Understanding metabolic syndrome requires that we shift our thinking from an epidemic perspective to one that embraces an endemic view of metabolic health problems. Recent scientific discourse about the metabolic problems that comprise metabolic syndrome refers to each of them as epidemics in their own right. Epidemics are viral or bacterial infections from outside the body that quickly and indiscriminately kill large numbers of individuals living within a circumscribed geographic location. While it is true that most Americans will most likely experience and/or die from one or more metabolic problems, these conditions are not epidemics in the historical sense of the term. The historical response to controlling and eradicating epidemics has been to rapidly target individuals who are

most likely to fall within the epidemic's relational and spatial reach.

In stark contrast, the politics of metabolism is characterized by endemic problems. Endemics are discriminating, widespread, and long-term population-level phenomena that weaken societies' energies because treating them is expensive and they lead to the decreased economic productivity of working populations. According to data published by leading authorities, the direct and indirect health-care costs from heart disease, diabetes, and stroke exceed one trillion dollars per year. Because endemics represent a political problem for those who govern, endemic problems quickly become objects of government intervention, scientific disciplines, and capitalist expansion. In the context of improved health and productivity, this framing of endemic phenomenon is required to excise as much political utility, scientific discipline, and economic profit as possible.

Shifting our perspective from an epidemic to an endemic view is critical for understanding how the biological realities, political rationalities, and economic opportunities of the politics of metabolism shaped the discourses of metabolic syndrome. Developing a more robust understanding of the politics of metabolism also involves analysis of the biomedical-government-industry collaborations that lie at the center of biomedical knowledge production in the United States. Although metabolic syndrome may not exist as a biological reality in precisely the same ways that cancers exist, it emerged in the context of a massive biomedical, government, and corporate response to the endemic problems of metabolism. The discourses, technologies, and practices of these social institutions are the tools with which researchers construct metabolic syndrome. Taken together, these preliminary interpretations underscore both the importance of ideas and institutional practices in the politics of metabolism.

Race, Ethnicity, and Metabolic Syndrome

Metabolic syndrome not only constitutes a new way of constructing,
studying, and treating human metabolism, it also serves as an emerging cultural location for the construction of new meanings of race and ethnicity. To understand the relationships between metabolic syndrome, race, and ethnicity, and to analyze the meanings produced through the science of metabolic syndrome, *Blood Sugar* interrogates the uses of racial and ethnic categories in metabolic syndrome research. The first set of relationships that link metabolic syndrome to race concerns the specific constructions of race and ethnicity that are used in this research. Race and ethnicity are socially constructed systems of categorization that are used to identify, group, and rank human beings, albeit based on different criteria. Race is a socially constructed category that emerged in the 1600s to classify individuals into so-called races based on presumed biological differences between population groups. Ethnicity is a socially constructed category that emerged in the 1920s to classify individuals into so-called ethnic groups based on presumed differences in culture, geographic origin, and ancestry. Race and ethnicity are related in that ethnicity emerged in large part in response to critiques of biological notions of race. Given this historical relationship, race and ethnicity are not interchangeable systems of categorization. However, there is meaningful overlap between what are considered racial and ethnic groups. For example, African Americans are considered to be both a racial and an ethnic group. Race and ethnicity are controversial systems of categorization, especially in the context of biomedical research, because individual biological and genetic differences do not fall neatly along racial and ethnic lines. In other words, despite their shared origins in response to biological interpretations of individual and group differences, race and ethnicity are social constructions.

The federal government plays several important roles in the production of metabolic syndrome and race. It enforces the racial categorizations used in biomedical research on metabolic syndrome, funds and produces research on the syndrome, and regulates the labeling and safety of prescription drugs related to it. Because of historical and current federal research policies that regulate demographic data
collection, statistical information about a research subject’s race and ethnicity is routinely collected along with anthropomorphic, molecular, and genetic information about the subject’s metabolism. Therefore, the sampling frames, analytic strategies, and research findings of metabolic syndrome research studies are often framed using these racial and ethnic categories. In this regulated scientific environment, it is also common to see published review articles on metabolic syndrome that are focused exclusively on particular racial and ethnic minority groups. The racial categories used in federally regulated health research are statutorily based on the Office of Management and Budget’s 1997 Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity. The OMB recommendations on the measurement of race and ethnicity in the general population note that “the [racial] categories that were developed represent a social-political construct designed to be used in the collection of data on the race and ethnicity of major broad population groups in this country, and are not anthropologically or scientifically based.” In this context, many researchers also frame their research on racial groups as ethnic to avoid talking explicitly about race in ways that could be interpreted as racial bias, or worse, scientific racism.

A second set of relationships that link metabolic syndrome to race and ethnicity concerns the effort to study, prescribe, and label drugs that may be related to metabolic syndrome. Drug companies are actively recruiting individuals who seemingly have metabolic syndrome for their clinical research. For example, the African American Rosuvastatin Investigation and Efficacy Study (or ARIES Study) investigated the ability of Crestor, a powerful new member of the statin class, to lower both blood pressure and cholesterol in a self-identified African American population. A second recent study, the Clinical Utility of Caduet in Simultaneously Achieving Blood Pressure and Lipid Endpoints in a Specific Patient Population (or CAPABLE Study) investigated whether Caduet, a combination of two drugs, Lipitor and Norvasc, was effective at lowering African Americans’ blood pressure and cholesterol. Both of these prescription drug studies were conducted in a manner similar to the way
that African Americans were targeted in the research and marketing of BiDil, an antihypertensive medication that is the first drug approved by the FDA for use in a specific so-called ethnic group: African Americans.¹¹ Yet, coupled with recent research findings that suggest that members of racially and ethnically categorized groups might require different medications, dosages, and routes of administration of prescription drugs trials and because of new federal guidelines about the inclusion of racial and ethnic minorities in clinical trials, this research has a new racial dimension.¹²

Metabolic syndrome has become a new way of representing and explaining racial health inequalities in America. The scope and impact of chronic metabolic conditions have intensified in the United States, especially among racial and ethnic minority groups. Recent data from the Centers for Disease Control and Prevention (CDC) document substantial and persistent racial disparities in the distribution of and complications from these major chronic metabolic conditions.¹³ For decades, social epidemiologists have documented such disparities among racial and ethnic minority groups.¹⁴ This research on racial health disparities reveals that African Americans and other racially categorized minority groups experience higher rates of death owing to chronic metabolic diseases and higher rates of complications from those diseases, in large part because of the interactive dynamics of racism, sexism, and class inequality on health.¹⁵

This body of literature on racial health disparities has received less attention in terms of making a theoretical contribution to critical race theory, science and technology studies, or political sociology, and instead has been more embraced in the fields of social epidemiology and public health. At its core, this research challenges the notion that racial health disparities are caused by natural and cultural differences between racially categorized groups. These scholars have long argued that racial health disparities result from group-based inequalities in access to the economic and political resources necessary to maintain and improve health, such as having access to affordable and adequate medical care. However, simply
paying more attention to racially encoded health disparities in the context of metabolic syndrome will not be enough. Currently, scientific comparisons of racially categorized groups in metabolic syndrome and its correlates have become a veritable cottage industry. Nobly, metabolic syndrome analysts often carry out their work with the purpose of devising better biomedical explanations for health disparities in heart disease, diabetes, and stroke. Yet, the dubious theories of racial inequality and discourses of race that emerge from metabolic syndrome research on racial and ethnic groups have not been adequately addressed in that research.

Through these practices, metabolic syndrome has become a new discursive tool used to produce new meanings of race in the politics of metabolism. Specifically, metabolic syndrome draws upon and extends knowledge making practices that have long constructed race as natural, biological, and genetic. As the biomedical discourses and practices of metabolic syndrome continue to unfold, they intersect with the ways in which race shapes the theories and practices of medicine in terms of disease surveillance, diagnosis, and treatment. Because metabolic syndrome emerged largely from within twentieth-century American biomedicine, it was inexorably shaped by the social structures of race and racism. The sociological relationships between metabolic syndrome and race in the United States seem to have emerged at the intersection of scientific racism—a set of scientific discourses and practices that served to ignore, explain away, and/or justify racial inequalities—and the practices of an increasingly biological and technological approach to the study of human metabolism.

*Blood Sugar* explores how metabolic syndrome and race operate together as forms of power and knowledge within the politics of metabolism. Three questions guide the arguments I make. First, how did metabolic syndrome emerge as a new discourse in the politics of metabolism? Second, how are current conceptions and meanings of race constructed through the science of metabolic syndrome? Third, what are the implications of this emerging relationship between metabolic syndrome
and race for understanding the construction of racial meanings and the reproduction of racism within the politics of metabolism?

Notes


4 In 1997, the Office of Management and Budget (OMB) provided the definitions of race and ethnicity that must be used in all biomedical and health-policy research funded by the federal government. See Steve Epstein, *Inclusion: The Politics of Difference in Medical Research* (Chicago: University of Chicago Press, 2007); and Alexandra E. Shields,

5 For analyses of this research, see chapter 3, “The Scientific Racism of Metabolism.”


7 Ibid., 36874.


10 Ibid.


12 See my analysis in chapter 4, “Killer Applications: The Racial Pharmacology of Prescription Drugs.”


Bio

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