

# Achieving Healthy Weight in African-American Communities: Research Perspectives and Priorities

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### Abstract

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The longstanding high burden of obesity in African-American women and the more recent, steeper than average rise in obesity prevalence among African-American children constitute a mandate for an increased focus on obesity prevention and treatment research in African-American communities. The African-American Collaborative Obesity Research Network (AACORN) was formed to stimulate and support greater participation in framing and im-

plementing the obesity research agenda by investigators who have both social and cultural grounding in African-American life experiences and obesity-related scientific expertise. AACORN's examination of obesity research agenda issues began in 2003 in conjunction with the Think Tank on Enhancing Obesity Research at the National Heart, Lung, and Blood Institute (NHLBI). The assessment was subsequently expanded to take into account the overall NIH strategic plan for obesity research, literature reviews, and descriptions of ongoing studies. In identifying priorities, AACORN members considered the quality, quantity, focus, and contextual relevance of published research relevant to obesity prevention and treatment in African-American adults or children. Fifteen recommended research priorities are presented in five categories adapted from the NHLBI Think Tank proceedings: health effects, social and environmental context, prevention and treatment, research methods, and research training and funding. These recommendations from an African-American perspective build on and reinforce certain aspects of the NHLBI and overall NIH research agendas by providing more specific rationale and directions on areas for enhancement in the type of research being done or in the conceptualization and implementation of that research.

**Key words:** ethnic groups, culture, nutrition, physical activity, research priorities

### Introduction

This article presents the perspectives of a group of African-American scholars on priority areas for research to reduce the excess burden of obesity and promote healthy weights in the African-American population. The authors are charter members of the African-American Collaborative Obesity Research Network (AACORN),<sup>1</sup> an organization

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<sup>1</sup> Nonstandard abbreviations: AACORN, African-American Collaborative Obesity Research Network; NHLBI, National Heart, Lung, and Blood Institute.

formed in 2002 to increase the involvement of African-American researchers in obesity-related research and public policy initiatives. Important additional objectives underlying AACORN's formation were to increase collaboration among African-American scholars working in this area and to foster their professional growth. We identify African American-oriented research priorities to clarify the health effects of obesity, understand the social and environmental context for weight control, identify effective obesity prevention and treatment interventions, improve research methods, and enhance research training and funding mechanisms. These priorities are intended to focus and complement the broader obesity research agendas articulated by the National Heart, Lung, and Blood Institute (NHLBI) and the NIH overall (1,2). Without special advocacy, research issues specific to "communities of color" may not fare well in the competition for resources to support obesity research; concerns for the majority population may take precedence.

### **AACORN Background and Rationale**

AACORN was formed by bringing together African-American researchers from 10 U.S. universities or research centers around a common vision of "healthy weight, freedom from obesity-related health problems, and high quality of life for African-American youth, adults, and elders." The 11 charter members include junior and established African-American health scholars with research interests and expertise pertinent to obesity and related health disparities. AACORN members' expertise includes community health, nutritional epidemiology, public health, clinical nutrition and dietetics, women's and gender studies, exercise science and physical activity epidemiology, weight management intervention research, cardiovascular disease epidemiology and prevention, diabetes management and epidemiology, cancer control, and community-based participatory research.

In light of the high burden of obesity in African-American women recognized at least two decades ago (3) and the recent increases in obesity prevalence among African-American children (4), the relative paucity of obesity prevention and treatment research involving African Americans (5–8) constitutes a mandate to increase the quality and quantity of obesity research with a specific African-American focus. AACORN focuses on African Americans, although a similar case could be made for the need to enhance obesity research in several other ethnic minority communities (5–10). AACORN seeks to enhance the visibility and integration of the perspectives of African-American investigators in the larger obesity research arena. By observation, few obesity researchers are African American, and relatively few African-American researchers focus on obesity. Greater involvement of African-American researchers may improve awareness of the need to study obesity issues in African Americans as well as the ability to study them (11).

Aside from the importance of equal opportunity in scientific fields (12), ethnic diversity among researchers is critical for research on socially constructed health disparities (11,13,14). Ethnic diversity expands the breadth and depth of relevant life experiences and, therefore, of the social and cultural knowledge available to inform the research process. While scientific methods and processes are designed to foster objectivity in gathering data and drawing conclusions, many aspects of scientific endeavor are, nevertheless, subjective (15), and bias is inevitable (11). The social grounding and perceptions of those conducting research influence the choice and framing of research questions, the contexts in which studies are conducted, and the nature and quality of the research experience for study participants. The investigator's ethnicity, sex, and other aspects of life experience are potential assets or liabilities. Diversity among investigators increases the likelihood that investigator influences will be recognized, counterbalanced, and scientifically enhancing rather than limiting.

Research to further obesity prevention and treatment in African-American communities is a case in point. Contextual and behavioral determinants of obesity and of potentially effective obesity prevention and treatment interventions in African-American communities will most likely be understood differently by African Americans compared with other investigators. Food intake and physical activity are profoundly influenced by situational, socioeconomic, and cultural variables as well as individual-level biobehavioral factors (16–20). Obesity research informed by the perspectives of African-American investigators may point to new and clearer directions for studies in African-American communities (21). For example, the social and cultural milieu for weight-related interventions, although blended with elements of the mainstream culture, is qualitatively different for African Americans than for white Americans (3,6,20–25). Specifically, attitudes about excess weight are generally less negative in African-American than in white communities (22,23) and may include perceptions of excess weight as favorable or at least not harmful to health (24,25).

Some important caveats apply when discussing the advantages of involving researchers of the same ethnic group as the population being studied (11,21). Increased involvement that takes the form of tokenism or "window dressing" will not help. Nor will it help to stereotype African-American researchers as having homogeneous views about obesity-related issues. Additionally, concluding that only African-American researchers can conduct valid and sensitive research on obesity in African-American communities would be overly simplistic and a grave error. What is needed is more and appropriate involvement of those African-American researchers who can and wish to help in motivating and framing obesity and disparities research. Consideration of relevant experiences, scientific expertise,

and desired investigator roles will be as important as or more important than in other situations, because of the potential sensitivities involved and also because the pool of African-American researchers is small and easily overburdened. AACORN seeks to develop outreach and infrastructure that will make obesity research more motivating and feasible for interested African-American researchers.

### **NIH Obesity Research Agenda**

NIH priorities are only one part of the picture of available funding to support obesity research but are distinctive. NIH is the preeminent and largest health research funder overall, as well as in the obesity arena, and NIH priorities are public priorities. AACORN's examination of the NIH obesity research agenda began in 2003 at a 2-day workshop held just before the NIH "Think Tank on Enhancing Obesity Research at the National Heart, Lung, and Blood Institute" (1). AACORN's 2-day workshop included a review of weight-related research needs in African-American communities and highlights of obesity-related research initiatives at the Centers for Disease Control and Prevention. Participation in the NHLBI Think Tank enabled AACORN members to hear "state of the science" reviews about relationships of obesity to atherosclerotic and cardiovascular diseases, the metabolic syndrome, prothrombotic and procoagulant states, asthma, and sleep disorders, about the current understanding of biological, behavioral, and environmental determinants of obesity, and about clinical and community-based approaches to obesity prevention and treatment. The Think Tank focused on the population at large; however, 8 of the 50 resulting recommendations highlighted research needs related to diverse populations defined by ethnicity or socioeconomic status (see Table 1). In addition, the discussion of prevention research in the Think Tank Executive Summary emphasized the need to "test the cultural appropriateness of key constructs and develop new approaches that include multiple institutions, sustain strong relationships with communities, and engage communities as partners" (1).

AACORN also considered the NIH strategic plan for obesity research (2), then in draft form, which incorporated the Think Tank recommendations and also addressed obesity-related outcomes of interest to other NIH institutes and centers, e.g., diabetes, maternal health status and reproductive outcomes, breast and prostate cancer, knee arthritis, and other causes of physical disability. The goals of the overall NIH plan emphasize prevention and treatment of obesity through "behavioral and environmental approaches to modify lifestyle" as well as "pharmacological, surgical, and other medical approaches" and "breaking the link between obesity and its associated health conditions." Health disparities are addressed explicitly as the first of a series of cross-cutting topics in the NIH strategic plan. African Americans, Hispanics, and American Indians are identified among populations warranting special emphasis in (obesity)

research planning, particularly children in these populations. Several examples of NIH-supported obesity research advances and dissemination efforts that focus specifically on African Americans or on ethnic comparisons of African Americans and white or Hispanic populations were listed in an appendix to the NIH strategic plan.

### **AACORN Priorities**

AACORN generated 15 interrelated research priorities in five categories adapted from the NHLBI Think Tank proceedings (1): health effects of obesity; social and environmental context for weight gain and weight control; obesity prevention and treatment interventions; research methods; and research training and funding mechanisms. These priorities are discussed below and summarized in Table 2. They build on the general NIH recommendations while being selective and more specific in describing the nature of studies that might provide answers to some key unanswered questions in African Americans. We considered the apparent quality, quantity, focus, and contextual relevance of published research relevant to obesity prevention and treatment in African-American adults or children, based on literature reviews (5–8,26,27) and available information about research directions of the NIH and the Centers for Disease Control and Prevention (1,2,28).

#### ***Health Effects of Obesity***

Uncertainty about the health effects of obesity in African Americans may detract from the apparent importance of emphasizing research on and interventions for obesity in African Americans. In addition, it may be useful to identify which African Americans are the most or least susceptible to obesity-related health effects. Four relevant recommendations follow.

*Obtain a Better Understanding of How High BMI Levels Influence Disease Incidence, Case Fatality, and Mortality Rates in African-American Men and Women.* The significance of obesity for African-American health continues to be debated. Driving the debate are inconsistent and unimpressive associations of obesity with mortality in African-American cohorts (29) and observations of ethnic differences in the relationship of a given BMI level to measures of body composition (9,30). The mortality data are difficult to interpret given the black-white differences in overall mortality profiles and the fact that mortality data reflect both disease incidence and the numerous influences on survival of those with disease, e.g., health care access and treatment, the presence of comorbidities, and death from causes unrelated to obesity. Another key issue is how one reconciles the relatively clear associations of obesity with the incidence of chronic diseases (31–33) and the weak association with mortality.

*Identify Biological and Behavioral Factors that Modify the Association of High BMI Levels with the Development of*

**Table 1.** NHLBI Think Tank recommendations that refer to high-risk ethnic minority populations, cultural variables, or health disparity issues\*

Category	Recommendation
Diet, physical activity, and energy balance	Determine the combination of biological, behavioral, and environmental factors that predispose certain population subgroups (e.g., adults and children in several ethnic minority populations) to excess weight gain and difficulty in losing weight
Environmental and societal determinants of food intake and physical activity	<p>Determine population secular trends in caloric and nutrient intake, energy expenditure of physical activity, and energy balance, including variations in important population subgroups defined by demographic characteristics</p> <p>Elucidate the specific associations of acute and chronic poverty with obesity development and the related implications for other cardiovascular and pulmonary disease risks</p> <p>Determine the influences of environmental and social factors on the obesity epidemic, including attention to social change and social process variables such as poverty-related variables and policies regarding food and unsafe environments limiting physical activity</p> <p>Determine socially and culturally acceptable ways to minimize the effects on children in diverse ethnic and socioeconomic groups of societal-level environmental factors (particularly school and neighborhood characteristics) that predispose them to overeating and inactivity</p> <p>Using community-based participatory research approaches, conduct large scale “market research” studies in diverse communities of the acceptability of various environmental and societal changes that might be undertaken to promote healthier weight levels</p> <p>Determine effectiveness of “media literacy training” to help raise awareness of potential adverse food marketing strategies in children and adults across diverse socioeconomic and cultural subgroups</p> <p>Determine and study the relationships between BMI or adiposity phenotypes and cardiovascular and pulmonary disease risk factors and events among ethnic groups</p>
Prevention, treatment, and applications to clinical practice and community settings	

Source: Executive Summary of the Think Tank on Enhancing Obesity Research at the NHLBI. Available at [http://www.nhlbi.nih.gov/health/prof/heart/obesity/ob\\_res\\_exsum/ob\\_res\\_exsum.pdf](http://www.nhlbi.nih.gov/health/prof/heart/obesity/ob_res_exsum/ob_res_exsum.pdf).

\* The Think Tank generated 50 recommendations in total.

*Comorbidities in African-American Men and Women.* Little is known about obesity subtypes in African-American communities with respect to susceptibility to various health effects (e.g., gynoid vs. android obesity; amount of visceral vs. subcutaneous abdominal fat). For example, obesity with a relatively gynoid fat distribution could be less harmful (1,34). Subgroup differences could explain some of the inconsistencies seen in associations of obesity with health outcomes. Behavioral variables such as dietary composition or physical activity level are also of interest in this respect, e.g., determining whether dietary or physical activity pat-

terns influence fat distribution patterns or disease incidence *within* the population of overweight or obese African Americans.

*Characterize, for Overweight and Obese African Americans in Different Age Strata, the Benefits of Adherence to Dietary and Physical Activity Recommendations that Are Independent of Weight Loss.* National dietary data (35) identify several aspects of African-American dietary patterns that are inconsistent with current dietary recommendations for health promotion. In the same vein, physical activity profiles of African Americans may be characterized

**Table 2.** Summary of AACORN research priorities to focus and enhance research to achieve healthy weight in African-American communities

Category	Recommended research priorities
Health effects of obesity	<p>Obtain a better understanding of how high BMI levels influence disease incidence, case fatality, and mortality rates in African-American men and women</p> <p>Identify biological and behavioral factors that modify the association of high BMI levels with the development of comorbidities in African-American men and women</p> <p>Characterize, for overweight and obese African Americans in different age strata, the benefits of adherence to dietary and physical activity recommendations that are independent of weight loss</p> <p>Determine the effects of treatment-related weight gain among African-American cancer survivors</p>
Social and environmental context for weight gain and weight control	<p>Determine the extent to which food, activity, and weight-related market behaviors of African Americans are influenced by targeted marketing and local availability of foods and how perceptions of buying power or lack thereof shape food choice decisions</p> <p>Obtain a better understanding of the processes whereby African-American communities undergo cultural and structural changes and the key determinants of these processes</p> <p>Better characterize perceptions of food, eating, physical activity, and weight and their roles in African-American family and community life, including the identification of knowledge gaps and beliefs that are incompatible with current scientific thinking</p>
Obesity prevention and treatment interventions	<p>Determine the effectiveness of targeted environmental and policy changes to facilitate healthful eating, physical activity, and weight control</p> <p>Design effective weight loss approaches that appeal to the perspectives and motivations of obese African-American men and women with established comorbidities such as diabetes, hypertension, or heart disease</p> <p>Design and evaluate weight loss and weight control strategies geared to African-American families, social settings, and social dynamics</p>
Research methods	<p>Increase qualitative research and community-based research with African-American communities to elicit underlying perceptions, issues, and priorities, to derive insights for measurement and program design, and to promote sustainability</p>
Research training and funding mechanisms	<p>Support pre- or postdoctoral fellowships to increase the number of African-American researchers involved in obesity research, including initiatives designed to attract researchers from disciplines such as family studies, child development, urban planning, and social work</p> <p>Create a publicly accessible, integrated, inclusive catalog of obesity prevention and treatment research priorities and funding opportunities that focus on African Americans as a primary study population or key subgroup</p> <p>Convene an ongoing, multidisciplinary group of experts, e.g. from health, education, human development, marketing, humanities, social science, economics, and urban planning, to develop comprehensive obesity research initiatives that focus on African-American communities</p> <p>Support multi-institutional, interdisciplinary collaborations to conduct obesity research focusing on African Americans</p>

by relatively low levels of physical activity and high levels of inactivity during leisure time (36–38). Weight loss is difficult, particularly in African Americans (6). It would, therefore, be useful to know whether dietary and physical activity changes themselves are beneficial even in the absence of a major weight loss.

*Determine the Effects of Treatment-related Weight Gain among African-American Cancer Survivors.* Excess weight gain is a possible consequence of cancer treatment, with implications not only for quality of life but also for cancer recurrence and development of conditions such as hypertension and cardiovascular disease (39–41). Weight gain after breast cancer diagnosis and treatment is significantly greater among African-American women compared with women of other ethnic groups (42). African-American women are also more likely than white women to be obese at breast cancer diagnosis, and obesity has been associated with indices of poorer survival (i.e., later stage of disease diagnosis) (43,44). However, participation of African Americans in studies evaluating interventions designed to enhance weight control efforts before, during, or after diagnosis and treatment has been limited. Furthermore, few studies have explored how sociocultural characteristics may influence responses to post-treatment weight gain among African-American breast cancer survivors.

### ***Social and Environmental Context for Weight Gain and Weight Control***

There are gaps in our understanding of what it might take to foster major changes in the weight-related eating and activity profiles of African Americans, especially regarding economic and social contexts. These contextual issues are critical considerations (6,16,18,21). Many social-structural aspects of obesity-promoting environments are more adverse in African-American than in white communities (6,10). Research is needed to elucidate both the targets for structural change and the community processes whereby these changes can be accomplished. Three specific recommendations follow.

*Determine the Extent to Which Food, Activity, and Weight-related Market Behaviors of African Americans Are Influenced by Targeted Marketing and Local Availability of Foods and how Perceptions of Buying Power or Lack Thereof Shape Food Choice Decisions.* Social context variables predisposing to obesity in African-American communities include market forces that promote overconsumption of high calorie foods and sedentary behaviors. These market forces both influence and respond to social and cultural norms about diet, physical activity, sedentary behavior, and body size. High-calorie, low-nutrient-dense foods that are highly palatable and the least expensive (45) are disproportionately marketed to African Americans (46). Markets in African-American and low-income neighborhoods have fewer healthy foods, and residents may have limited space

in which to store fresh and frozen produce (18,47,48), making it more difficult to follow a healthful eating pattern even when desired. Supersizing and buying in bulk are simple models of economics, and the culture of buying and selling based on these models prevails both in the general population and in African-American communities.

Similarly, insofar as physical activity has become a commodity in the market, we need a better understanding of how the expenditure of energy and participation in leisure-time physical activity are constructed in the African-American experience. Accounts of hard work, long hours, and low pay may reflect a value system that does not place direct importance on energy expenditure through leisure (19). More knowledge is needed on the impact of these values on market behaviors regarding physical activity. The influence of higher than average levels of television watching in African-American children should be studied in relation to both physical inactivity and overeating (49,50).

*Obtain a Better Understanding of the Processes Whereby African-American Communities Undergo Cultural and Structural Changes and the Key Determinants of These Processes.* Studies are needed to elucidate how environmental and social-cultural obesity determinants can be modified through actions generated from within or outside of the African-American community. Some African Americans may be accustomed, out of historical necessity, to a pattern of prudent, reactive attitudes vis-a-vis messages that come from “outside” (17). How to foster collective resistance to adverse targeted marketing of certain foods or inactivity-related products is unclear, although the precedent for such resistance has been documented for at least one case of targeted marketing of tobacco (51). Greater clarity is also needed about how to characterize African-American communities in a way that does justice to the many relevant definitional variables. These variables include intersections among race/ethnicity, sex, and social class factors, as well as structural factors that maintain African Americans as a population group in disadvantaged status relative to whites (52).

*Better Characterize Perceptions of Food, Eating, Physical Activity, and Weight and Their Roles in African-American Family and Community Life, Including the Identification of Knowledge Gaps and Beliefs that Are Incompatible with Current Scientific Thinking.* The ultimate solutions to obesity in African-American communities must make sense within prevailing beliefs, explanatory models, and world views of African Americans, which may differ from those of whites in numerous respects (6,16,17,19–21). Drawing from such disciplines as cultural anthropology and folklore, solid ethnographic descriptions of African-American food experiences and the integration of work, leisure, family, and communal lives can help provide a better basis for undertaking obesity-related interventions. The African-American population has a broad range of life experiences and has

adopted lifestyles that reflect, among other things, the strong forces of social stratification by ethnicity. Much more attention should be given to these cultural and social forces.

### ***Obesity Prevention and Treatment Interventions***

Effective strategies for obesity prevention or treatment in African-American communities are urgently needed, particularly those that emphasize environment/policy-level and family-based interventions that can improve the context for developing and maintaining healthy weight. Clinical trial data for adults suggest that weight loss is more difficult for African Americans than whites, even if those enrolled and retained in the trials are highly motivated for lifestyle changes and given intensive counseling and support by well-trained health professionals (6). The more adverse environmental contexts for weight control in African-American communities may be partly responsible. Cultural adaptation of individual behavior change approaches does not necessarily result in improved weight losses (6).

*Determine the Effectiveness of Targeted Environmental and Policy Changes to Facilitate Healthful Eating, Physical Activity, and Weight Control.* The effectiveness of obesity prevention and treatment interventions among individuals is influenced by environmental factors. Positive lifestyle change will not occur if these contextual issues are not addressed. Addressing these issues may require policy interventions integrated across separate agencies of governments. Integrated approaches to full-scale environmental changes, based on the notion of the built environment as a public health concern that is broader than the obesity issue, are especially needed in those African-American neighborhoods that are at highest risk and where the sense of self-empowerment and collective efficacy may be lowest. Studies are needed to identify community readiness for these changes (53), the mechanisms for achieving them, and their impact on obesity and other health and social outcomes. Foci of such research might include urban gardens, park designs and restorations, adequate street lighting, sidewalk maintenance, innovations in retail food availability, and changes to stimulate more physical activity at work, at home, and at other times.

*Design Effective Weight Loss Approaches that Appeal to the Perspectives and Motivations of Obese African-American Men and Women with Established Comorbidities such as Diabetes, Hypertension, or Heart Disease.* Weight loss is beneficial for secondary prevention of chronic diseases. However, because of their high prevalence, obesity-related diseases may seem normative or predestined in African-American communities, limiting health-related motivations for weight loss. Understanding the way chronic conditions and diseases are perceived and the complex set of factors that influence health behavior decision making, *in context*, are critical for designing health messages and in-

terventions. Health behavior decision-making is not only determined by perceived “health threat” but also reflects perceived consequences/costs to family and community secondary to seeking and participating in treatment or behavior change and perceived individual cost and benefits of resulting outcomes such as weight loss or increased physical activity (54,55). Effective interventions for obesity may require widespread changes in community attitudes toward obesity-related diseases, i.e., a greater perception that chronic diseases are manageable conditions and that self-control of health maintenance is within one’s grasp. Studies are needed to identify the best settings for reaching those in need and for determining how weight control programs can be integrated with other programs to improve health, productivity, and quality of life for African Americans at various life stages. Research in natural settings is essential to avoid generating results under ideal, but artificial, circumstances that are difficult to translate to real world settings (56).

*Design and Evaluate Weight Loss and Weight Control Strategies Geared to African-American Families, Social Settings, and Social Dynamics.* Our understanding of the impact of family and social dynamics on the transfer of beliefs and norms regarding weight and body image within African-American communities is limited. Family patterns in African-American communities tend to allow for a broad set of roles for women and often include extended family influences, especially across generations (57). These patterns impact on the eating and physical activity behaviors of family members in complex ways. Research is needed especially to curb the accelerating rates of obesity in African-American children, including research that focuses on parent:child dyads/triads and that reaches children and parents across the socioeconomic status spectrum. Proximal determinants, where studied, are as expected—low levels of physical activity, consumption of excess calories and fat, consumption of large portion sizes, eating while watching television in their bedrooms (58,59), and not wanting to be too thin (60). Obesity intervention studies should allow full consideration of the influence of family relationships, where “family” is defined broadly, on the weight-related behaviors of both adults and children and, if possible, design interventions to incorporate these relationships in positive ways. Similar research directions are indicated with respect to influences of social dynamics and social settings (61).

### ***Research Methods***

Qualitative research and community-based research are particularly critical for informing the design and analysis of assessments (e.g., questionnaires) and interventions that are sensitive to weight-related cultural and contextual variables (62,63). The following recommendation addresses the need

for more emphasis on these types of research in relation to food, physical activity, and weight issues and interventions in African Americans.

*Increase Qualitative Research and Community-based Research with African-American Communities to Elicit Underlying Perceptions, Issues, and Priorities to Derive Insights for Measurement and Program Design and to Promote Sustainability.* Qualitative studies allow participants to discuss salient factors that influence their dietary or physical activity practices from their own perspectives, without limitations imposed by the researcher's conceptualization of the issues. Analytic methods for qualitative data allow for "deep reading" (in the sense of text interpretation that goes beyond the surface to elicit underlying meanings) that is not possible with quantitative data. Such methods can inform the design of questionnaires that are culturally valid and linguistically appropriate, sensitive to relevant issues, and less likely to produce the unreliable and misleading explanations for study outcomes that can result from using standard instruments (11,62,64,65).

A better understanding of the strength of social forces and the vulnerabilities of the individual in the daily coping with his/her context is essential in the development of realistic expectations for program outcomes. Qualitative data can aid in the identification of deeply embedded cultural variables that influence the outcomes of obesity-related interventions. For example, an examination of 41 qualitative studies involving African-American women (Odoms-Young, unpublished data) found that dietary practices were influenced by folkloric beliefs about the relationship between diet and obesity or diet and diseases such as hypertension and diabetes. Attention, without prejudice, to such beliefs can improve effectiveness of dietary interventions. Qualitative data may also help to conceptualize intervention strategies that benefit from themes in African-American culture. This may include several major philosophical themes that are shaped by the subcultures of Africa, the oppressive historical experience of slavery, and the interaction with European culture.

Research approaches that are community-based should be given extremely high priority (11,66,67). Experiences with or knowledge of racially based social engineering, e.g., segregation and apartheid, and the slow progress in obtaining respect, equality, and inclusion may lead African Americans to be skeptical about initiatives from the "mainstream" (68). The effects of this skepticism have not been adequately addressed and may not be recognized, even within African-American communities. The models for studying these potentially strong influences are not well developed. Sustainable weight-related interventions may need to be embedded within the relative context of the multitude of needs and priorities in African-American communities (69), although such holistic programming may be a poor fit with the current pattern of funding based on specific diseases.

Community-based research also facilitates an "assets" orientation that leverages community strengths.

### **Research Training and Funding Mechanisms**

Raising awareness of the need for more research to address obesity in African-American communities and for the involvement of more African-American scholars in this research will be counterproductive without an adequate infrastructure—defined to include training, funding, databases that facilitate assessments of research needs and impact, and related support for multidisciplinary collaborations. Infrastructure needs are addressed in the following four recommendations.

*Support Pre- or Post-doctoral Fellowships to Increase the Number of African-American Researchers Involved in Obesity Research, Including Initiatives Designed to Attract Researchers from Disciplines such as Family Studies, Child Development, Urban Planning, and Social Work.* Training mechanisms designed from a career ladder perspective do not necessarily help to focus scholars in content areas where a critical mass of scholars of color is needed. Obesity is a sufficiently broad topic that a focus in this area could potentially support or enhance career paths in a variety of disciplines. In fact, given the breadth of social and environmental perspectives from which obesity can be viewed, we recommend that potential obesity research scholars be recruited from a variety of disciplines.

*Create a Publicly Accessible, Integrated, and Inclusive Catalog of Obesity Prevention and Treatment Research Priorities and Funding Opportunities that Focus on African Americans as a Primary Study Population or Key Subgroup.* Given that the research needed to tackle obesity in African-American communities may be of interest to a range of potential sponsors, cataloguing and coordinating these activities would facilitate strategic planning that is population-oriented rather than institutionally focused. This would better enable researchers to avoid duplication and to identify true gaps and opportunities for problem solving and generating knowledge about obesity in African Americans. Ideally, from the perspective of the African-American population, the research priorities of diverse funders would be integrated and harmonized.

*Convene an Ongoing, Multidisciplinary Group of Experts, e.g., from Health, Education, Human Development, Marketing, Humanities, Social Science, Economics, and Urban Planning, to Develop Comprehensive Obesity Research Initiatives that Focus on African-American Communities.* African American-oriented obesity research collaborations would also be enhanced by convening relevant groups of experts and facilitating interactions among them. A multidisciplinary panel with access to the above-described overall funding picture could assist in identifying strengths and weaknesses in the relevant research activities at any point in time and initiate research in areas of highest need.

*Support Multi-institutional, Interdisciplinary Collaborations to Conduct Obesity Research Focusing on African Americans.* Specific funding initiatives can be very effective in stimulating the development and implementation of the types of interdisciplinary collaborative efforts that are needed. These initiatives may require novel mechanisms for facilitating interactions across institutions and among funders.

### Conclusions

AACORN was founded to meet a perceived need of African-American investigators for greater influence on the obesity research agenda. Implicit in the formation of this organization was the belief that a group of African-American investigators working collaboratively with each other, as partners with other investigators who may have more established influence, status, and resources, and with funders could be uniquely effective. In a sense, this applies the concept of “community-based participatory research” (67)—where the community in question is a subset of academics with a specific connection to the problem under study—within an academic research community rather than only between academic researchers and their study populations of interest. The importance of participation, as equal partners, of investigators from the group being studied has long been discussed within the field of women’s health research (70) and may be applicable to other academic subcommunities.

The 15 AACORN recommendations presented in this article are intended to complement the NIH and, presumably, other obesity research agendas to identify, from an African-American perspective, areas for enhancement either in the type of research being done or in the conceptualization and implementation of that research. With small changes in wording, many of these recommendations could be applicable to other ethnic minority populations or to the plurality of the overall U.S. population; such adaptations would be consistent with the objective of this article. AACORN is already engaged in advancing this research agenda. Consistent with the last two priorities listed in Table 2, AACORN brought together a diverse group of ~40 scholars and research collaborators with key Centers for Disease Control staff at an August 2004 workshop in Atlanta, GA, to 1) consider a wide range of influences (historical, cultural, sociological, literary, environmental, and economic) on food, activity, and weight in African-American communities and 2) reflect on the current status and future directions in obesity-related interventions. Follow-up from that workshop will include research project ideas, funding proposals, position papers, and presentations, as well as further development of AACORN as a focal point and base to continue the dialogue.

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