Published in final edited form as:

Health Commun. 2013 ; 28(4): 341–350. doi:10.1080/10410236.2012.688009.

Food, Class, and Health: The Role of the Perceived Body in the Social Reproduction of Health

Shawna L. Carroll Chapman^{1,*} and Li-Tzy Wu¹

¹Department of Psychiatry and Behavioral Sciences, School of Medicine, Duke University Medical Center, Durham, NC, USA

Abstract

The association between social class and cardiovascular health is complex, involving a constant interplay of factors as individuals integrate external information from the media, health care providers, and people they know with personal experience to produce health behaviors. This ethnographic study took place from February 2008 to February 2009 to assess how cardiovascular health information circulating in Kansas City influenced a sample of 55 women in the area. Participants were primarily Caucasian (n=41) but diverse in terms of age, income, and education. Themes identified in transcripts showed women shared the same idea of an ideal body: young and thin, and associated this perception with ideas about good health, intelligence, and morality. Transcript themes corresponded to those found at health events and in the media that emphasized individual control over determinants of disease. Women's physical appearance and health behaviors corresponded to class indicators. Four categories were identified to represent women's shared beliefs and practices in relation to class, cardiovascular disease, and obesity. Findings were placed within an existing body of social theory to better understand how cardiovascular health information and women's associated beliefs relate to health inequality.

Introduction

Cardiovascular disease (CVD) is the leading cause of death among women in the United States (US) and a major cause of physical disability (AHA, 2010). There are several risks for CVD, such as eating fatty foods and being overweight or obese (Milner, 1998). CVD is also associated with poverty but causal pathways are not well understood (Steptoe & Marmot, 2004). Awareness of CVD mortality among women has improved, but much of women's information about this disease comes from the popular media (e.g., television and magazines), and confusion in media messages is a significant barrier to women taking preventive action (Mosca, Mochari-Greenberger, Dolor, Newby, & Robb, 2010). In addition, the poor often lack basic resources discussed in media messages (e.g., safe places to exercise) (Clarke & van Amerom, 2008). This study used ethnographic inquiry among 55 women in Kansas City, USA to ask:

1. How women of varying socioeconomic position understood CVD risk,
2. How that understanding corresponded to information about the disease in their environment (i.e., the popular media, health education), and
3. How their understanding of CVD affected their lives (e.g., diet).

*Address for correspondence: Shawna L. Carroll Chapman, PhD, Department of Psychiatry and Behavioral Sciences, School of Medicine, Duke University Medical Center, Durham, NC 27710, USA; Shawna.Chapman@dm.duke.edu.

Researchers asked these questions to explore associations among socioeconomic status (SES), behavior, and women's perception of CVD risk and to help elucidate how health information and social class interact to influence health behaviors.

The Social Reproduction of Health

Health researchers use *lifestyle* to condense all of an individual's behaviors into a single term and recognize that behaviors are a combination of choices and structural constraints put on people in daily life (Hagoel, Ore, Neter, Silman, & Rennert, 2002). What health researchers call lifestyle can be considered a product of what Pierre Bourdieu called *habitus*, or the habitual, unconscious practices people use to survive daily life (Williams, 1995). Habitus is part of the social reproduction of health, a thread of theory concerned with how social structures differentially perpetuate health conditions (e.g., good or bad) among different social classes (Janzen, 1992).

Taste classifies individual and social preferences in everything from art to food (Bourdieu, 1984), and it is particularly relevant to today's obesity epidemic and high rates of CVD related mortality. Bourdieu (1984) said structural constraints force people to eat certain things, but overtime they learn to like what they eat, so food preference often represents food availability (Bourdieu, 1984). Placing taste within the habitus rubric suggests that there are associations among health behaviors, physical characteristics, and demographic variables. Analyses of data from large surveys finds behavioral clusters associated with demographics. For example, Hagoel et al. (2002) conducted phone interviews with 1,075 Israeli women (aged 50–74) and found three distinct clusters or groups, health promoting, inactive, and ambivalent. Survey responses indicated that behaviors were associated with women's perceptions, and women of a higher SES were more likely to engage in healthy behaviors than those of a lower status.

Media messages are part of public discourse, help shape perception, and are important to social reproduction (Crossly, 2004). Many women obtain lifestyle information from the media (Mosca et al., 2010), and studies of popular magazines find that stories portray CVD as preventable through individual choices while ignoring the role of structural constraints on its development (Clarke & van Amerom, 2008). Bourdieu understood that economic powers could colonize public communication (e.g., the media) and, using taste, showed how distortions affected cultural perceptions to negatively affect lower class segments (Crossly, 2004). While research documents a lack of information about structural constraints on CVD development in popular magazines, we found no research that considered how messages related to cultural perceptions of CVD or how associated perceptions affected different class segments and their health behaviors.

Large surveys may not capture the subtle or women specific factors that can help elucidate links between SES, health behaviors, and health messages in the way that qualitative methods can (Gochman, 1997). Guided by the existing evidence and theoretical framework on health behaviors, we conducted an ethnographic study from February 2007 to February 2008 to assess the amount and type of cardiovascular health information in the environments of, and associated health behaviors in, a sample of 55 women of varying social position recruited from the Kansas City area. We chose this design to help shed new light on previously overlooked patterns for women, generate new hypotheses, and propose an integrated model for understanding the interaction of public health information, social class, and health behaviors.

Methods

Design

Ethnographic data came from participant observation, informal discussion, and formal interviews conducted in public spaces and private homes in three counties (Jackson, Johnson, and Wyandotte) on the Kansas, Missouri border in Kansas City. Researchers used grounded theory, an established qualitative methodology that guides study procedure from data collection through findings dissemination (Strauss & Corbin, 1998). The study had three phases. Initially, participant observation and conversations were used to explore women's basic knowledge of cardiovascular health, factors they associated with it (e.g., healthy diet), and factors that hindered their achieving it (e.g., limited time). Phase two included participant and media observation and formal interviews with a sample of 55 women using a question protocol created from constructs identified in the literature and data collected in phase one. Phase three included data analysis and dissemination.

Sample selection procedures depended on the study phase. During the initial phase, women willing to talk once informed of the study and aged 18 or older were engaged in conversation about cardiovascular health. This broad approach can result in over or under representation of responses, but it is considered acceptable for initial inquiry into cultural domains, particularly when used with a wide range of people and carried to saturation (i.e., respondents stop providing new information) (Bernard, 2006). For the second phase, researchers constructed a sampling frame that included at least 40 white, working, non-medically trained women from across the socio-economic spectrum. Additionally, the study required women have a range of health insurance types (e.g., no insurance) and come from across the lifespan. A small sample of minority women was also interviewed to inform future research.

The field researcher (author Chapman) told women of the study during participant observation and asked them to provide contact information if interested in participating in a formal interview. Although this study offered no participation incentives, women generally agreed to participate. The final sample included 55 women. Of the total sample ($n=55$), two women did not fill out a demographic questionnaire, and another did not provide household income. Missing information was estimated using interviewer observation and recruitment context. The Human Subjects Committee of the University of Kansas Institutional Review Board approved this research project and granted use of oral consent to confirm women's agreement to participate.

Areas selected for the initial phase were those that provided access to women engaged in leisure or lengthy, non-stimulating activities (e.g., doing laundry) from diverse socioeconomic backgrounds (i.e., cafes, coin laundries, coffee shops, hair salons, bookstores, libraries, and community centers). For phase two, the researcher asked participating women where they spent leisure time and accessed health information (i.e., community centers, the YMCA, farmers markets, and safety-net clinics). Participant observation also occurred at a small number of public health events (e.g., health fairs, nutrition classes) at places the researcher was doing fieldwork to learn about the health information presented in these areas. Finally, the researcher emailed women's organizations (e.g., Women's Chamber of Commerce) and asked to participate and recruit during events (e.g., health fairs). When a woman agreed to a formal interview, the researcher met her at a location of her choosing (e.g., her home, a nearby café) and conducted the interview at a quiet place. When women agreed, the researcher recorded interviews (two refused). Each interviewed woman also drew a picture of someone perceived by the woman to be at risk for and someone with CVD (Appendix I), explaining her pictures as she drew them (Weiss, 1995).

In phase one, women free listed everything they knew that increased or decreased risk for CVD. In phase two, interviewed women pile sorted 59 cards created from free-lists and media information (Bernard, 2006). Women also described the piles they made and why they sorted them in the ways they did (Weller & Romney, 1988). Additional data included field notes from participant observation and informal discussion. In addition, to consider CVD information available to women through the media, the field researcher watched and took notes in a random sample of major network (local and national) evening news shows (n=80) and their commercials (n=1,372 including multiple repeats) for six months in 2008. All notes and transcripts were loaded into Atlas.ti (2007) qualitative data analysis software.

Data Processing and Analysis

Researchers used Grounded theory to guide data analysis (Strauss & Corbin, 1998). This systematic form of inquiry requires researchers immerse themselves in data, keeping careful notes to identify analytic categories as they arise (Strauss & Corbin, 1998). Using Atlas.ti, researchers read text (i.e., field note, news and commercial notes, and interview transcripts) for substantive information, highlighting what they identified as pertinent portions, and summarizing them with a representative code (e.g., fast food bad). Researchers then imported highlighted text sections and their corresponding codes from the reading frame into the network view of Atlas.ti. This electronic whiteboard allowed researchers to group similar text sections and codes and to visually compare sections and consider how sections related to each other (e.g., kinds of food identified as bad vs. good). Once researchers identified commonly occurring themes (e.g., processed food bad), then named them and reread and recoded text with new names (Strauss & Corbin, 1998).

During the analysis, researchers examined similarities and differences in the patterns that women talked about concepts (e.g., bad foods, good foods) corresponding to their access to health care. Based on women's descriptions of their health insurance and experiences seeking care (e.g., no insurance and no care), eight subgroups were identified. Using the network view feature of Atlas.ti, researchers considered all the quotes related to a specific code (e.g., healthy foods) for each subgroup and found distinct patterns in how women in groups identified CVD risks, healthy foods, and related topics. To confirm patterns, researchers created a separate network view for overarching topics related to codes (e.g., food) and visually compared quotes for identified subgroups. During this process, groups collapsed into four descriptive categories (i.e., cultivated, managed, neglected, and forgotten). Women's demographic data also were sorted into categories in Excel to determine how access to care corresponded to multiple socioeconomic indicators captured by demographic questionnaires (i.e., household income, education, residence SES [based on zip code] and profession) and interviews (e.g., family background).

Last, researchers used final codes to form themes (Strauss & Corbin, 1998). Analysis of women's drawings proceeded in the same way, with researchers looking for repetitive imagery. Free list data were not useful for a planned proximities matrix because women listed so few items (Bernard, 2006), but categories created during pile sorts were considered with transcript analysis to confirm themes. Themes found in analyses of field notes, news segment, and commercial notes were also compared to interview transcript themes. We report themes relevant to diet here.

Results

Selected characteristics of the study sample

Of the 55 women, two refused the demographic questionnaire, and one did not report all household income. Ten had medical training; 45 did not. Participants were primarily non-

Hispanic Whites (n=41, 75%) and included Blacks (n=7, 12%), Hispanics (n=5, 9%), Native Americans (n=1, 2%), and Asians (n=1, 2%). Racial composition of the sample was similar to that of the Kansas City area (non-Hispanic White 76%, Blacks, 13%, Hispanics 6%, Asian 2%, Native American <1%) (MARC, 2005). Ages of the sample ranged from 20 to 74 years. Annual household incomes varied (under \$5,000 to \$300,000+). Education levels started with the 10th grade and ended with 10 women who completed graduate school.

The Ideal Body

Overall, women shared the same idea of the ideal female body. Frequently seen in the media, this young, thin form is an iconic symbol. All the interviewed women compared their bodies and the bodies of others to this form and discussed those with it as in control, intelligent, hardworking, emotionally balanced, and morally conscientious. They discussed women without such a body as fat, lazy, personally out-of-control, poor, and stupid. Women lower on the spectrum more often indicated fat meant obese, while women higher on the spectrum sometimes included people who were just overweight. A woman from the top of the spectrum explained,

These are people who are diminished. I mean really diminished. I mean these aren't morbidly obese people. They need to lose fifteen to thirty pounds and their lives would change, so they need to lose weight.

Most women (90%) at the top and many in the middle of the socioeconomic spectrum (63%) believed people could obtain the ideal body through hard work and self-discipline. Because they associated this body with good health, they said women had a duty to try to achieve it. Women lower on the spectrum said such control was possible for those with enough time and money, but not everyone had an excess of resources to invest in their bodies; the remaining women said such a body was not possible. Women should do their best to remain thin but also understand that media images were not real. However, even the latter two groups made disparaging comments about the obese, behaviors they associated with obesity, and themselves, suggesting they internalized negative views. An uninsured, obese, diabetic woman who worked in retail for just above minimum wage discussed multiple attempts to lose weight; her most recent being daily walks around her neighborhood that ended when the Midwestern summer combined with her poor health to force her inside. When she exercised in her tiny apartment her neighbors complained about the noise, and she could not afford the fee to join the local YMCA. Still, she explained her failures as, "*my fault*," saying, "*I basically do it to myself*."

Bodily Control

Whether women believed the ideal body was possible for them, all discussed the best ways to approximate it through diet. Eating a healthy diet required discipline and control, ideas women explained through metaphors, such as balance, which women described as control over physical form and emotional state. Such control included sometimes eating unhealthy foods to feel good. One woman explained,

I have a hotdog when I go to the ballpark like twice a year. I love them, and it makes me feel good to indulge. They are delicious. I don't eat them at home because they're disgusting. You might as well wrap a stick of butter in a bun, but once in a while at the ballpark. Balance, you know.

Although she felt eating a hot dog was physically unhealthy, eating one occasionally was acceptable because it made her feel good emotionally. Good emotions counteracted the physical effects of hot dogs when not eaten too often. When women talked about balance, it was also as if they walked a tightrope with unhealthy foods on one side and healthy foods on the other. As one woman put it, "*Well, yeah, I'll eat these chips, but I'll eat the apple too, so*

there is balance.” Women also talked about fat as out of control and fattening foods as sinful or addictive and causing them to lose control.

Themes in television news stories and commercials about health had similar elements to women’s responses to interview questions. Themes for national news segments were also similar to those found by other researchers for magazine articles and included an emphasis on individual risks for disease, personal control over health, treating people’s access to health care as a given, and favoring a biomedical model (Clark & Amerom, 2008). The dominant theme in commercials was the ability of a product to help a person establish, re-establish, or maintain control over their body. Ads sold an active, engaged lifestyle, the lifestyle people could have if they were in control. Weight loss products promised to give people control by either helping them change behaviors or by changing their body’s biology to lose fat without behavior modification.

Information at health events (e.g., health fairs, nutrition classes) varied based on the intended audiences. Events in low-income areas (n=3) were free and often offered incentives (e.g., gift card) for people to attend. With one exception, a woman from the community trained by a university outreach program, information offered to women of lower socioeconomic position came from individuals of higher position (e.g., medical students, nutritionists) who lived outside the area and explained that CVD resulted from a diet high in fat and cholesterol, too little physical activity, and being overweight or obese. Educators told women they needed to take responsibility for themselves and were sometimes harsh, such as when one told a group of women that *“it isn’t rocket science,” “fat is un-American,” and “fat Americans are bad Americans.”*

Events for women in the middle of the socioeconomic spectrum (n=3) required tickets (\$25, \$40, \$70), included multiple sessions on subjects from CVD to makeup application, and included bags of free samples from sponsoring companies. One event advertised as, “a unique learning environment featuring top local and national experts on women’s health.” The ad continued that women could relax in the “spa-like atmosphere,” as they had health screenings, received “extraordinary gifts,” and ate an “elegant lunch.” Health information focused on individual choices as causes of disease and several companies featured products (e.g., whole grain cereal) at booths intermixed with those by health agencies.

Events for women at the top of the spectrum (n=2) also focused on individual choices as the causes of disease but treated it as a given that obesity caused CVD, focusing more attention on the importance of stress. Speakers told women to “pamper” themselves through health diagnostics, as they solicited donations to pay for new facilities. Events were free, invitation only, and held by local health care providers that gave away swag bags of heart health goodies (e.g., a heart shaped stress ball), wine, and h’orderves (e.g., salmon, chocolate covered strawberries).

Just as health events differed by the socioeconomic status of their target audience, women’s responses in interviews varied along socioeconomic lines. Women’s descriptions of their health beliefs and behaviors placed them into one of four descriptive groups or “body categories” (Table 1): cultivated (n=11, 20%), managed (n=19, 34%), neglected (n=13, 24%), and forgotten bodies (n=12, 22%). Just as Hagoel et al. (2002) found women of higher socioeconomic position were more likely to engage in health promoting behaviors, interviewed women of higher position engaged in more health promoting behaviors. However, it is difficult to draw direct comparisons between the two studies due to differences in research methods and samples. Among interviewed women, classification was at least in part because women’s ability to access resources affected their ability to engage in the behaviors that demarcated groups. Interview themes discussed here related to diet

including: perceptions of healthy and unhealthy foods, self-perceived ability to obtain healthy foods, how often women shopped, cooking ability, reasons women ate specific foods, food desires, and frequency of eating healthy or unhealthy foods, including what prompted women to eat specific foods. Additional themes used to classify women related to their experiences accessing health care and exercise habits and are discussed elsewhere (Chapman, 2012).

Body Categories

The cultivated group—With limited exception, women with cultivated bodies were among those with the highest incomes, education, and professional credentials (Table 2). Most (81%) were white, married (63%), and accessed healthcare through a preferred provider organization (PPO) insurance plan that allowed them to see a provider without a referral. Their PPO plans came from large corporations or the federal government, and these women reported the lowest premiums, co-payments, and deductibles, sometimes paying as little as \$10 a month for their family's health benefits. Of the two who described themselves as homemakers, both had professional husbands. This group also included a substitute teacher, administrative assistant, and office support worker, but these women's personal histories aligned them with others in the group (e.g., the substitute teacher recently quit her career to spend more time with her children). Cultivated bodied women described themselves as healthy with only one reporting a history of a serious health condition (i.e., breast cancer survivor).

Based on investigator observation, one woman was obese and another overweight. These women often referred to their weight as a problem but also excused it due to their intense focus on other health areas (e.g., eating organics, taking vitamins, exercising, frequent health diagnostics). As the obese woman explained,

I have extremely good blood pressure. I have extremely good cholesterol, good and bad. I mean they are both in good shape. My doctor used to say I was probably one of the healthiest obese people you'd ever meet.

Although it would seem her experiences with obesity might shift her views, as she described a person at risk for CVD she recognized her own bias,

This is a prejudicial concept with it because, I myself being obese think it's interesting I would sit and do this, but I think of laziness and the unwillingness to lose weight.

Women in the cultivated body group were very concerned with appearance, particularly as it related to other people's perceptions of them, including the overweight and obese women who were trying to lose weight. They considered an attractive physical appearance an indicator of good health and complained about high levels of stress, particularly in relation to their ability to take care of themselves. As an example of this, consider the words of a woman spoken as she drew a picture of a person at risk for CVD (Figure 1, appendix),

This is busy women who takes care of everyone else in their lives but themselves, who run on adrenaline and no sleep and take care of the kids and their husbands and their jobs and they think oh I'll get to me later.

The managed group—Eighty-nine percent of women with managed bodies were white (Table 3), 42% married, and all accessed health insurance through group-based health management organization (HMO) policies that required referral from a primary care physician to see a specialist. They described themselves as healthy but some reported existing health conditions, some serious (e.g., type II diabetes). Half (50%) were overweight or obese. Women with managed bodies included professionals and professional support

staff. Women in this group were not as concerned with their physical appearance as cultivated bodied women. They tried to look their best but accepted a few extra pounds as a normal part of life and rarely complained about an inability to take care of themselves. Instead, they complained about a lack of time to do all of the things they wanted (e.g., go to school). They also lamented how tired they were at the end of the day, and their inability to purchase what they identified as expensive products that would improve their health and appearance.

The neglected group—Overall, women with neglected bodies had lower household incomes than those in the preceding groups but also had the widest income range (Table 4). More of these women were minorities (41%). Fewer were married (38%). They also had the greatest range of education and professional prestige. More than half (53%) were private contractors or small business owners who obtained health coverage from the private market. Four paid above market rates for high deductible policies due to a pre-existing health condition. Three had Medicaid coverage but had to pay for a large portion of their care before it was covered (i.e., high spenddown). Neglected bodied women often said they went without care because they could not afford it but were also sicker than those from the first two categories, reporting a range of conditions (e.g., type II diabetes, heart disease). Most (77%) were overweight or obese with increased weight corresponding to age. These women cared less about their appearance, although total disregard was rare. These women showed conflict between their health beliefs and behaviors, often explaining what people should do to be healthy as they acted in the opposite way.

The forgotten group—Forgotten bodied women had the lowest annual household incomes, included a high proportion of minorities (30%), were least likely to be married (20%), and were uninsured (100%) (Table 5). Those who saw medical providers accessed them through safety-net clinics. These women had the lowest education and least prestigious professions, such as a hair stylist and waitress. They resembled neglected body women in reported health conditions, weight (80% overweight or obese also corresponding to age), and attitudes about physical appearance. Unlike neglected bodied women, these women lamented their behavior, saying they wanted to be healthier. For example, one woman who regularly ate lunch at a fast food restaurant explained,

Should I get the french-fries? Well no, but sometimes I really want the french-fries, and when you're already having the cheeseburger and the Coke. Well, I say why not get the french-fries sometimes. You know it would be better if I had something from home, like a Lean Cuisine, but there just isn't anywhere for me to do that.

Although she realized she was not eating well, faced with temptation, she could not refuse. She wished she had a place to eat at work to avoid temptation. As in the above quote, these women also admitted to engaging in unhealthy behaviors to feel good but usually added the caveat the behavior was not that bad compared to their alternative.

Food and Body Categories

Women shared perception of the ideal body but had differential access to the resources needed to approximate it. Their beliefs about ways to obtain it also varied. *Cultivated bodied women* described the most rigid perceptions of healthy food and had the least constraint over the foods they accessed. While most worked (81%), these women had the time needed to prepare meals because they paid for help with household duties (e.g., grocery delivery). They also had the skills required to cook healthy foods, including reading new recipes. While many attributed basic skills to their mothers, they also mentioned supplemental education from nutritionists. These women purchased groceries at least weekly, guaranteeing access to fresh produce, and rejected fatty foods. They preferred organic,

natural, and whole foods (i.e., whole grains, unaltered fruits, vegetables, and lean meats). Learning what was healthy from nutritionists; they had regimented diets and read labels. “*My secretary thought I was crazy,*” one woman said as she sat in her favorite neighborhood café sipping imported coffee and described her diet.

I eat steamed broccoli at ten in the morning and she used to look at me like, how can you eat that at ten in the morning. But I said to her one day, this is what my body needs so it can give me optimum performance. It is too bad everyone can’t see Dave [her nutritionist].

Managed bodied women also preferred natural foods, but their lists included frozen produce and prepackaged foods advertised as having natural ingredients, which saved their time. These women purchased most of their groceries right after payday, visiting the store intermittently to replenish staples (e.g., milk). Cooking skill varied by age (i.e., younger women were less skilled) childhood attributes (i.e., geographic background, early SES, and mother’s employment), and how much they enjoyed cooking. Some learned to cook from their mothers. Others only microwaved. None cooked from scratch daily. These women made what they identified as healthy choices from a range of foods. For example, these women said fast food was bad but also said they knew how to order to make it healthier. Sometimes they indulged by choosing the least healthy item, usually with foods that they identified as supposed to be bad, such as ice cream.

Neglected bodied women described healthy foods similar to women in other categories but warranted separate classification because they often talked about purposefully indulging in foods identified as bad. While women in other categories also did this (e.g., ballpark hotdog), neglected bodied women did it routinely. Some made it their lifestyle. Others tried to incorporate healthier habits as well.

Forgotten bodied women had limited grocery budgets that varied monthly, as they used this money to pay for unexpected expenses. They only shopped immediately after payday. Once bills were paid, there was no money left. These women bought inexpensive staples with long shelf lives (e.g., powdered milk) and rarely purchased fresh produce because it spoiled and was too expensive. Over fast food chicken nuggets and fries, a woman lamented, “*I spend all that money for a little tiny thing of like strawberries and then they’re gone in like two hours and then what?*” Preparation time and complexity also played a part, as women had limited time. Most did not use recipes, and some had difficulty reading them. Women learned to cook from their mothers and prepackaged food directions. Many avoided artificial sweeteners as too chemical, and most said they did not like fruits or vegetables, with a few uniform exceptions (e.g., canned green beans).

Discussion

Women in the sample with the healthiest diets (e.g., fruits, vegetables, whole grains, and fats) had more time, money, and the best healthcare when compared to the others in the study. Women across the spectrum said they preferred the foods they knew (e.g., taste), but for women at the bottom of the socioeconomic spectrum, diet was constrained by limited resources. These women also had greater burden from lifestyle related diseases (e.g., type II diabetes). Interview data suggested individualized health messages reinforced class hierarchies, deflecting attention away from social problems implicated in CVD development. In this way, health communication was part of the social reproduction of health and acted as Bourdieu feared, legitimating the current, unequal system of resource allocation and disease distribution. Health professionals must consider the role health messages play in perpetuating inequality to ensure they do not inadvertently reiterate or reinforce cycles of blame as occurred at some observed health events. Research on ways to

provide individuals from across the class spectrum useful health information that does not lend itself to perpetuating such cycles is needed. Just as with members of the lay public, health professionals are subject to influence by popular media (Clarke & van Amerom, 2008), suggesting a need for research to assess health educator attitudes and the role these play in the social reproduction of health.

Previous analyses have explored the failure of CVD messages to incorporate structural constraints into disease causation (Clark & van Amerom, 2008), and unequal access to health resources among people at the bottom of the social hierarchy (Sered & Fernandopulle, 2006). Results from this study support the value to further explore the ideological support of unequal systems, including those at the top who have the most power to perpetuate them (Rylko-Bauer & Farmer, 2002). This research is unique because it documents the effects of an unequal system and the symbols used to support it in a sample that spans the socioeconomic class spectrum and links it to CVD communication. Finding that women across the sample confounded thinness with cardiovascular health and expressed more concern with being thin than being healthy, suggests attitudes about social class influence health behaviors. The identification of similar behavioral patterns in statistical research (e.g., Hagoel et al., 2002) indicates that body categories may have wider implications for incorporating questions about social class perception into empirical studies of large, representative samples, particularly those that address the impact of health communication. In a sense, these body categories represent hypotheses that require further exploration, modification, and testing in a large sample.

Some practitioners may view the confounding of body image with health as acceptable as long as it encourages good health behaviors. However, confounding showed potentially negative consequences. The rigid dietary behaviors exhibited through body cultivation were reminiscent of descriptions of women with eating disorders who used dietary control to maintain feelings of order (Bordo, 1993). Such behaviors may be economically wasteful and have other health implications for women involved. Women with managed bodies used health relativity to feel in control. “Health relativity” happens when people base health decisions on a limited number of choices that are similar in nature and may make unhealthy foods appear better than they are and turn social discussions about food from what is available to what is most acceptable. Women with neglected bodies used common activities and self-described bad choices to express displeasure at the status quo, achieve pleasure, and exert feelings of control over their lives. Such behaviors have clear ramifications, and may require unique intervention methods. Women with forgotten bodies based feelings of efficacy on their ability to imitate women with cultivated and managed bodies and internalized failures at behavior change related more to structural constraints than choice.

Study limitations

These results are qualitative and based on a small sample, thus findings are not representative of larger samples. Although racial and ethnic representation was similar to that in the study area, the sample size of nonwhites is too small to draw conclusions. Nonetheless, results from in-depth interviews of nonwhites suggest the need and feasibility to conduct similar ethnographic research among minority populations, many of whom are at greater risk for CVD and decreased socioeconomic status (Karlman, Merkin, Crimmins, & Seeman, 2010). Additionally, the same amount of attention was given to all food related phenomenon without regard to frequency of occurrence, thus some actions may be given more weight than they deserve when evaluating the corpus of food related behaviors. Four women did not align with the rest of the sample, but unique personal experiences related to deviations. Notwithstanding these limitations, the attention paid to “individual cases” of women allowed for identification and in-depth exploration of associations not previously considered or captured in a large survey and offered new directions for research. The overall

results are in line with survey data showing distinct subgroups of women characterized by health behavior and SES (Hagoel et al., 2002).

Conclusion

The overlap in demographic characteristics among the four identified body categories shows that categories are not separate cultural groups but manifestations of a society's hierarchy, body beliefs, and dietary behaviors. Research shows that many women learn what they know about CVD from the popular media and that confusion among popular media messages limits protective action (Mosca et al., 2010). This study, though limited in its scope, reveals that women incorporated individualized health messages into cultural beliefs about the body and SES. Larger, quantitative studies are needed to fully explore these associations. The knowledge presented here is imperative to those in the fields of health communication, as they are most able to counter popular media messages about health and advocate for media providers to offer more responsible and representative stories about disease development. Policy makers must also be made aware of findings and their relevance to current debates over the use of shame in public service ads (see: <http://www.npr.org/2012/01/09/144799538/controversy-swirls-around-harsh-anti-obesity-ads>).

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

This work is based on the dissertation, *From Cultivation to Neglect, Women's Bodies in the Social Reproduction of Health*, accepted by the University of Kansas in partial fulfillment of the requirements for the Doctor of Philosophy degree for Shawna Chapman. The authors have received research support from the U.S. National Institute on Drug Abuse of the National Institutes of Health (R33DA027503, R01DA019623, and R01DA019901; PI: Li-Tzy Wu). The sponsoring agency had no further role in the writing of this paper or the decision to submit the paper for publication. The opinions expressed in this paper are solely those of the authors.

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Table 1

Definitions of Body Categories

Category	Definition
Cultivated	Used health-promoting behaviors to turn their bodies into projects.
Managed	Tried to mimic cultivated bodied women but without the same resources relied on products that promised them the same results as cultivated women's actions.
Neglected	Women who purposefully engaged in health compromising behaviors after a life event (e.g., diagnosis with a disease, loss of a job, divorce) left them without the resources needed for body cultivation or management.
Forgotten	Could not afford many health promoting behaviors and when they attempted behavior change, efforts were limited and often short-lived.

Table 2

Demographic Information for Cultivated Bodies (n=11)

Income Level	Age	Married	Occupation	Education	Race
Unknown *	39	Yes	Substitute Teacher	4 year degree	White
40,001 – 60,000	31	No	Marketing/Sales	4 year degree	White
60,001 – 80,000	31	Yes	Administrative Assistant	Some College	White
80,001 – 100,000	67	Yes	Office Support Staff	4 year degree	White
80,001 – 100,000	56	Yes	Homemaker/ Volunteer	Graduate School	Latina
80,001 – 100,000	43	No	Architect	Graduate School	Black
80,001 – 100,000	39	Yes	Services Liaison	4 year degree	White
100,000 – 150,000	47	Yes	Homemaker /Home Health Aide	4 year degree	Latina
150,001 – 200,000	42	Yes	Computer Engineer	4 year degree	White
150,001 – 200,000	58	No	Office Administrator	Some Grad School	White
300,001 – 400,000	55	No	Executive	Graduate School	White

* Provided individual annual income instead of household annual income

Table 3

Demographic Information for Women with Managed Bodies (n=19)

Income Level	Age	Married	Occupation	Education	Race
< 5,000	71	No	Retired/Sales	Two Year Degree	White
< 5,000	74	No	Educator	Some Grad School	White
10,001 – 20,000	23	No	Medical Student	4 year degree	White
20,001 – 40,000	32	Yes	Utility Clerk	High School	White
40,001 – 60,000	58	No	Educator	Graduate School	Black
40,001 – 60,000	31	Yes	Non-profit Director	Some Grad School	White
40,001 – 60,000	45	No	Bookkeeper Box Store	Graduate School	White
40,001 – 60,000	56	No	Registered Nurse	Graduate School	White
40,001 – 60,000	57	No	CPA	Graduate School	White
40,001 – 60,000	57	No	Accounting	High School	White
40,001 – 60,000	71	No	Retired/Journalist	2 year degree	Black
80,001 – 100,000	50	No	Computer Data Analyst	4 year degree	White
80,001 – 100,000	27	No	Sales	4 year degree	White
80,001 – 100,000	36	Yes	Accounts Receivable	4 year degree	White
80,001 – 100,000	47	Yes	Business Owner	Some Grad School	White
100,000 – 150,000	49	Yes	Nurse Practitioner	Graduate School	White
100,000 – 150,000	53	Yes	Vice President – Banker	Some College	White
100,000 – 150,000	30	Yes	System Administrator	4 year degree	White
100,000 – 150,000	62	Yes	Medical Technologist	4 year degree	White

Table 4

Demographic Information for Women with Neglected Bodies (n=13)

Income Level	Age	Married	Occupation	Education	Race
< 5,000	28	Yes	Clothing Store Clerk	< High School	White
< 5,000	46	No	SSI	High School	Black
10,001 – 20,000	51	No	SSI	Some College	Black
10,001 – 20,000	47	No	Sales Person	4 year degree	White
20,001 – 40,000	59	No	Services Coordinator	4 year degree	Latino
20,001 – 40,000	60	No	Box Office	4 year degree	White
20,001 – 40,000	62	No	Administrative Assistant	Some College	White
40,001 – 60,000	60	Yes	Childcare Provider	High School	Black
40,001 – 60,000	21	Yes	Receptionist	High School	White
40,000 – 60,000	34	No	Pediatric Nurse Practitioner	Graduate School	White
60,001 – 80,000	49	No	Registered Nurse	Some Grad School	Asian
80,001 – 100,000	64	Yes	Job Coach	4 year degree	White
80,001 – 100,000	55	Yes	Book Keeper	Some College	White

Table 5Demographic Information for Women with Forgotten Bodies (n=12 ^{*})

Income Level	Age	Married	Occupation	Education	Race
< 5,000	42	No	Student/Volunteer	Some College	Native American
10,001 – 20,000	24	No	Receptionist	High School	Latino
10,001 – 20,000	60	No	Substitute Teacher	Graduate School	White
10,001 – 20,000	52	No	Assisted Living	High School	White
10,001 – 20,000	46	Yes	Home Maker	< High School	Latino
10,001 – 20,000	20	No	Billing Clerk/Waitress	High School	White
20,001 – 40,000	58	No	None/Volunteer	Tech. Certificate	White
20,001 – 40,000	35	Yes	Accounts Receivable	High School	White
40,001 – 60,000	38	No	Hair Stylist	Trade School	White
40,001 – 60,000	41	No	Demo Associate	High School	White

^{*}Two women refused to fill out the demographic questionnaire.