

# Talking to Families About Obesity: A Controlled Study

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*Interviewing whole families and basing clinical assessments on the interview is a new approach to the exploration of attitudes surrounding obesity and its management. The present study used it to compare families containing an obese child with a control group of families containing a child with coeliac disease. Families in the obese group were found to have various characteristic beliefs, experiences, and attitudes related to their condition. The obese condition was more often experienced by the family as a problem than coeliac disease was, and it was felt to be a more intense, pervasive and negative problem. The family members in the obese group felt more responsible for their condition but often preferred to be fat and were not as often actively dealing with their condition. In families with an obese girl, eating was usually out of control. Families of obese children recruited from a school had a more positive attitude to obesity and eating than those recruited through a hospital obesity clinic. The latter families felt a greater sense of stigma, had more negative attitudes toward obesity, and made greater efforts to reduce weight. Various hypotheses to explain the findings are explored.*

In earlier papers (Loader, 1985; Kinston et al., 1987) we argued the case for a direct family approach to the study of obesity. We conjectured that the family might be a crucial unit for study in childhood obesity since it is the site of individual physical and psychological development and the mediator of social influences. Obesity in childhood is a difficult condition to treat successfully

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(Lloyd & Wolff, 1976; Weill, 1977; Spence, 1986). Management failure may be partly due to the stigma of obesity which leads to a social prejudice shared by many doctors and other health professionals (Maddox et al., 1966, 1968; Tru-swell, 1985). However, if childhood obesity is part of a family disturbance, failure may also be a consequence of the need to manage a child's obesity through the parents in the context of a disturbed family life.

Families of obese children have been studied in a variety of ways (Kalucy, 1976), but it is not known whether or not it should be thought of as part of a family syndrome. Because family interaction has only recently been established as an important object of research (Winter & Ferreira, 1969; Framo, 1972), there is still a dearth of *family system* studies of physical conditions, including obesity, compared with the wealth of studies based on investigation of the individual in his social context (Leventhal et al., 1985). Systematic descriptive studies of family interaction, experience, and functioning require special methods. Our focus of work at the Institute of Child Health and The Hospital for Sick Children (London), and at Brunel University, has been the development of conceptual schemes and validated instruments and techniques for eliciting and describing family-level data in a clinically meaningful fashion. This work has drawn upon in our studies of childhood obesity.

In a previous paper (Kinston et al., 1987) we investigated whether families with an obese child were particularly dysfunctional and the effect of the degree of obesity on the emotional health of the family as a whole and its individual members. The principal conclusions were that these families tended to show *a specific type or pattern of disturbance*, but not an increased degree of disturbance, and that this (objectively determined) disturbance was most noticeable from an insider or subjective vantage point. In this paper, we report a controlled study of how families with obese children feel and think about obesity and its management and about associated issues concerned with food, eating, social perceptions, and the effect of obesity on family behavior.

There is not much information on the attitudes and experiences of members of a family with an obese child, except for anecdotal accounts or passing comments (Loader, 1985). There is, however, a body of relevant research which includes information obtained from obese individuals through systematic study, e.g., by Monello and Mayer (1963), and during therapy e.g., by Bruch (1957, 1974). Studies of social attitudes to the obese in adults (e.g., Meyer & Tuchelt-Gallwitz, 1968), in adolescents (e.g., Lerner, 1969), and in children (e.g., Staffieri, 1967) are relevant but do not touch on the inner life of the family or consider family members in the family context. Existing research suggests that the obese share prevailing social attitudes to obesity (Bruch, 1974; Lerner & Korn, 1972; Mayer, 1968), and it is therefore possible, but not certain, that obese and nonobese family members in families with an obese child would do so in the family context too. The present study aimed to provide information on these and related matters using direct observation and clinical interviewing of the whole family.

## METHODS

A detailed account of the sample, design, procedures, and measures has been provided in Kinston et al. (1987). This description will elaborate on as-

pects particularly relevant to the assessment of experiences and attitudes on the basis of a home interview.

### Sample

The sample for this study consisted of 48 families in two main groups: 36 families with an obese index child, "obese families," and 12 control families with an index child with coeliac disease, "coeliac families." Obesity in the index child was defined as a weight exceeding expected body weight by 20% or more after adjusting for height, sex, and age (Cole, 1979). Maximum overweight was 96%. The obese families contained at least one obese child and consisted of three subgroups from (1) a hospital out-patient clinic for obese children, "hospital-obese" families,  $n = 13$ ; (2) the list of a local general practitioner, "GP-obese" families,  $n = 11$ ; and (3) a local primary school, "school-obese" families,  $n = 12$ . The control families were from another out-patient clinic for children with coeliac disease at the same hospital as the hospital-obese subgroup. Coeliac disease is an unequivocal physical disorder which is chronic, requires strict attention to food and diet, and in which the child is generally well. Selection and recruitment differed among the groups. Clinic groups were selected on the basis of consecutive attendance. The GP-obese and school-obese were selected by the GP's receptionist and teachers, respectively. The refusal rate was 30% in the obese group, and 33% in the controls. Further details of recruitment, exclusion criteria, and analyses of refusers are reported in the earlier paper.

### Procedure

After initial recruitment and interview for basic data, each family was given an audiotape-administered task interview to study family processes. At 6–12 weeks later each family was interviewed by a researcher in the home to assess experiences and attitudes. Other measurements and questionnaires were completed at the two contacts.

### The Family Experience Interview

The Family Experience Interview (FEI) is an instrument based on a clinical interview approach to the family (Cromwell et al., 1976) and designed to elicit family interaction and discussion which is then evaluated clinically. In this way it differs from the interview given to the families at recruitment which produced immediately available information. The FEI is a version of the Standardised Clinical Family Interview (SCFI) specifically modified for this study. The rationale, development, and psychometric evaluation of the SCFI has been described elsewhere (Kinston & Loader, 1984, 1986). The FEI used the principles of administration and format of the SCFI to ensure that the interviewing of a whole family would be standardised, reliable, and valid. It was administered in the family home to the whole family, took about an hour to complete (range: 45–90 minutes), and was recorded on audiotape with the family's permission. Two of the researchers (PL and LM) administered this interview, with families randomly allocated to one or the other.

After a standard introduction which welcomed the family and explained the

rules, the interviewer took the family through a semistructured protocol designed to explore various issues. The main topics and probes for obese families were (1) The Family: the way the family sees itself, who is closest to whom; (2) Obesity: who is fat, how does obesity affect people, worries about obesity, advantages and disadvantages of obesity; (3) Concepts: why people become overweight, what is overweight, possibility of avoiding overweight; (4) Management: what is done, deciding what children will eat, disagreements about food, discipline in relation to food, mealtime arrangements; (5) Treatment: whether treated, who was treated, what interests the physician/dietician/therapist, why you go/refuse, whether it helps; (6) Attitudes: of the immediate family, of the extended family, of teachers, of children at school, of men and women in general, of yourself. (A copy of the protocol is available on request.)

The interview protocol was modified for the hospital-coeliac group, while attempting to maintain comparability. For example in the Concepts section (3), the interviewer probed why people developed coeliac disease, what coeliac disease was, and whether it could be avoided. Minor modifications were also required for the three obese subgroups to take account of their different situations, e.g., handling "attendance for treatment" varied for each.

#### Home Interview Assessment

The aim of the FEI was to reveal how the family members actually experienced and thought when in the family context, not just to note what they said. Rater judgements and descriptions of the material elicited were therefore required, and the Home Interview Assessment form (HIA) was developed to record these in a systematic, focussed, and standardized fashion. The HIA contained a variety of questions about obesity (or coeliac disease) under headings similar to those in the FEI. (The HIA is available on request). The form was completed on the basis of all the material elicited by the FEI and drew on a sense of how all aspects of the material fitted together. Hence families would not be expected necessarily to agree with such judgements. The HIA form was completed immediately after the interview by the interviewer, and his/her ratings were used in the quantitative analysis. To check for reliability, the HIA form was completed again by the alternate interviewer who listened to the interview on audiotape. Agreement between interviewer and listener was checked for each item, and those items where there was insufficient total agreement were excluded from the analysis. On most items total agreement was over 80%. Borderline reliable items (50–65% total agreement, no extreme disagreements) have been included in the results, with this indicated.

The HIA contained two parts. The short initial part required the rater to make an assessment of whether the family understood the purpose of the FEI and whether all members actually participated (as required by the method) and were physically present throughout. Judgements also had to be made of the level ("high," "medium," or "low") that characterized the families in regards to cooperation, articulacy, consistency, clarity, openness, and consensus. These factors are crucial in estimating the validity of the remainder of the assessments in the second part.

The second and main part of the HIA contained two types of data: quantitative and qualitative. For example, raters had to judge whether or not a family

believed that the hospital had helped their condition or not; numbers for each possibility could be counted and significance of group differences estimated. On the same subject, the raters also had to record the families' attitudes to clinic attendance. Such descriptions varied greatly between families, and statistics were not appropriate or required for their analysis. All quantitative data were coded and punched for computer analysis using nonparametric tests (Siegel, 1956) in the Statistical Package for the Social Sciences (SPSS). The effects of sex of the index child and of the subgroups within the obese group were routinely checked.

## RESULTS

The obese group (36 families, index children, and mothers; 28 fathers; 25 siblings) and the control group (12 families, index children, and mothers; 10 fathers; 7 siblings) showed no significant differences on demographic and family structure variables. See Kinston et al. (1987) for details. After providing findings on the contextual factors relevant to the validity of the Home Interview Assessment, reliable quantitative and qualitative findings will be presented together.

### Contextual Features

All interviews were rated *high*, *medium* or *low* on factors which, if scored *low*, would invalidate subsequent assessments. All families scored well on "understanding the aim of the interview" (*high*), being "articulate" (*medium*, borderline agreement), and being "open" (*high*). However, the obese group differed significantly from the coeliac group showing less "clarity" (31% versus 67%, *high*,  $p < .05$ ), less "cooperativeness" (67% versus 92%, *high*,  $p < .05$ ), less "consensus" (53% versus 83%, *high*,  $p < .05$ ), and less "consistency" (58% versus 100%, *high*,  $p < .005$ , borderline agreement). As these features were generally scored *medium* in the obese families, substantive findings were probably not seriously obscured.

### Having the Condition

Members of families with an obese child more often saw the obesity as a problem than members of a control group saw coeliac disease as a problem (Table 1, part A). In both groups, mothers most often viewed the condition as a problem (obese, 94%; control, 75%). Group difference was most noticeable for the index child (obese, 85%; control, 50%; agreement borderline). Obese families tended to experience the child's obesity more intensely and to worry more about it than the coeliac families did for coeliac disease. All families in the obese group were able to list at least four reasons why obesity was a problem. The commonest reasons were health risks, lack of mobility, unfashionable clothes, and the teasing evoked by being obese. The commonest problems mentioned by coeliac families were difficulties eating out and at parties and short stature. Reactions of worry, embarrassment, and self-consciousness to the problems were marked in the obese families: obese children felt unattractive

Table 1. Frequency on reliable items in Home Interview Assessment.

Items	Obese Group (%)	Control Group (%)	<i>p</i> value ( $\chi^2$ )
<i>A: Having the Condition</i>			
Its a Problem			
Mother	94	75	
Father	75	60	
Index Child*	85	50	< .06
Sibling*	78	50	
Its a Worrying Problem	58	40	
Bad or Neutral			
Mother	80	42	< .05
Father	66	46	< .001
Index child	77	50	
Preference to Be Thin			
Mother	56	90	
Father	52	78	
IC	63	90	< .001
Sibling	55	100	
<i>B: Causation of the Condition</i>			
Cause within Control of Individual*	91	36	< .005
Condition Is Not Inevitable	83	30	< .01
Idea of Cause Is Muddled*	50	50	
Family Has a Consensus on Cause	75	83	
Multiple Factors in Causation	88	46	< .05
Due to Eating too Much (for obese group only)			
Mother	66	N/A	
Father	65	N/A	
Index Child	58	N/A	
Sibling	71	N/A	
<i>C: Management of the Condition</i>			
Condition Is Changeable	100	100	
Condition Is Own Responsibility	97	100	
Management Is Positively Valued	100	92	
Clinic Is Positively Valued	70	83	
Preoccupation with Food and Eating	53	50	
Preoccupation Is Positive	50	60	
Eating Is Not Under Control	52	17	< .1
Actively Dealing with Condition	59	100	< .05
Actively Dealing with Experiences	23	25	
<i>D: Attitudes to the Condition</i>			
Stereotyped View within Family*	27	8	
Belief in a Social Stereotype	70	50	
Stereotype of Obese Women (obese gp)	76	N/A	
Stereotype of Obese Men (obese gp)	14	N/A	
Belief that Condition Affects:			
School children	74	17	< .005
Extended family	35	8	
Nuclear family	20	8	

\*Borderline reliability.

and the parents felt guilty about the obesity. In the coeliac group the response was low key, with some concern and frustration about keeping a diet and about problems in later life.

Correspondingly, members of obese families taken together more often saw obesity as bad or neutral ( $p < .001$ ), especially mothers ( $p < .05$ ), and found

the good side to obesity difficult to imagine. The good things were most noted by the school-obese group who were not undergoing any treatment. The good things were that obesity made you bigger and stronger, made you less likely to feel cold, protected you against illness, and made you jolly. By contrast, the coeliac families readily cited advantages of their condition: the most frequent being the healthiness of the enforced diet and the fact that the child becomes a celebrity. In the obese families, the disadvantages of being obese outweighed the advantages greatly. In the coeliac families the advantages of the disease were stressed to a greater degree than the disadvantages.

Despite this negative view of obesity, family members in the obese group were nearly evenly divided as to whether they would prefer to be definitely fat or definitely thin; only the index children more often preferred to be thin. The groups differed significantly here, since almost all coeliac family members preferred to be thin ( $p < .001$ ).

#### Causation of the Condition

More obese families than coeliac families saw the cause of their condition as within the control of the individual ( $p < .005$ : agreement borderline), as not arising inevitably ( $p < .01$ ), and as involving multiple factors ( $p < .05$ ; see Table 1, part B). Most family members in obese families believed that the obese ate too much. Analysis by subgroups revealed that this view was most commonly held by the parents of the hospital-obese and GP-obese families (range: 67–77%) and least often held by the school-obese parents (range: 15–25%). The index children in the hospital-obese and GP-obese groups held this view less often than their parents (54 and 33%, respectively), but those in the school-obese group held it more often than their parents (36%). Just about half the families in each group were judged to be muddled in their views on causation. The multiple factors reported as causing obesity included hereditary factors, poor diet, emotions like worry and boredom, overfeeding by parents, and lack of exercise. The coeliac families all gave a medical explanation for their condition.

#### Management of the Condition

Almost all families in both groups regarded their condition as changeable rather than fixed, believed that management was their own responsibility, valued management positively, and valued the clinic they attended positively (Table 1, part C). The hospital-obese families were all appreciative of the help given to them, felt accepted by the clinic staff, and valued their work. Some saw attendance as an insurance against future problems. Some were bewildered by, or disagreed with, psychological aspects of their regimens. The other two obese subgroups were not currently in treatment and were generally critical of previous help. The coeliac families found their health checks reassuring but disliked the routine type of care and the long journey to the clinic. They made realistic suggestions for improving their care.

In both groups, about half the families were judged to be preoccupied with food and eating, and these families were evenly divided between seeing their preoccupations as negative and as positive. Preoccupations were usually seen

as negative when they were associated with conflicts and disagreements in the family. In the coeliac group, the main preoccupation was the concern that the child should eat enough of the right food. The preoccupations in the obese families covered more issues including what to eat, when to eat, and how to eat. The school-obese families were again different in that their preoccupations around food and eating were judged to be positive; for example, they saw meals as an important meeting time for the family.

In obese families eating was judged to be out of control more often than in the coeliac group: 52% versus 17% ( $p < .1$ ). A detailed analysis of the findings by sex of the index child revealed that this difference was *solely* due to the obese girls' families ( $p < .001$ ).

All (100%) of the coeliac families were actively managing coeliac disease. However, only 59% of obese families were actively trying to reduce the weight of overweight members ( $p < .05$ ). The greatest proportion of obese families actively dealing with obesity were in the hospital-obese subgroup (69%) and actually in treatment. The lowest proportion (25%) was in the school-obese subgroup. Few families in either main group were actively attempting to manage their experiences or preoccupations, for example by reflecting on their validity or by attempting to alter each other's views. However agreement on this assessment was borderline.

#### Attitudes to the Condition

A stereotyped view of the condition within the family was not common (Table 1, part D). The obese families viewed obesity as a manifestation of laziness, weakness, and indulgence; but sometimes it meant being happy and cheerful. Many families thought that others had a stereotype of their condition (obese, 70%; coeliac, 50%). The frequency was somewhat higher in the hospital-obese group (82%). In the obese group, this stereotype was almost invariably negative: obesity usually meant being "greedy," "horrible," "lazy," and "lacking in self-control." Coeliac families, by contrast, imagined that others felt sorry for or were frightened by people on special diets.

Seventy-six percent of the obese group believed society had a stereotype of obese women which was negative; but only 14% believed there was a stereotype of obese men, and this was not assigned an intense negative value. Judgement of the effect of the condition on others was more marked in the obese group. The obese families especially believed that school children were influenced by obesity, but the coeliac families thought coeliac disease and the associated diet generated little reaction: obese, 74% versus coeliac, 17% ( $p < .005$ ). The reactions of school children to an obese child were generally believed to be negative. Only the hospital-obese group had a large proportion of families (40%) that believed that obesity affected the way school teachers related to the child.

The obese families more often believed that the condition of the index child affected the way that the nuclear family (20%) or the extended family (35%) treated them; whereas in the coeliac group the condition was regarded as much less significant in either family setting (nuclear, 8%; extended, 8%). Analysis revealed that the incidence in the obese group was primarily due to



the hospital-obese families (nuclear, 33%; extended, 46%). Where obesity did affect other family members, it generally did so in a negative way, but agreement on this was borderline.

## DISCUSSION

The areas covered in our interview have been studied by many other researchers, sometimes in far more detail and sometimes with a greater degree of control. However, interviewing whole families in a naturalistic fashion and making clinical assessments reflect a new approach to the exploration of attitudes surrounding obesity and its management, and so there is no direct comparability. Insofar as there is consistency with other work, this study offers useful but limited confirmation. The significance of the study lies, first, in those areas where there are new or unexpected findings, and, second, in the way the overall picture of a family containing an obese child differs from that of a family containing a child with coeliac disease. After reviewing limitations of the study, these findings will be presented and placed in the context of existing research. Finally, possible explanations will be discussed.

### Limitations

It is always possible that variables systematically differentiating the two groups might explain some of the findings. However, in Kinston et al. (1987) it was shown that the obese and control families were similar with respect to demographic criteria and to factors such as family composition, structure, and age patterns, and that the subgroups did not confound results.

The data are clinical assessments of the family in the light of the whole interview, not the families' replies to questions. Because of the newness of such an interview and assessment, care as to reliability and validity is essential. Reliability was checked and found satisfactory. A few discrepant items were omitted completely; and items with borderline agreement were specifically noted in the Results and in Table 1. The FEI and HIA protocol specificity and detail offered the raters some protection from bias or the unconscious projection of cultural prejudices; and the audiotapes have been preserved for independent checks. Bias or prejudice would not account for the unexpected variations found between the subgroups nor for the unexpected similarity between the two groups in accepting responsibility for the management of the child's condition.

There are always problems with samples. For example, although the school-obese sample is close to a general population sample, the school is situated in a relatively deprived part of London. Similarly, the treatment facility at which the hospital-obese families were recruited was in a prestigious institution and not characteristic of a general medical or obesity clinic. The families which refused to participate showed some differences from those in the study, and these, or others unnoticed, may limit the generalization of our findings. It could be also argued that coeliac disease is not a suitable comparison group because the condition only becomes visible to others in the very process of

choosing a meal. Therefore, unlike obesity, it is not continuously obvious. Finally, although statistical analyses allow for small sample sizes, the numbers in the control group and in the obesity subgroups were not as large as would have been desirable.

### Review of Specific Findings

A clinically significant finding was the frequency with which family members in the obese group *preferred to be fat* rather than thin. The obese families saw the obesity of their child as a more serious physical, psychological, and social problem than the coeliac families did coeliac disease. Despite this, obese families' members were evenly divided on whether it was preferable to be fat or thin. This preference for obesity was not solely due to the greater degree of obesity in the obese group members because most obese members in the coeliac families preferred to be thin, and other research has indicated that obese people in general wish to lose weight (Huenemann et al., 1966; Meyer & Tuchelt-Gallwitz, 1968). It therefore appears to be a specific characteristic of families with obese children. This finding would explain some of the difficulty in treating obesity. In this context it is noteworthy that the obese group was similar to the coeliac group on important treatment factors like accepting responsibility for the condition and responsibility for its management.

Quantitative and qualitative analysis revealed a specific problem with the *control of eating* in the obese group. More than half the obese families, usually where the index child was a girl, did not have eating under control. The obese and coeliac families were similar in the frequency with which families were judged to be preoccupied with food and meals and in the proportion of positive to negative toning in these preoccupations. However obese families showed an increased intensity and ramification of preoccupations into family life, i.e., the preoccupations were also not under control. Few families were actively dealing with their experiences of obesity or the prominence of obesity-related preoccupations. These findings link to research on treatment failures in adult obesity: Stuart and Davis (1972) reported an analysis of dinner-table conversations between women in a weight-loss program and their husbands, and found that the husbands of wives who failed to lose weight initiated more conversations about food, offered food more often, and were more critical of eating behavior. The findings on control of eating are relevant to the debate on the contribution of eating behavior to obesity. The current consensus is that the obese do not overeat (Oscanova & Stanislav, 1975; Griffiths & Payne, 1976; Garrow, 1978; R.C.P., 1983), although some researchers disagree (Southgate, 1986). There was a substantial minority, mainly in the school-obese group, who did not believe that overeating was significant. Some obese families, more often in the hospital group, were actively engaged in dietary control. The obese families were generally aware of the common *negative stereotyping* of obesity and obese children (Allon, 1975; Monello & Mayer, 1963; Staffieri, 1967) and shared it, although they rarely believed this affected their attitude towards their overweight child. This finding is comparable to that of Harris and Smith (1983), who found that obese children rated themselves positively on the same rating scales which they had used to rate obese figures negatively. Although adverse consequences of stigmatization by school-children were generally rec-

ognized, concerns about adverse discrimination in the nuclear and extended family and from teachers were only common in the hospital-obese group. The obese families differentiated adult obesity by sex, believing that obese women were stereotyped and stigmatized, but not believing that stereotyping of obese men was important or stigmatizing. Reports in the literature have confirmed differences in the stigmatization between obese boys and obese girls and between obese men and obese women (Cahnman, 1968; Clifford, 1971; Dwyer & Mayer, 1975; Wooley et al., 1979), but these findings from within obese families themselves are new.

### The Overall Picture

*Coeliac families* expressed themselves well. They offered medical explanations of the condition and saw it as inevitable and with a cause which was beyond their control. However, they stressed the positive aspects, believed in management, and managed the condition well using a strict diet. The condition and its treatment were regarded as minor elements in family life.

By contrast, the *obese families* showed more problems in expressing themselves. They had a condition which they saw as avoidable and for which they assigned many causes, often, but not always, including eating too much. They believed that obesity was changeable and depended on their own actions. Nevertheless often they were not actively managing the condition (or were doing so badly) and lacked control of eating or of concerns surrounding eating. They saw obesity as a problem that reached into many aspects of their lives, and they focussed on its negative aspects. Despite this awareness, they often expressed a preference for being fat rather than thin.

The obese group contained two distinct subgroups. The school obese families were distinct in that they tended not to believe that eating too much was a factor, and positively valued obesity despite recognizing its disadvantages. The hospital obese families were distinct in that they were actively managing the condition, believed that eating too much was an important cause, and were most concerned about the stigma attached to obesity. More often than other obese families, they believed obesity affected those who came into contact with the obese child, including themselves. These distinctions emphasize the distortions inherent in attitudinal studies based on sampling from clinics rather than from the general population.

### Explaining the Findings

The differences between the obese and control groups are unlikely to be an artifact, and the broad concordance of our findings with those of the general literature strengthens their validity. In attempting to explain the findings, three hypotheses emerge and will now be examined in turn.

**Hypothesis 1:** *Obesity is a physical condition with an as yet unknown pathological base; and the obese families differ from the coeliac families primarily because they are being given inappropriate management advice.* Obesity is then comparable to coeliac disease prior to elucidation of its etiology.

This would explain the family's concern with obesity and eating but not the ramifications and quality of their preoccupations nor the failure to control eat-

ing and to adhere to treatment regimes. Nor does it account for the very large numbers of overweight individuals who lose weight by dieting (Schachter, 1982). Even among children, where weight-reduction is most difficult, dietary management can work (Spence, 1986). In addition, at least 20–30% of obese children do not grow up to be obese adults (Knittle, 1972; Stark et al., 1981).

**Hypothesis 2:** *The group differences are due to society (including doctors) regarding obesity as a stigma and asserting that obesity is not primarily a physical condition, whereas in fact it is. Obesity is then comparable to leprosy in the middle ages or having a prominent birthmark.*

It is true that, next to skin color, obesity is the major stigma in our society (Canning & Mayer, 1966; Weiss, 1980; Wadden & Stunkard, 1985). So the hypothesis could explain many features noted in the present study which are not covered by Hypothesis 1. The radical element in the women's movement would approve: Aldebaran (1975) views "weight loss as systematic murder of a biological minority by organized medicine, acting on behalf of . . . society."

Although social and cultural attitudes must be invoked in any explanation of obesity, Hypothesis 2 still fails to account for the findings cited above in regard to weight loss. Some findings from the present study are also difficult to explain. For example, the high frequency with which being fat was preferred is puzzling: the reverse would be expected. The school-obese families, where food, eating, and obesity were positively valued, also appear out of line with this hypothesis. Finally, various findings from another part of this study are not accounted for by Hypothesis 2, or positively refute it: e.g., Kinston et al. (1987) reported that the fatter the child the less mentally ill the mother, whereas Hypothesis 2 would suggest an opposite correlation.

**Hypothesis 3:** *The group differences are primarily due to obesity being a manifestation of a psychosocial identity of the index child, of the family, and of society: an identity which is negatively valued by society. (Unlike coeliac disease, where biological mechanisms are primary and pathological, physical changes in obesity are mediated by normal biological mechanisms and are subsidiary.\*) Obesity is then comparable to psychosocial dwarfism.*

This hypothesis explains the findings in the present study, including those not handled by Hypothesis 2. For example, it explains the preference for being fat: in social systems the status quo is the standard fall-back position in negotiations over change. The argument for obesity to be construed as a manifestation of personal and system identity was initially put forward by ourselves in Kinston et al. (1987) to explain a variety of puzzling findings, including the one mentioned above. The identity hypothesis views the physical state of obesity as being under voluntary (i.e., psychological) control. However, since being nonobese means identity change for obese individuals, weight loss will tend to be resisted as unwelcome or even dreaded by the individual and the family. Successful loss of weight is possible, however, depending partly on individual determination and partly on other psychological and social factors which facilitate or inhibit identity change.

Hypothesis 3 allows for the possibility of a family accepting and identifying with a negative social valuation in relation to the outside world but operating

\*It is also assumed, without affecting the argument, that physiological factors can override psychosocial factors: e.g., obesity may result from the forced immobility associated with spina bifida or muscular dystrophy.

with a different set of values within the family. This may explain the features of the school-obese families where the stigmatized index child was probably more concerned about his obesity than his parents were. There is also the possibility of a family rejecting the negative social valuation and successfully accepting obesity. This form of psychological self-management was rare in our sample. The implications of identifying with a socially negative identity have been explored in the sociological literature on deviance (Parsons, 1951; Goffman, 1963; Berger & Luckman, 1966) but require further investigation in relation to obesity specifically.

## CONCLUSION

Obesity is difficult to manage in comparison with coeliac disease. If coeliac disease is not managed, the child suffers by falling ill. This would reflect poorly on the parents; and since management leads to a healthy child, actively managing the condition is rewarding for both child and parents. If obesity is not managed, the child suffers solely by virtue of being stigmatized (Weill, 1977), except in the rare case of massive obesity which interferes with cardiopulmonary function. This stigma does not spread to parenting ability; and management of obesity is therefore less pressing. However, our findings do suggest that where stigma is a major concern, the family may persist with treatment. Even where families appear to be actively seeking to manage obesity, there are difficulties. In most families one or both parents are obese, and the child's obesity will be further supported by the normal processes of identification. In these families, there are also ideas that obesity is a good thing and a common preference for being fat rather than thin. Furthermore obesity and surrounding issues of food and eating are not clearly delimited as merely one among many elements of family life to be relatively dispassionately dealt with, but rather appear to be intensely and pervasively experienced, possibly as aspects of the core identity of the family. Our previous research findings also suggested that distress and disturbance in the family might increase if the child lost weight. Taken together, these factors lower the likelihood of successful management.

Because management is ignored or attempts fail and the public and professionals blame obese individuals, there have been calls to focus primarily on altering attitudes (DeJong, 1980; Sonne-Holm and Sørensen, 1986) or even to abandon the notion of treatment (Aldebaran, 1975; Bradley, 1982). These approaches have merit but they do not deal directly with the identity dimension. They assume that obesity in an individual and social meanings of obesity are independent factors. This would be true if obesity were primarily physical, like skin color. However the concept of obesity as an identity takes the opposite view: *obesity develops in individuals and families as a manifestation of cultural views about obesity* (Kinston, in preparation). To elaborate on the concept of obesity as an identity, it is necessary to examine exactly what is happening inside obese families, and such a study with these same families has just been completed (Kinston et al., in preparation).

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