U.S. has changed dramatically since the early 1900s. Gardens, small farms, and neighborhood grocers characterized the early twentieth century, but the supermarket emerged as the quintessential component of the national and local food system; narratives around fixing broken food systems often begin with the supermarket and not the ways people historically created local foodways (Reese, 2019). This section offers a chronological overview of several system-wide changes and where these changes significantly impacted the ability of residents of minority and low-income communities to access healthy and affordable food.

### 1900s

Food retailers until the mid-1800s tended to be small independent and unaffiliated corner stores or general stores spread throughout an urban area or town. These stores carried very few items and were often referred to as dry grocers because they generally did not stock fresh products such as meats, fish, baked goods, and vegetables. Separate stores specialized in

these items such as butchers, fishmongers, bakeries, and green grocers, and due to the lack of refrigeration, consumers shopped in these stores as frequently as the dry grocer. The corner or general stores bought from a wholesaler, jobber, or other middleman and paid, for the most part, the asking price. One company recognized that if they affiliated or formed a "chain" of these small corner stores, they would have more bargaining power to get better prices. Shoppers preferred shopping at a lower price chain store over other higher priced independent stores (Stanton, 2018).

Chain grocery retailing took off around the beginning of the twentieth century, with the Great Atlantic and Pacific Tea Company (A&P) (established 1859) and other small, regional players. Grocery stores of this time tended to be small (generally less than 1,000 square feet) and were still considered dry grocers. The primary changes were logistical and operational, money-saving innovations to enable the lower pricing of goods. For example, A&P developed standardized aisles and product offerings, and it operated its own logistics system of warehouses and self-delivery, eliminating all the various middlemen that were commonplace in the market at that time. Another innovation of A&P was its creation of private label or store brands such as Ann Page brands and Eight O'Clock Coffee. A&P ceased operations in November 2015 after 156 years in business (Stanton, 2018).

Entrepreneurship as a pathway to self-reliance was a foundational place-making strategy central to the development of community identities in the context of anti-black racism and segregation. The complex network of merchants and consumers that emerged in the first half of the twentieth century was key to understanding how black communities have historically functioned (Brodkin, 1998). Food bartering and trading not only met individual needs but also formed social and cultural capital through which community cohesion was built (Sbicca, 2012). In the contemporary food landscape, the loss of this bartering and exchange is what residents pointed to as one indicator for how the social fabric of neighborhoods shifted (Reese, 2019).

Entrepreneurial pursuits provided an opportunity for African American business owners to both serve their neighborhoods and resist racist structures that constrained physical, economic, and social mobility. Black businesses were the crux of community economic development (Reese, 2019). This type of development was undergirded by a self-reliance ethos

that was as much about community-building and community success as it was about individuals' thriving. Political power, social networks, and skills that were shared were invaluable in terms of creating a thriving neighborhood (Gregory, 1999).

However, for example, in Washington, D.C., Jewish-owned and -operated stores were central. Black-owned businesses were more likely to occupy renovated homes, whereas Jewish-owned businesses were constructed as commercial properties (Parks, 1987). The racial hierarchy that marked Jews as "not quite white enough" thrived on the sometimes-precarious relations between them and African Americans (Brodkin, 1998).

**1920s**

In the early 1900s, the Piggly Wiggly stores introduced self-service shopping, which enabled consumers to walk freely throughout the stores and consider items not on their shopping list (impulse shopping). This began the age of "branding" or the product choice model: food manufacturers and processors needed a way for consumers to identify their specific products and then convince the small shopkeepers to buy and sell them (Stanton, 2018).

In 1930, Michael Cullen, considered the father of the modern supermarket, opened the first King Kullen store. He situated his stores in warehouses on the outskirts of New York City, and offered free parking to accommodate the increase in American-owned cars. The additional building space allowed higher volumes of goods offered and subsequently lower prices. Chains began adopting this new format (Stanton, 2018).

**1930s**

By the 1930s, the largest grocery stores averaged between 6,000 and 8,000 square feet. By the 1960s, supermarkets were as large as 60,000 to 80,000 square feet (Gottlieb & Joshi, 2010). The variety of items they offered could not be matched by locally owned, smaller stores (Reese, 2019).

**1950s**

In the 1950s, supermarkets followed their customers out of the city centers to the suburbs. The sizes of supermarkets grew during this period; land was cheaper in suburban areas and it was more efficient to build bigger stores for a growing population (Stanton, 2018).

Food manufacturers continued to accelerate competition to get products on supermarket shelves, and more supermarkets offered multiple brands in the same category.

Supermarket retailers began charging manufacturers "slotting" fees or allowances to stock their products; manufacturers and processors then increased the costs/prices to supermarkets by as much as 50 percent, resulting in higher prices for shoppers and the elimination of lower-priced brands that could not afford the high front end fees from supermarket shelves (Stanton, 2018).

**1960s**

Supermarkets supplanted corner and general stores as the primary shopping site for consumers and viewed other supermarkets as their primary competition. However, variety stores such as Walmart (incorporated in 1969) increasingly sold more and more food; and, because they didn't charge the same fees and could buy products from food manufacturers at a lower cost, they could sell food at a lower price. These stores became known as "supercenters" (Stanton, 2018).

It was not just market forces that hurt small grocers and the neighborhoods they served. The 1968 uprisings, the inequalities they represented, signified that food access was not simply a market problem; it was also a racism problem. Mourning and anger over the death of Martin Luther King and the racism that killed him, manifested in material losses, and the devastation of neighborhood infrastructure was an impetus for future disinvestment and abandonment (Reese, 2019). Out-migration of whites and Black middle-class families, seeking more space and increased safety, began long before the riots, and so too did the out-migration of businesses (Prince, 2014). The riots, however, provided an example of how narratives of violence intertwined with blackness become integral to justifying the systematic demise of retail food access (Reese, 2019).

**1970s**

In 1976, attracted by the prospects of being able to offer lower prices than traditional supermarkets, Aldi (a German company) entered the U.S. and was called a "hard discounter." They offered little convenience such as shopping bags, and products on the floor were still in boxes with no fancy lighting or store fixtures. Aldi has become incredibly successful in the USA while being globally one of the most successful hard discounters in the world. Also, entering the U.S. market is Lidl, the main competitor to Aldi. Hard discounters, besides having much lower prices, primarily sell a very limited assortment of private label or secondary brands, do not stress fresh foods, and invest minimally in technology (Stanton, 2018).

Deindustrialization and disinvestment in city centers, which accelerated in the 1970s, further contributed to the development of "black ghettos" that were characterized by blight, poverty, unemployment, the influx of drugs, and increasing crime rates (Vargas, 2006). And, the isolation of these neighborhoods from non-poor areas--particularly the suburbs--was just as important, because access to limited and subpar resources contributed to continued decline (Whitehead, 2015). Supermarkets followed a national trend, choosing to leave predominantly black inner-city neighborhoods in favor of more affluent, white suburban areas. The closing of smaller stores, in addition to these losses, dented the morale of communities and reduced customer traffic to nearby shops. The loss of these "anchor" stores impacted surround businesses like drug stores, shoe stores, dry cleaners, bakeries, etc. (Gregg, 1982)

**1980s**

Other low-cost food businesses developed. "Warehouse" stores were initially "cash and carry" stores to compete on lower prices than traditional supermarkets, and by the early 1980s, dominating food retailers appeared. Costco entered the market as a warehouse club, and Walmart entered the "club store market" with Sam's Club and the same concept as Costco (Stanton, 2018).

The invasion by crack cocaine in black neighborhoods in the 1980s also negatively impacted communities and food sales (Farber, 2019). Teenagers during that time saw crack cocaine impact the lives of their peers, their parents, and their neighbors. Grandparents were raising their children's babies; an entire generation disappeared dealing drugs (Reese, 2019). The crack invasion contributed to the assumption that black neighborhoods were inhospitable to investment by retail food suppliers.

**1990s**

Publicly owned, traditional major chain grocery stores were unable to grow their sales much beyond the U.S. population growth rate. To appease stockholders, the chains attempted to grow the value of their stocks, not by getting more shoppers but by buying other supermarkets. Expansion into new locations was difficult because the most desirable locations were already occupied, and they could not reduce prices to attract new customers because their economic model could not withstand the lower prices required to compete with

supercenters and hard discounters. Consolidation became the modus operandi for growth (Stanton, 2018).

A chain might consist of 15-20 stores compared to thousands of independent retailers around the U.S. In many cases, these stores had higher profit margins than the large chains and had a high net present value to the independent owners. A large supermarket chain looked to increase its sales revenue simply by adding the sales of the newly acquired independent chain and hoped to increase its profit margins in the same manner. The larger total sales volume gave the national chains more negotiating power over the food processors/manufacturers for lower prices and higher fees. Also, private label products were more profitable due to lower costs of production costs and higher sales due to the chain's brand strength (Stanton, 2018).

While there were some successes in the consolidation process, in general, it failed to live up to its promise. In many cases, the small independent chains were more responsive to their local customers, while the large national chains were more interested in implementing common practices within their large chain and ignored the local populations. Kroger is an example of a food retailer that has successfully managed the consolidation of smaller chains: in addition to Kroger Stores, its banners include Fred Meyer Stores, Fry's, Pick 'n Save, Quality Food Centers (a.k.a. QFC), and Ralphs, each targeting different consumer segments (Stanton, 2018).

**2010s**

The retail–wholesale sector also has evolved dramatically since the 1980s with the advent of self-distribution centers by large retail food companies (those with more than 100 stores). Traditionally, wholesalers have bought foodstuffs (and other consumer product goods) from processors and manufacturers, held the inventory in their warehouses, and resold and delivered them to retail stores or other buyers. In recent years, many of these wholesalers have gone out of business, shrunk to providing these services to smaller stores, or become logistics companies. This evolution came about as part of retail business strategies designed to hold as little inventory as possible, which in turn induced wholesale warehouses to shrink their inventory and switch to a faster turnover model. The ideal, though not attainable, goal is to have a just-in-time delivery model (Nesheim, Oria, & Yih, 2015).

Focusing on supermarkets as an explanation of this inequality at the exclusion of other components of foodways is insufficient (Alkon, Block, Moore, Gillis, DiNuccio, & Chavez, 2013). Although alternative food and food justice movements have resulted in urban farming and agriculture becoming central to reimagining a broken food system, the reality remains that the majority of consumers continue to rely heavily on grocery stores even if they incorporate gardening, urban farming, or farmers' markets in their food consumption (Reese, 2019). The whiteness of the alternative food movement means that most urban residents are disconnected from these alternatives, even if they are available in their neighborhoods (Alkon, et al., 2013).

## FOOD ACCESS INTERVENTIONS AND INITIATIVES

There are grassroots efforts to improve the availability and quality of food in food deserts. Such efforts include urban farming, community gardens, expanded farmers' markets in urban environments, mobile groceries and markets, and food trucks in underprivileged areas. However, we need federal, state and local mobilization to effect change. For example, zoning ordinances can be implemented to limit property rights when exercise of them would result in food deserts and state finances can be utilized to develop food retail in areas where there is little to no access to fresh food.

Pennsylvania's Fresh Food Financing Initiative (FFFI) is one example of a government effort to address the food desert problem. The FFFI is a grants and loan program that was set up to encourage development of fresh food retail in underserved areas. Pennsylvania contributed $30 million in state funds to the initiative. So far, 88 projects have been funded and food access has improved for roughly 400,000 residents of Pennsylvania because of FFFI (The Food Trust, 2020). Due in part to the success in Pennsylvania, the federal government launched the Healthy Food funding Initiative (HFFI), a partnership between the U. S. Departments of Treasury, Agriculture and Health that aims to improve food access in underserved areas. Life the FFFI, the HFFI provides grants and loans to develop fresh food retail in areas that are now classified as food deserts (Reinvestment Fund, 2019, December 20).

## FOOD ACCESS REFORM STRATEGIES

Washington and Williams (2019) champion the adoption of a role-driven race equity reform strategy as one way to confront food insecurity and disparities in food access that are unrelated to food supply and demand. The strategy emphasizes the capacity of individuals to use the inherent authority of roles at any level of an organization to create change. They contend that individual actors, both within and without the food system, can work toward achieving more equitable outcomes in the nation's food system.

Ammons et al. (2018) write that racism is not merely the presence of racial prejudice but is "racial bias and prejudice combined with dominant currents of social and institutional power that work systemically for whites and against people of color." Washington and Williams (2019) state that the "tornado" of racial inequity in the U.S. is the collection of actions following the end of slavery. They highlight the refusal to establish schools for the formal education of children of color and the simultaneous exclusion of freedmen from the workforce, which worked together to contribute to the gaps in educational attainment and socioeconomic advancement that separated majority and minority communities in the antebellum South and continue today (Washington & Williams, 2019).

The Applied Research Center and the Philanthropic Initiative for Racial Equity (2009, p. 6) defines race equity as the "proactive reinforcements of policies, practices, attitudes, and actions that produce equitable power, access, opportunities, treatment, impacts, and outcomes for all." Merriam-Webster (2019, p. 980) defines reform as "putting an end to (an evil) by enforcing or introducing a better method or course of action." Taken together, one can deduce that race equity reform would be "putting an end to (an evil) by enforcing or introducing policies, practices, attitudes, and actions that produce equitable power, access, opportunities, treatment, impacts, and outcomes for all" (Washington and Williams, 2019).

Organizations and systems and society are made up of roles that each have tasks and circumscribed boundaries of authority; it is not only those at the top that have the power to create change or initiate reforms within (Washington & Williams, 2019). A role-driven approach to reform asserts that each person in these various roles has the ability and the authority to make discretionary decisions that combine to impact system outcomes. Therefore, it is critical

that individual members maintain a race equity lens by looking at situations while paying
disciplined attention to race and ethnicity in analyzing problems, looking for solutions, and
defining success (GrantCraft, 2007). With that lens and a dedication to pursuing equitable
outcomes, they then have the tools to influence system outcomes to make them more racially
equitable.

When contemplating the need and mechanisms for reform, much attention is paid to
means of initiating top-down policy changes. In doing so, many overlook individual action as a
viable path to reform when contemplating problems that, like the problem with food
insecurities in minority households, manifest institutionally and systemically. People at the
bottom of an organization are uniquely situated for identifying issues and taking the actions
necessary for correcting them (Oshry, 2007).

For example, like any other industry, agriculture has a system in place to lower the entry
cost, and it would require a race equity reform approach to allow access by minorities to this
system. The systematic denial of loans to African Americans and other minorities has
undermined their attempts to enter the agricultural industry historically (Washington &
Williams, 2019). This problem is no different than the one minorities face when trying to get
loans for homes or businesses. Many of the criteria on which loan applications are assessed
lead to en masse minority denials (Hinson and Robinson, 2008). Other racial disparities, like the
wealth or achievement gaps, account for minorities being "unqualified" for the financial
support needed to get started in the industry. These discrepancies contributed to the steep
decline in the number of minority farmers (Gilbert et al., 2002).

It would be necessary for individual loan officers to be more aware of the big picture
issues that undermine the qualification of minority applicants and realize how a criterion may
be less fair in practice than they appear in theory; they may be more inclined to exercise their
discretion in order to fund the minority farmers that come before them. Agricultural insurance
agents are no different; if individual insurance agents were fully aware of current realities
influencing the factors that qualify or disqualify applicants, those realities could be considered
when determining rates (Washington & Williams, 2019). This would also undermine the process
of redlining, and if financers and insurers made a commitment to address the disparate effects

of food insecurity, they would not be so quick to decline people who are seeking to establish farms or other sources of food near minority communities (Washington & Williams, 2019).

Implementation of any reform initiative requires action at all levels; individual accountability should be at the heart of every plan to create effective change, regardless of "rank" within an organization. If individuals at various levels of an organization are unaware of both their ability and authority to address problems, then any attempt to create change within that organization will not come to fruition. Meaningful race equity reform requires not only this awareness, but also sustained individual accountability for aligning personal and professional actions in the pursuit of that change. Therefore, cultivating individual change agency through education, training, and community engagement is imperative (Washington & Williams, 2019).

The racial disparities that are evident in the food system are a current reality; however, that does not mean they have to be the realities of the future. Correcting these issues will require intentional action aligned with a strategy (Washington and Williams, 2019).

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