Robert L. Peralta

*Thinking Sociologically about Sources of Obesity in the United States**

As medicine increasingly targets and identifies obesity as a disease, it is important for social and behavioral scientists to participate in the identification of obesity origins which exist outside of the immediate individual in question. While scholars in the medical arena often focus on proximate factors contributing to ill-health, distal factors can be critical sources of public health problems such as obesity. This paper will highlight important distal factors found to be associated with obesity. Empirical studies reveal the allocation of resources and goods such as fresh fruits, vegetables, low fat-high protein foods, exercise opportunity, and education on nutrition, health, and diet are not equally distributed. Moreover, cultural attitudes toward thinness, health, and beauty are not universal but subject to cultural and ethnic interpretation. The unequal and often distinctly different distribution of goods, services, and knowledge has been directly linked to obesity disparity rates by race, social class, and gender. Policy recommendations and suggestions for future research conclude the paper.

A central lesson derived from sociological research and analysis is social problems are rarely, if ever, equally distributed within a given society. Rates of illness and disease often vary by race, social class, gender, sexual orientation, education level, and social psychological factors such as conformity pressure. Obesity, a condition recently claimed by the medical community as a "disease," is no different in its tendency to vary by the aforementioned variables. Medical researchers tend to place emphasis on proximate factors on illness such as "overeating" or genetic susceptibility instead of distal factors such as the density of fast-food outlets in a given neighborhood touched by racism and socioeconomic marginalization. This essay will provide a brief overview of some of the relevant distal factors associated with obesity and call attention to the need for delineating social origins of obesity and educating scholars about these important sources of obesity.

Robert L. Peralta is an assistant professor in the Department of Sociology at the University of Akron. He holds a Ph.D. in Sociology from the University of Delaware. Dr. Peralta's areas of expertise include social deviance, the social psychology of alcohol use, interpersonal violence, and social inequality. His current research addresses racial and ethnic health disparities. The nature of alcohol use in intimate partner violence and HIV transmission are the focus of his current research agenda.

The social origins of obesity discussed in this piece will include an examination of how unequal distribution of goods and resources affect obesity rates. The goods and resources referenced include: (1) the geographic availability, prevalence and cost of nutritious foods and unhealthy fast-food options; (2) time, facilities, and equipment for exercise; and (3) the availability and level of education regarding nutrition and exercise. First, a brief overview of the epidemiology of obesity in the United States will be presented. Conformity to definitions of health and beauty as well as rebellious attitudes against "thinness" as the ideal will be discussed. In addition, isolation and segregation from cultural messages regarding health and beauty will be explored as a source of obesity disparity by race and ethnicity.

Increasing Rates of Obesity—An Epidemiological Overview

Disparities in obesity by race and ethnicity are a reflection of how allocation of resources and cultural norms regarding weight and health influence different groups physically (i.e., weight) and psychologically (i.e., body image and social definitions of beauty). The focus on proximate risk factors, potentially controllable at the individual level, resonate with the value and belief system of Western culture that emphasize both the ability of the individual to control his or her personal fate and the importance of doing so (Becker, 1993). Sociologists orient themselves differently from individual-level explanations and seek to understand the social conditions that protect against or accelerate and exacerbate risk. As risk behaviors and their resulting consequences become increasingly claimed by medicine, it is important for social scientists to revisit and reaffirm the social origins of public health concerns such as obesity for effective prevention and intervention (Link and Phelan, 1995).

Obesity is defined as an excessively high amount of body fat or adipose tissue in relation to lean body mass. Obesity is currently on the rise in the United States; about 31 percent of U. S. adults are now obese, which is twice the rate of twenty years ago. Many more Americans are expected to be clinically defined as obese soon, as 64.5 percent of Americans are currently considered "overweight" (being overweight is defined by the National Institutes of Health as 21 percent lighter than obese (Fontaine et al., 2003).

Table 1 displays an epidemiological portrait of overweight and obesity in America for men and women of different ethnic and racial identities. The table shows obesity and overweight prevalence rates vary by gender: men are more likely to be overweight and women are more likely to be obese. African American women have the highest rates of obesity (55.4 percent), while white males are the least likely to be obese (27.4 percent).

TABLE 1
Overweight and Obesity among Persons 20–74 According to Sex, Race, and Hispanic Origin: United States, 1999–2000.*

	Percent of Population (standard error)	
	Overweight[1]	Obesity[2]
Both Sexes[3]	64.5 (1.5)	30.9 (1.6)
Male	67.0 (1.5)	27.7 (1.7)
Female	62.0 (2.0)	34.0 (2.0)
Mexican Male[4]	74.4 (2.8)	29.4 (2.5)
Mexican Female	71.8 (2.5)	40.1 (3.8)
White Male	67.3 (2.0)	27.4 (1.9)
White Female	57.2 (2.7)	30.4 (2.3)
Black Male	60.3 (2.3)	28.9 (2.4)
Black Female	77.7 (1.9)	50.4 (2.8)

* *Sources*: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey, Hispanic Health and Nutrition Survey, and National Health Examination Survey. Data are based on measured height and weight of a sample of the civilian noninstituionalized population.

[1] Body mass index (BMI) greater than or equal to 25.

[2] Body mass index (BMI) greater than or equal to 30.

[3] Excludes pregnant women.

[4] Persons of Mexican origin may be of any race.

Experts agree overeating, especially the over-consumption of high fat and high sugar foods, is an important factor contributing to the rising rates of obesity (Frazao, 1999). The emphasis on the individualistic behavior of "overeating" is a good place to begin a critique of person-level approaches to the phenomenon of obesity and its increased incidence in the United States. While overeating certainly is a source of obesity, the sociocultural context in which overeating takes place must be acknowledged. Social surveys suggest the majority of citizens understand obesity to be a fundamental question of "individual responsibility." On its own, stance is not useful in examining, preventing, and treating the problem of obesity. Examining social variables related to overeating is not to "blame society" but to provide a more holistic and accurate understanding of obesity as a public health problem.

Previous research reveals education is correlated with obesity. Being obese is less prevalent and perhaps more stigmatized among the well educated, especially well-educated women. Among those who do not have a high school degree, 32 percent were obese. Among those with at least a high school degree, 23 percent were obese. Finally, among those with a college degree or more, only 18 percent were

obese (Ross, 1994). Especially for women, socioeconomic status has been found to be highly correlated with obesity in a negative direction. Sobal and Stunkard (1989) found in a review of 141 studies that women's education was negatively correlated with obesity in 93 percent of studies conducted in the United States. A complete and accurate explanation for the growing problem of obesity is needed if there is to be any hope of confronting the problem effectively.

Social Origins of Obesity

Social conditions are factors involving a person's relationship to other people. Ranging from relationships with intimates (micro-level) to positions occupied within the social and economic structures of U. S. society (macro-level). In addition to factors such as race, gender, and socioeconomic status, stressful life events of a social nature need to be included in the definition of "social conditions." Variables such as violent victimization, job-loss, as well as stress-process variables like social support, fall within the realm of social conditions (Link and Phelan, 1995).

While overeating is an important and obvious factor contributing to obesity, the results of research reveals a dramatic increase in marketed portion sizes over time (ranging from candy bars to restaurant meals) and sheds light on the context in which eating takes place (Spake, 2002; Winslow and Landers, 2002). Moreover, per capita availability of foods high in fat and sugar has increased by at least 20 percent since 1977 (Drewnowski, 2003). The results of this research become all the more interesting when juxtaposed with research suggesting individuals unwittingly consume more food when presented with larger portions in comparison to those presented with smaller food portions (Gossnell et al., 2001). To suggest individuals are choosing to eat larger amounts of food of their own free will is not entirely accurate. These two social structural mechanisms work in conjunction with individual decisions to eat, creating an ideal—and perhaps unconscious—condition for overweight and obesity to proliferate.

The social patterning of disease has a relatively long history of empirical research. Most obvious is the often strong association between health and socioeconomic status. Lower SES is associated with lower life expectancy and higher overall mortality rates (Pappas et al., 1993; Adler et al., 1994). Of note, research strongly suggests the social patterning of disease is not a case of social selection but of social causation, especially for specific diseases (Dohrenwend et al., 1992). For example, Catalano and colleagues (1993) related job layoffs to the emergence or reemergence of alcohol abuse, and Lin and Ensel (1989) and Ensel and Lin (1991) showed that stressful circumstances predicted subsequent illness including obesity and mental illness using longitudinal designs. Overall, this body of literature suggests the com-

mon mechanisms underlying some aspects of disease including obesity are social in origin.

Thus, it is important to ask what it is about an individual's life circumstances that shapes their exposure to risk factors such as poor diet and sedentary lifestyle. Research on social inequality suggests people of higher SES are more favorably situated to know about the risks and to have the resources to allow them to engage in protective efforts to avoid them. Declines in coronary heart disease, for example, have been greatest among people of higher socioeconomic status. Beaglehole (1990) explains higher SES individuals have been better-informed and more able to implement changes in health behaviors like smoking, exercise, and diet. The result has been a widening in the gap for rates of heart disease between the rich and the poor (Link and Phelan, 1995).

Resource Allocation: Results of Unequal Resource Distribution

Why would SES be associated with obesity? The link between SES and obesity is centered on access to resources that can be used to avoid obesity or to minimize the consequences of obesity once it occurs. Money, knowledge, power, prestige, and interpersonal resources related to social networks and social support comprise important social resources. Race, ethnicity, and gender are closely tied to resources like money, power, prestige, and social connectedness. In 2002, 12.1 percent of the U. S. population was living in poverty. This statistic was higher for African Americans and Hispanics, at 24.1 percent and 21.8 percent, respectively (U. S. Census, 2002). The situation for African American females is worse, with a higher percentage living below the poverty line in comparison to their male counterparts.

The causes and consequences of diseases such as obesity are dynamic and continually transforming. The resources described above are portable from situation to situation and are thus effective at preventing or reducing the consequences of disease. As new sources of obesity emerge (such as the proliferation of fast food, foods with high concentrations of trans-fatty acids, and sugar laden products) those with the fewest resources are among the last to realize the health hazards associated with these convenience foods (Link and Phelan, 1995). An evaluation of health habits among a sample of urban teenagers, for example, found African American females to practice the poorest health habits, with the highest intakes of foods high in saturated fat, cholesterol, salt, and simple sugars compared with same-age white, Hispanic, and Asian American females (Fardy et al., 2000). The link between money, knowledge, power, prestige, and interpersonal resources are structured differently for different groups. The health disparities mentioned here are manifestations of this.

Drewnowski (2003) has gone as far as to say "obesity in the U. S. and similar societies may be a socioeconomic, as opposed to a medical, problem that is related to diet structure and costs." Drewnowski (2003) reports foods contributing to obesity are chosen in part because of their convenience, high palatability, and low energy cost of added sugars and fats. For low-income families, obtaining sufficient dietary energy at the lowest possible cost is the overwhelming concern. Food Stamp Program participants reported food price was the most important consideration in making food choices and the overriding concern when choosing and preparing food was to ensure no one would "feel hungry" after a meal (Basiotis, 1998).

Language barriers, low socioeconomic status, low education, and low nutrition knowledge place the Latino population at an increased level of health risk. Indeed, Boulanger and colleagues (2002) support previous research (Harnack et al., 1992), which identified a link between education level, the number of children living in a household, and nutrition knowledge. To make healthy eating decisions, individuals need to be informed. Clearly, differences exist in access to quality education by race and ethnicity thus affecting obesity rates. Studies in California and elsewhere have documented a pattern in which low-income neighborhoods have higher concentrations of fast-food restaurants and convenience stores which tend to sell high-fat, non-nutritious foods, and fewer grocery stores and farmers markets which sell lower-fat foods, fruits, and vegetables (Alaimo et al., 2001).

Aside from diet habits, exercise habits are deserving of mention. Well established that recent trends reveal the well-educated exercise more than the poorly educated, men exercise more than women and men are more likely to exercise more strenuously than women (Ross, 1994). These differences are commonly explained by accessibility obstacles to gyms and recreation centers due to geographic placement, economic deterrents to membership, and gender norms which determine if and how men and women should exercise. Also relevant is time for exercise when many low-income heads of families are strained for time due to labor and child-care demands. These factors correspond with the obesity trends reported in Table One above.

Social-Psychological Origins: Deviance, Gender, Race, and SES

Obesity is an interesting sociological issue because it is considered by most both a physical characteristic, like deafness and genetically-based deformities, and a form of behavioral deviance, like drug addiction and homosexuality. Unlike the physically disabled, the obese are held responsible for their condition. Obesity itself is looked upon with antipathy because most Americans consider it unsightly and unaesthetic. Obesity is also considered a manifestation of a weak, self-indulgent, or lazy individual. Research suggests, however, if the condition is "medical" in nature

and cannot easily be controlled, individuals are less likely to be held responsible, thus reducing stigma. If the condition is not due to a medical predisposition to obesity, however, the likelihood of an obese individual being stigmatized increases because it is felt this person is personally responsible for his or her own deviance (DeJong, 1980).[1]

How might the powerful forces of conformity contribute to obesity? According to the reflected self-appraisal perspective, we view ourselves through others. Opinions are reflected back to us in words or actions of acceptance or rejection, esteem or disrespect, liking or hate (Cooley, 1964). The stigma of obesity and the need to conform to thinness has created a multi-billion dollar industry selling diet books, exercise programs, and equipment, diet pills, liposuction, and mechanical devices for reducing weight (Goode, 2004; Falk, 2001; Sobal, 1984). Individuals who internalize the stigma will either blame themselves for their obesity or become depressed while others will turn to diet and exercise to conform to general health and beauty standards. Others reject the stigma of being obese by organizing formal and informal groups that project pride in being overweight and fight discrimination on the basis of one's weight. Regardless, research suggests obese people are more likely to diet and to experience worse physical health, both of which are associated with depression (Ross, 1994). Moreover, dieting to lose weight as an attempt to fit appearance norms is more distressing than being overweight or obese per se (Ross, 1994).

With increasing rates of overweight and obese Americans, one would assume the stigma associated with being obese would diminish—yet this has not occurred. Ross (1994) suggests, however, being overweight (as opposed to being obese) is not stigmatized as commonly believed perhaps due to its prevalence (Ross, 1994). Paradoxically, the social stigma attached to obesity remains high (Sobal, 1984). Standards of beauty are in part to blame for the current state of affairs. For women, the standard of beauty has become much thinner; for men, beauty has become defined as lean yet muscular. Both ideals become increasingly out of reach as the rates of obesity in America climb for both women and men. Ross (1994) reports an "emphasis on health rather than appearance, would likely discourage dieting and distress over being fat, and encourage exercise ... women's health would be improved by exercising more and dieting less."

For all Americans, and especially women, being obese is a source of body dissatisfaction, rejection, and humiliation (Sobal and Mauerer, 1999). The degree of body dissatisfaction and marginalization, however, varies by race and ethnicity (this is yet another example of how obesity and the reaction it evokes vary by social categories). What is universal is that women of all backgrounds endure the brunt of obesity-based social stigma because women are more likely to be objectified (Schur, 1984; Sobal and Stunkard, 1989). In a survey of 33,000 readers of *Glamour* maga-

zine placed in the August 1983 issue, 75 percent said that they were "too fat," even though only one quarter were overweight, according to standards set by the Metropolitan Life Insurance Company's 1959 height-weight tables. What is more surprising, 45 percent of *underweight* women felt that they were too fat. In addition, most obese individuals and especially women tend to internalize their stigma, believing the condemnation they experience is deserved (Cahnman, 1968). Recent literature reports similar self-image body distortion (see Monteath and McCabe, 1997). Sanderson and colleagues (2002), for example, report undergraduate female participants believed, compared to themselves, other women are thinner, want to be thinner, exercise more frequently and for more aesthetic reasons (e.g., weight loss, attractiveness), and are more aware of and influenced by the thinness norm. Moreover, upper-class women showed more evidence of perceiving a discrepancy on behavioral norms such as eating and exercising behaviors. It has yet to be determined whether this internalization is due to the intense preoccupation with the self and individual responsibility discussed earlier. Perhaps if the obese and others understood the social conditions that contribute to and reinforce obesity in the United States, internalization of stigma wouldn't be so widespread and motivation for change would be more possible.

As displayed in Table 1, African Americans and Mexican Americans are disproportionately overweight and obese compared to white Americans, especially among these women of color. Within a highly segregated country such as the United States, many argue cultural norms play a role in insulating African Americans from dominant cultural messages regarding the relationship between health, wellness, thinness and beauty. To be obese in communities segregated from white America is to have fewer direct encounters with the stigma surrounding obesity (Ingrassia, 1995; Parker et al., 1995).

In addition, racial differences in attitudes toward weight are substantial. Black teenage girls and women regard being overweight as more acceptable for themselves and others than is true of white girls and women (Milkie, 1999). Evidence suggests African Americans have been relatively immune to the allure of thinness a highly valued characteristic among white men and women. In a study of junior high school and high school girls, 90 percent of white teens expressed dissatisfaction with their weight while 70 percent of their African American counterparts said they were satisfied with their weight (Ingrassia, 1995). Nearly two thirds of black teenagers said it is better to be a little overweight than a little underweight. Substantially overweight black teenagers described themselves as "happy" with their weight. Finally, black girls recognize black teenagers are not attracted to thinness. Social conditions such as those colored by racial segregation contribute to disparities in obesity by race in the United States (Parker et al., 1995). Individual-level explanations

for obesity, such as lack of exercise and over eating, fall short of explaining critical differences.

Conclusion/Policy Recommendations

My purpose is to highlight the research advancing our understanding of social conditions contributing to obesity and to underscore the importance of continued research in this direction. As social scientists, it is critical to be closely involved in the study of public health problems that have become medicalized. Obesity is not a primarily medical problem and should not be addressed solely by medical approaches. If the medical community assumes exclusive expertise in obesity research, the examination of proximate conditions may overshadow the importance of distal determinants thus debilitating our effectiveness at treatment and prevention. Individualistic approaches to this health problem are doomed to failure unless the social contexts in which eating and exercising behaviors take place are taken into account.

If one wishes to address the fundamental social causes of obesity, interventions must address inequality in the resources that fundamental causes entail. Many believe this is impractical because social inequality is so firmly entrenched in society. There are, however, many polices that have a direct bearing on the effects of social inequality. These policies have an effect on the extent to which people from different social circumstances have access to health-related resources. Policies which involve social and racial integration, the minimum wage, equality in access to quality education and child care, access to exercise programs and equipment, parenting leave, funding for physical education in schools, equitable tax policies, affordable nutritious foods, and other initiatives of this type produce social change.

Understanding the social-psychological origins of obesity in the United States is important as well. Differentiating between "deliberate" behavior and the possession of a physical trait are cultural and constructed phenomenon. Negative attitudes toward the obese stem from the assumption that they are fat because they are gluttonous and self-indulgent—they are lazy and they eat too much; most people believe that the obese "could control their weight if they really wanted to" (Katz, 1981). These social-psychological orientations have an impact on how the social problem is understood by the obese and the physically fit alike these assumptions distorts the overall approach to the public health problem.

Social class and race further complicate the social mechanisms influencing obesity rates. The stigma associated with obesity varies by social class as well as race. For developed countries like the United States, obesity is more prevalent among the poor. For poorer countries, it is the wealthy that tend to be overweight or obese. Thus those who are poor and heavy in the United States bear a double burden of

stigma. Could this double burden increase or decrease the probability of improving health by reducing risky weight levels? To my knowledge, there is very little research on this question.

Where race is concerned, research suggests black self-acceptance among obese girls and women are distinct from white patterns of self-disparagement. This is demonstrative of how social factors impact individual behaviors. We know empirically the stigma of obesity among African Americans is significantly less relevant and more subdued than it is among whites. Thus, obesity is far less deviant in black versus white communities. However, as previously mentioned, the causes and consequences of disease are continually shifting. Recent research suggests that "thin is beautiful" mantra is penetrating communities of color.

Future social and behavioral research in this area needs to contextualize risk factors associated with obesity. To contextualize risk factors is to attempt to understand how people come to be exposed to individually based risk factors such as poor diet and lack of exercise so that effective interventions can be designed. Next, researchers need to recognize some social conditions can be fundamental causes of disease. Fundamental causes can include access to resources that help individuals avoid diseases and their negative consequences altogether. For example, there are powerful social, cultural, and economic factors shaping the diet of poor people in the United States. Consequently, providing information about healthy diet to poor people and exhorting them to follow nutritional guidelines is unlikely to have much impact, given their need for convenient, affordable foods. Without an understanding of the context that leads to risk, the responsibility for reducing risk rests solely with the individual. Adopting a comprehensive understanding of obesity in the United States will position us to further improve the health of the nation.

Notes

*The author would like to thank friend and colleague Rita J. Simon for her contributions to this piece in the form of lengthy discussions about obesity in America. I would also like to thank T. DeMarco and P. Guerino for reading various drafts. Finally, I would like to thank my student, A. Trimble, for assisting me with much of the library research.

1. It is yet unknown what the implications are for this variation in the social allocation of marginalized status. Are obese individuals likely to be successful in reducing his or her weight if their condition is understood as a medical condition or would an obese person be successful at losing weight in response to the social stigma associated with obesity stemming from non-medical reasons? This is an important research question that needs to be addressed.

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