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Food Insecurity and the Obesity Epidemic: A Political Economy Perspective

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Abstract

The scientific literature is immersed with discourse on how individual risk factors and obesogenic pollutants in the built environment exacerbate obesity prevalence. This paper deviates from the contemporary dialogue and focuses on a political economy perspective. This perspective calls for a macro-level approach in order to understand why higher levels of food insecurity and obesity persist in the most vulnerable communities in the U.S. and globally. The problem of food scarcity is linked to factors that contribute to obesity related risk factors. The political economy lens recognizes this association and therefore, explores larger dimensions, that is, Institutions that influence the availability, production and dissemination of food products, the impact of profit maximization on food commodities and the effect of dominant social forces on decision making. This paper summarizes research findings associated with food inadequacy and the obesity epidemic to address the underlying political, economic and social factors that shape this discourse.

Keywords: Political economy, Food insecurity; Income Inequality, Obesity, Multinational Corporations

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Food Insecurity and the Obesity Epidemic

According to the Food and Agricultural Organization of the United Nations [1] "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" (n.d.). In 2007, Food insecurity impacted 15.8 million persons in the U.S. [2]. At least 8.3 percent of these households consisted of children experiencing food insecurity. The United States Department of Agriculture (USDA) reported that at least .8 percent of such households had irregular meal schedules, which is considered a severe case of food insecurity according to USDA standards. These dangerous levels of food supply increased from earlier findings at 0.5 percent in 1999 and 0.7 percent in 2006. In the U.S., food insecurity levels reached 17.6 million households [3]. In addition, 7 million households experienced food shortages which caused at least one or more family members to reduce their food intake.

Adults with children in food insecure environments were more likely to have full time jobs, less than half were not high school graduates and more likely to reside in large cities or rural areas. However, during the recent recession, suburban areas showed substantive increases in food insecurity and resulted in greater usage of food assistance programs [3,4]. Food insufficiency in children was associated with a range of health conditions including frequent headaches, poor psychosocial development, depression, anxiety, and low achievement scores in math and reading [5]. In adults, limited access to food resulted in loss of work productivity and higher medical expenses. Programs to assist food insecure families included the National Lunch and School Program, Supplemental Nutrition Assistance Program (SNAP) and Special Nutrition Program for Woman, Infants and Children (WIC), totaling approximately 60 billion dollars from USDA resources. However, 32 percent of families did not benefit from these critical programs and were considered ineligible if their monthly incomes exceeded 185 percent of the poverty level.

Unemployment and poverty are key social determinants of health that impact the extent of food insecurity [6,7]. Poverty attributed to limited access to adequate and quality food sources and inconsistent meals [8]. National studies showed that food insecurity was associated with higher obesity prevalence among low income boys and girls between the ages of 6-11 years old compared to their food-secure counterparts. In addition, food insecure children were likely to have higher prevalence of being

overweight [9,10]. This occurred mostly in children who were 8 years old or older. In contrast, food secure children younger than 7 years old were less likely to be overweight compared to their counterparts [11]. The scientific literature is inundated with studies that link physical activity to the obesity epidemic, however recent studies also show correlations between food insufficiency and a lack of physical activity [12]. Hence, the scientific data is evident - the availability of less expensive foods high in dietary fat, and greater consumption of sugar and calorie intake contributed to overweight and obesity prevalence in lower income communities [13,14].

Political Economy Approach: Food Insecurity

The economics of food insecurity is clear. The Organization for Economic Cooperation and Development (2015) claimed that food insecurity is caused by a lack of access to affordable foods driven by substantial price increases on food products over the past decade. The World Health Organization further acknowledged that market forces impacts individual choices to purchase unhealthy or an inadequate supply of food [15]. Hence, poverty exacerbates food insecurity and reflects a lack of critical resources, primarily income, unavailable to the most vulnerable members of society. As millions of adults and children experienced food insufficiency, mental and physical outcomes deteriorated, billions of dollars were appropriated to medical costs and this burden on society ultimately impacted national productivity [5,16].

Scientists perceive the inequitable distribution of food where the poorest suffer the greatest as a matter of social justice – food justice to be more precise [5]. The perception of food insecurity as an issue of justice shifts the discourse to recognizing the agents that can be held accountable for the billions of people, globally, that lack an adequate food supply [17,18]. The accessibility of resources which includes the income to purchase nutrient rich foods to all social classes reflects a political decision on how to distribute such resources throughout society. Therefore, the unjust distribution of critical resources among all income groups can be explored from a political economy perspective [19]. The political economy studies inconsistencies in the reliance of market forces versus social welfare programs to achieve equity in food security. In contrast, scientists argue that open trade diminishes food insecurity and benefits the poor [7]. Studies demonstrate that trade facilitates the availability of foods by enhancing agriculture in surplus areas and alleviating food shortages in places designated as food deficient zones. Brooks and Matthews argue that free markets or price elevation of food products does not threaten food security, rather, inadequate income hinders access to affordable foods. Therefore, social provisions are needed to offset income shocks (i.e. job loss) which contributes to the inability to purchase food. However, Nord, et al. [6] contend that the prevalence of food insecurity remained the same even after turbulent economic conditions improved in the U.S. after the recession and this was attributed to relative increases in food prices [6,20].

The pursuit for profit and the power of elitists group impact the production, consumption and distribution of quality foods throughout society [21]. Wealth exists in the form of access to money, capital, and land or other pertinent goods and services which can be traded in free markets. This embodies how (and to whom) foods are disseminated throughout society. The political economy studies political behavior in the context of economic circumstances and social well-being and incorporates an assessment of the social structures that influence political decision-making [21]. For purposes of food insufficiency, this discipline examines how macro-level factors can cause persistent scarcity in resources, such as healthy food products, and subsequently predicts how these resources are ultimately distributed to persons in the lower socioeconomic classes. Food and biotechnology multinational corporations exercise such dominance over the food industry and benefit the greatest from conventional modes used in food production and profit substantially from increases in market price [22].

Political Economy Approach: The Obesity Epidemic

The economics of obesity is articulated in many ways in the scientific literature. Galvez and Yen [23] recommend investing in low income communities to facilitate opportunities to reduce crime and enhance infrastructure in transportation and school systems to promote physical activity. In lower income families, economics is commonly discussed with respect to the body mass index (BMI) of children and the availability of inexpensive fast foods [24]. In addition, studies show BMI's increased as the price of fruits and vegetables also increased among low income children. Many researchers also found correlations between poverty and obesity, while others implicate overweight prevalence is also common in higher income households given their capacity to purchase food. The outpatient medical cost of obesity in children is $14.1 billion while inpatient costs totaled $237.6 million. The cost to treat obesity related illness in adults is approximately $147 billion.

The economic factors that exacerbate the obesity epidemic can be framed from a macro-level analysis that is, gauging the association of rising income inequality levels to the obesity crisis [25]. Income inequality measures the gap between the rich and the poor and the higher the degree of income and wealth among elitist groups relative to other members of society, the greater the degree of morbidity or mortality from obesity and obesity related illnesses [19,26]. This theory claims that the inequitable distribution of income and wealth among the social classes drives higher rates of obesity prevalence and obesity related conditions, especially among persons in the lower economic stratum. This places the concept of the obesity epidemic distant from a discourse of individual related risk factors to a political economy lens and allows for a deeper exploration on how the pursuit for profits, even in the consumption and dissemination of Corporations that produce food products, affects obesity or obesity related conditions [19,27,28].

Studies associated income inequality and obesity prevalence as most problematic within wealthy nations [28,29]. Poorer people in richer nations were more likely to have higher obesity prevalence.

Among various nations, Japan, was noted for having the lowest income inequality levels compared to other OECD nations and the lowest obesity rates among men and women at 1.9% and 2.9%, respectively. In comparison, the U.S. and Mexico had the highest income inequality levels and corresponding high obesity rates compared to other OECD nations [26]. Affluent countries saw substantial increases in body weight over the past three decades compared to non-affluent nations and this is attributed to the capitalistic nature of wealthier nations. Studies also show positive correlations among men in developed countries between calorie intake, income inequality and obesity rates [25]. Higher death rates from diabetes was linked to income inequality, such that people who were not wealthy experienced greater mortality compared to their elite counterparts. In addition, higher body mass index in women and greater abdominal weight gain in men was associated with higher income inequality levels in the U.S.

Nations with economic growth at the forefront of their political agendas are negatively impacted by the obesity crisis. The infrastructure of societies that experience greater income disparities lack social cohesion and are vulnerable to the self-interest of powerful institutions. Multinational corporations freely exert their influence on decision-making and the availability of critical social provisions, such as access to healthy foods.

Politics: Multinational corporations, food insecurity and obesity

While the scientific literature is well documented on the importance and accessible and available food products in the built environment, especially in low income communities, what is often omitted in these discussions is how the pursuit for profit maximization shapes the concentration and quality of foods that harm societies. More specifically, the literature lacks discourse on the role of Multinational corporations in dominating the food industry and its power over political decision-making and the allocation of welfare provisions to improve food options.

The concept of sustaining food security started with a dialogue on a health and human rights perspective through the Universal Declaration of Human Rights [30]. However, resolutions to balance the supply and demand for food shifted to neoliberal ideologies, thus linking trade liberalization and capital accumulation to the discourse on the manufacturing and distribution of food [31]. The new political hegemony emerged in the food industry such that Governments in capitalist and developing nations supported Corporate interests and implemented neoliberal policies accordingly [32,33]. Nations made provisions for deregulated markets to facilitate capital accumulation. Influential international power structures, such as the World Trade Organization, supported corporate interests and encouraged neo-liberal policies to OECD nations including the Trade Related Intellectual Property Rights agreement. TRIPS was conducive to elitist interest for the protection of property rights for foreign investments on products and processes [33]. Given this, many U.S. based multinational organizations capitalized on trade agreements and international policies that facilitated open markets to import foods to respond to the demand for food security. Multinationals had the power to monopolize profits during food production through: biotechnology for the advancement of food production and contract farming; and dissemination - elucidating dominant control over prices increases, sales and the amount of product supermarkets were able to purchase [34].

An example of a powerful actor in the food industry is the Agribusiness Multinational Corporations (ABM). Their role include food trade at the national level, but they have greater participation in the international markets [32]. The agricultural business has evolved to the usage of biotechnology to expand its operations and progressive agricultural practices to multiple national markets worldwide in the pursuit of capital accumulation. The focus of ABMs is to sell artificially inseminated (transgenic) crops which were developed to offset the effects of herbicides, causing farmers around the world to be dependent on their supply. These genetically modified foods (GMO) consists of an organism, such as a plant, whose DNA material was genetically altered, albeit not naturally, but through a biotechnological process causing the material to grow larger and at a faster rate. Currently, transgenic corn is the most highly traded commodity between ABMs and farmers. In addition, farmers owned their own seed stock, however, this stock is now, genetically manufactured and disseminated by ABMs to farmers [35]. These genetically modified foods were protected under the TRIP agreement. This, in turn, impacts the availability (and quantity) of food supply, especially in rural areas, worldwide. Social movements called for equitable access and control in the food industry for local farmers who may not otherwise have the resources to compete with multinationals. These farmers desire the ability to produce their own resources, and maintain local access to food supplies. In addition, Agricultural Corporate monopolies control the quality of foods imported in advanced capitalist nations. Quality or luxury foods contain less calories and consist of alcoholic beverages, fruits and vegetables and requires the production of labor in nations such as Mexico. Consequently, these same foods are not available or affordable to most of the people who reside in these countries. A similar phenomena exists in the U.S. where these luxury foods are costly and are unavailable in low income communities or places that have been geographic classified as a food desert.

Corporate producers of genetically modified foods (GMOs) have been at the center of political controversy in the U.S. Given the crisis in global and national food insufficiency, The World Health Organization (WHO) supports scientific evidence that the longstanding conventional agricultural system does not meet the current demand for extreme population growth, therefore contributing to food shortages [15]. The WHO cited food biotechnology as a more sustainable and valuable resource to alleviate hunger problems and eliminate food insecurity because its rapid process: increases food productivity, provides greater access to food for the poorest members in society, decreases diseased food harvests or crops impacted by inclement temperatures and can increase the incomes of farmers who adapt to this process [15]. The WHO further claimed that GMOs do not present a risk to human health. In addition, the U.S. Food and Drug Administration and the American Association for the Advancement of Science cited that the safety and quality of genetically engineered products are not compromised and

therefore, labeling products that contain genetically modified ingredients should not be required [36]. However, multiple independent surveys were conducted to determine consumer perception of GMOs and it showed nearly 100% unanimity, that consumers preferred GMO labeling [37-39]. Overall, 52% of Americans were more likely to purchase foods labeled as grown organically compared to foods labeled with genetically modified ingredients. A 2015 ABC poll showed that 62% of women and the majority of young adults believe genetically modified products are unsafe and 13% of the population are uncertain of the risks posed by such products.

Given consumer perception of genetically modified ingredients, food and biotechnological Corporations could lose substantial profits if policies that require GMO labeling are implemented. Corporate food and biotechnology companies, such as Grocery Manufacturers Association, Campbell soup, Abbot Laboratories and Coca-Cola, spent millions in lobbying efforts in the first two quarters of 2014 to block legislative efforts requiring mandatory labeling of foods with genetically modified ingredients [40]. Expenditures by these GMO Corporations totaled 28.3 million dollars, more than doubling the dollars spent by GMO labeling supporters. Food and biotechnology Corporations use these funds to enlist Congressional support to oppose bills and policies enacted by states to label GMO products. Few states have already passed GMO labeling laws and thirty others have proposed similar bills in 2013 and 2014. However, the Safe and Accurate Food and Labeling Act of 2015 passed in the House of Representatives in July with provisions to: ban states from passing GMO labeling laws and to permit the FDA to label GMOs as “natural” products or omit labeling any ingredients on food labels as bioengineered [41].

The Fast food industry is another MNC that has infiltrated the built environment since the 1970’s [42]. The largest fast food restaurants include McDonalds and Yum corporations which include Taco Bell, Pizza Hut, KFC [43]. The largest soft drink MNCs include Coca Cola, Pepsi, Cadbury Schwepps and Nestle. These food and drink MNCs are relatively inexpensive to purchase and have been recognized for their contributory risk factors for obesity, excessive weight gain, diabetes and the prevalence of other chronic diseases in the U.S. and worldwide [44,45]. As poverty increased in the U.S. and worldwide among young adults and children, the purchase of products from food and drink MNCs also increased among these age groups. With easy access to immediate food preparation, this allowed Americans to consume foods expeditiously in a fast paced society. Their products are deficient in nutrients, consist of high salt and sugar intake and excess calories [46]. The soft drink industry acquired substantial profits for their unhealthy products due to their minimal expenses in production and long shelf life [44]. In restaurant driven MNCs, their massive and expeditious consumption resulted in increasing manufacturing of products such as beef, to meet the demand [42,47]. Beef production, which utilizes the meat packing industry, receives the greatest revenues compared to other agricultural products in the U.S. Consequently, the exploitation of workers involved in its assembly resulted in insufficient pay, challenging working conditions and high rates of work-related injuries.

Supermarkets also participate in the global food markets as circuits to retail products for MNCs. The goal is to increase capital from seed to supermarket to undermine the activity of profits from local farmers in the food industry. Wal-Mart is among the top five supermarkets that warehouse commodities produced by MNCs and transport such products to consumers [48].

The United States controls the largest food industry in the world, yet millions of people still suffer in America from hunger or food insecurity or an inadequate supply of nutrient rich foods [49-53]. Consequently, the discourse on food insecurity can be situated in the political economy context due to the dominant controlling interests of food industrialized MNCs, the exploitation of labor, inequality of opportunity for labor to participate in the marketplace and the inequitable distribution of food resource allocation to the poorest members of society [54].

Conclusion

This paper purports that the political decisions to maintain corporate interests to resolve food insufficiency demonstrates major shortcomings. While the OECD, the WHO and Government officials acknowledge causal drivers of food insufficiency and the obesity crisis, the common denominator is the power of MNCs to operate without constraints in pursuit of capital accumulation at the expense of the poor. Prior efforts to achieve the goal of food security through privatization was ineffective and led to grave food injustices including substantive increases in poorer households with intermittent periods of food shortages and a compromise on the quality of foods available to these households. Corporate influences have been a dominant force in political decision-making, thus impacting the availability of social welfare provisions to labor workers or ordinary citizens. In the absence of addressing macro-level forces, efforts to eliminate food insecurity will prove to be futile or lack sustainability.

Policy recommendations to reallocate income or foods can provide sufficient protections to improve the social well-being of the poorest members of society. Human social capital can benefit from excess capital through investments in social welfare programs. The current discourse in which we articulate food security should undergo modification to address macro-level approaches and perhaps the trends in the number of families who experience food insecurity in the U.S. will also begin to diminish as well.

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