

SOCIAL FACTORS & OBESITY  
AMONG BLACK WOMEN

Marsha McGee  
Harry Hale Jr  
Northeast Louisiana University

## INTRODUCTION

. In recent years social scientists have paid more attention to the association between health and social factors. Studies have focused on the influence of such factors as emotional stress and social class on heart disease, cancer, and other physical states. The influence of social class on mental health has been explored, and the incidence of various diseases and disabilities are reported in relation to social class variables. However, few research studies have been applied to the relation of social factors to obesity. Researchers have more often concentrated on the etiology of obesity from a psychological or physiological perspective with emphasis on eating patterns, family tendencies to obesity, and influence of family relationships (Gurney 1936; Kaplan & Kaplan 1957; Goldman 1968; Craddock 1969; Schacter 1971). These studies indicate the importance attached to both genetic and psycho-social factors which influence obesity.

. A study comparing identical twins reared apart, adopted children, and the adoptive parents, and siblings reared in the same environment, found a high correlation between weights of twins reared apart despite environmental differences. Adopted children's weights were not correlated with their adoptive parents' weights, and large weight differences occurred among siblings (Schachter 1971). Gurney reported in 1936 that in his sample of over 300 children, if both parents were overweight, 73% of their children were overweight. If one parent was overweight, 41% of their children were overweight. Less than 10% of the children of slender parents were overweight. Johnson

reported similar findings with 80% of the children of two obese parents also obese (1956).

. It is estimated that only 5% of overweight persons suffer from metabolic or glandular disturbances (Kaplan & Kaplan 1957). While some persons are overweight primarily as a result of genetic factors, most obese people are overweight at least partially as a result of environmental influences which encourage high calorie intake not balanced by energy output. This procedure begins in infancy. Overfeeding of infants can result in an increase in adipose (fat) cells which may contribute to a person's weight problems later in life (Hirsch & Knittle 1970).

. Various studies have shown the importance which family relations hold for childhood obesity. According to Bruch's 1941 study, mothers of obese children tend to be controlling, overprotective, cold, and overindulgent. The mother may reject her child and attempt to hide this rejection by giving materially to the child in various ways. Food becomes a substitute for her affection. Children from such homes, or from homes where eating is overemphasized, may lose the ability to distinguish genuine from false hunger cues, and patterns of overeating may be established.

. Other researchers see overeating as a response to anxiety, as a sign of emotional immaturity, or as a response to external cues such as time of day or seeing advertisements about food (Kaplan & Kaplan 1971; Goldman, Joffa & Schacter 1968; Schacter 1971). Each of these approaches emphasizes the psychology of obesity. Within the recent literature, however, there has been a widening recognition that ideas about normal weight and norms for eating behavior, as well as diet, are affected by social class standing (Rimm & Rimm 1974).

## SOCIAL FACTORS AND OBESITY

. Sociological research shows that

the prevalence of obesity is higher among women from lower classes than among the middle and upper class women (Goldblatt, Moore & Stunkard 1965; Moore, Stunkard & Srole 1962; Silverstone Gordon & Stunkard 1969). Findings about obesity among men have varied, with some studies reporting a higher frequency among middle class men than among lower class men (Silverstone, Gordon & Stunkard 1969). Although the findings about obese women are consistent, differences in the ratio of obese women across classes appear when these studies are compared, with an apparent reduction in obesity in recent years at the lower class level. While Moore and her co-workers (1962) found 7 times more obese women in their lower class sample than in their higher class group, Silverstone and associates (1969) found a ratio of about two to one, and the Rimm found smaller differences. Speculation is that this disparity may result from an increasingly similar conception of the ideal body image based on Western standards.

The buxom European woman of yesteryear does not fit this ideal image (Rimm & Rimm 1974). In addition, techniques for measuring both social class and obesity varied across studies. It is possible that ethnic factors may contribute to prevalence of obesity, but no attempt has been made to define or separate these ethnic and class influences (Dwyer, Feldman & Mayer 1970). The current study is an attempt to further specify social class characteristics which contribute to obesity. A compilation of the major findings of the few United States researchers who have written about social class and obesity among women indicate the following:

- 1) Not only is the respondent's socio-economic status inversely related to obesity, but so is her socio-economic status of origin.
- 2) Among women who moved down in social standing, there is a higher incidence of obesity, while

among those who moved up, there is a lower incidence.

3) Husband's educational level is inversely correlated with degree of the wife's obesity, with the highest levels of obesity for the wives of lower class men.

4) The longer a woman's family has been in the United States, the less likely she is to be obese.

5) Proportionately more women are overweight than men at the lower socio-economic levels.

6) Not only are poor girls more likely to be obese, but their obesity begins earlier and increases more rapidly than that of upper class girls.

. As a result of these findings, Stunkard & Mendelson state that "It now appears that socio-economic status and related social factors have more to do with determining whether a person will be obese than does individual psychopathology." (1972 584)

. A portion of the limited research on obesity has been completed on samples of men and women who are in programs oriented to losing weight, and all of the research reviewed has reported findings on white women and white ethnics. We find no research concentrated on obesity among black people. One study comparing black, white, and oriental adolescents found the highest proportion of overweight teenagers among the blacks (Huenemann 1966). The researchers in these studies did not attempt to explain their findings. We are aware of no studies of obesity among black adults, and none which compare black and white obesity patterns.

. We have 6 reasons for the present study on obesity among black women:

- 1) Lack of information on obesity in this part of the population.
- 2) The proportionately high number of lower class blacks would indicate a significant number of obese black women, if the implications of other studies are correct.
- 3) Studies of black people's dietary patterns indicate consumption

of fatty foods and poor nutritional patterns contributing to a high incidence of obesity (Mayer 1965; Bradfield & Colburn 1970).

4) The correlation between health problems and obesity, and the prevalence of hypertension as a serious health problem among black women provides a basis for concern about determining significant factors leading to obesity among these women.

5) A number of studies report body image disturbance among obese persons which contributes to life dissatisfaction and problems of mental health.

6) The information obtained in this study could be used to foster understanding of motivations for weight gain and loss. It can also help direct program development for weight control for better physical and mental health.

**METHODOLOGY** Obesity has been defined in various ways, with standards of 10 to 30 percent overweight being used to classify an individual as "obese". The simplest and most commonly used obesity index is to determine a percentage above an ideal body weight calculated in widely used height/weight tables (Metropolitan Life Insurance Co 1959). These figures provided weight norms for men and women 24 years of age and older. Because 49 of the 83 women in the present sample are under 25, a decision was made to adjust weights downward in combination with the Metropolitan tables, and to compute an average ideal weight for the subjects. One pound was subtracted per year of age under 25. The same procedure is used in some physical fitness programs (Cooper 1977). While some authors have noted that obesity is not viewed with the same disfavor among the lower class, we contend that the correlation between weight and health validates the acceptability for research purposes of the recognized national standards for weight (Holland, Masling & Copley 1963). One

the basis of the weight tables, women weighing 10 pounds more than the norm for their group were labeled "overweight", and women weighing 25 pounds more than the norm were labeled "obese." Thus, 62% of the sample were labeled "obese."

The questionnaire was designed on the basis of previous findings for white people, to include description of social class standing and a measure of social mobility. Also included were measures of alienation, eating patterns, weight of family members, influence on eating behavior, and perceptions of body image.

#### **SOCIAL CLASS & SOCIAL MOBILITY**

Because questions concerning income level were considered sensitive among the study population, a measure of social class which indirectly assesses income was used. The Duncan Socio-Economic Index provided the means for classifying respondents according to the occupation of the head of the household (Reiss, Duncan, Hatt & North 1961). The scores ranged from lower to middle class.

Social mobility was measured by an index composed of 4 items constructed with face validity. Respondents were asked how satisfied they were with their place in society, how important it was to them to move up in social standing, how important it was for their children to someday move into a nicer house, and how important it was for their children to receive a college education. The mobility score was obtained by summing these four items. Five items from Srole's anomia scale were summed for the anomia measure. Other variables were measured by direct questions. Items about body image included questions on who is the healthiest, prettiest, and happiest: fat people, or thin people? Type and frequency of exercise were also described by subjects, as were dietary patterns and incidence of obesity among relatives.

**SAMPLE SELECTION** Eighty three questionnaires were completed by subjects who were chosen in two ways. A number of respondents participated in a weight control clinic sponsored by the researchers, at which they were given information on nutrition, exercise and health problems associated with obesity. Twenty subjects completed a questionnaire on arrival at the clinic. Poor attendance forced data collection in other areas, by two teachers at a predominantly black high school. They asked students whom they perceived to be overweight to respond. The nature of this sampling techniques leaves much to be desired, but the sensitivity associated with obesity and time limits made recruiting others the most practical option. We can testify to the difficulty of drawing samples of overweight persons. Studies of adjustment to weight problems usually are obtained from cases in medical treatment or weight reduction groups. Limits of the present sample prevent generalizing. However the findings may be indicative of the attitudes and behavior of black women who have made little effort to lose weight.

**FINDINGS** An analysis of social class standing showed that of the 83 subjects, 10 were lower class, 47 were lower middle class, and 26 were middle class. No significant relation was found between social class and obesity, because overweight people were equally distributed in the three social class strata. The lack of association may be due to the homogeneity of the sample and the limitation of the social class measure to the occupation of the household head. The issue is somewhat complicated by the fact that some respondents used father's occupation while others used mother's occupation; some used husband's occupation.

. Several women reported that many of their relatives were overweight, and 64% had at least one

overweight close relative. Most of these were parents, brothers, and sisters. Subjective and objective comparisons of the women's weight showed some variation. By objective standards, 74 percent of the women reporting their weight in pounds were classed as obese, although only 33% subjectively classed themselves as being much overweight. Over half of the sample reported having tried to lose weight, and 70% indicated that they would like to weigh less than they do.

. An overall sense of life dissatisfaction is reflected in the responses, and a part of this may be dissatisfaction with weight. About half of the women scored high on alienation, and many expressed a desire for material items and life chances which were not available. There was a general dissatisfaction with body size. Over 60% said a healthy, pretty baby tends to be a little fat, but the majority reported that people who are somewhat thin are happier, and that thin people are more attractive physically.

. Most women reported at least moderate between-meals eating, and 59% labeled themselves as heavy or very heavy eaters. A number reported eating as their favorite pastime. Of those who said their parents had taught them to eat large amounts, 66% said that it was a mark of pride for others to think the children well-fed, and 82% said that mealtime was an important occasion at home.

. Reported dietary patterns included a high incidence of greasy and starchy foods. Other studies report lower classes and black people have low consumption of fruit and milk, and a high use of soft drinks (Mayer 1965; Futrell, Kilgore & Windham 1975; McKenzie 1974). Doubts about amount eaten and problems of recall limit the value of this information.

. Most of the women said they exercised daily or more than once a week, but 70% said they needed

more exercise. There were 63% who wanted to improve their social standing. Only 11% were satisfied with their station in life.

**DISCUSSION** Indications are that such factors as diet, exercise, and heredity are important, and it is likely that for black people as well as white people, these factors represent different socialization patterns among persons of different social classes. The data provide several hints that this is so, though most of the comparisons lacked statistical significance. If the methodology can be refined, it is worth expanding our knowledge of social class norms, in order to determine the causes of behavior which leads to obesity. It is very well to talk about nutrition, the need for exercise, and the relation of obesity to health. But these approaches to weight loss cannot work without understanding the social factors as well as the sociology of motivation.

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