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Solloway, Orin Esther

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THEORY AND PRACTICE OF FAT

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment for the requirements for the
degree of
DOCTOR OF PHILOSOPHY

BY
ORIN SOLLOWAY
Norman, Oklahoma

1982

THEORY AND PRACTICE OF FAT

APPROVED BY

Chas. W. Wight
Marilyn Affleck
D. Lawrence Wiedner
C. E. Hillert

DISSERTATION COMMITTEE

This work is dedicated to two

Sylvans,

The first in memory, the second in hope.

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Orin Solloway
June, 1982

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ABSTRACT

THEORY AND PRACTICE OF FAT

by ORIN SOLLOWAY

Major Professor: CHARLES W. WRIGHT, Ph.D.

This study explores the contemporary social construction of fat, defined as an object of human meaning systems and denoting both cognitive and evaluative orientations. We focus on Fat Theory and Fat Practice as related aspects of a social reality-building process.

Fat Theory represents the cognitive doctrine of fat --i.e., objectified knowledge products which serve to explain it. We review two major bodies of current literature: The professional reports of obesity research and the popular accounts of "overweight" in the lay press. Considered as major repositories of a legitimating lore, these clinical constructions and popular paradigms are exposed and compared in terms of their definitional, physiological, psychological and symbolic formulations on fat.

Fat Practice refers to the ways of life of fat people --that is, people who identify themselves as "compulsive overeaters," people who diet, people who elect surgery for obesity and people who are members of weight reducing groups. We present (1) a typology of compulsive food practices and associated modes of consciousness, (2) participant-observation reports from local settings of two nationally-coordinated fat organizations, and (3) interview data from patients of obesity surgery.

CHAPTER I

INTRODUCTION

It is said that fat, conveniently stored on the bodies of our Paleolithic ancestors, provided an energy reserve that was crucial to human survival in the glacial hinterlands. Whatever the anthropological merit of this proposition, it suggests that human body fat -- once the hero of somatic adaptation -- may now be regarded as an evolutionary anachronism.

Those contemporary humans who may have retained residues of a genetic propensity for subcutaneous energy storage have, it would seem, fallen on hard times since the Ice Age. The modern era --having passed the species survival emergencies and spawned great industrialized sectors of abundant, relatively predictable food supply-- decidedly disvalues fatness. Today, the topic of human adiposity increasingly belongs to arbiters of health and high fashion, under whose auspices fat has declined to the status of pathology and pathos. In the popular and professional discussion of human fat and fat people, this much is clear: To be fat is to be aesthetically flawed and functionally impaired.

But the assertions that fat isn't pretty and is believed to be a health risk do not, somehow, account for the pervasively moralistic tone of many anti-fat exhortations. There is, one suspects, more to the message: Health and beauty are not all; character is also at issue. Moreover, behavior itself is inferred from the existence of excess body fat.

To the detached observer it might seem that configurations of the body present, in the usual case, merely individual variation. But it has not escaped sociological notice that very few of such variations are without social meaning, and that some variations (for example blondness, tallness or hirsuteness) are often interpreted as reflections of character. Moreover, specific anatomical aspects attain added social (indeed, socially-structured) salience as emblems of status or group membership --notably skin color as racial and secondary sex traits as gender identification. The body, then, is a well-acknowledged repository of social meanings.

In this respect, body fat is merely one among other benchmarks of social signification. Not only amounts of body fat but also individual variations of its distribution are particularly liable to cultural interpretation. Veblen, for example, noted the "pecuniary reputability" attached to the extremely constricted waistlines cultivated by women of his time (Veblen, 1899).

As for the meanings assigned to amounts of body fat that are felt to be excessive, two canons of contemporary understanding seem to be important: First is the general belief that the single, sufficient cause of over-fat is excessive food intake. Second is the corollary belief that fatness is easily and permanently reversed by dint of will, through intake restriction. In the context of such beliefs, the impu-tational potential of body fat goes beyond the signification of status or constitutive character: Excessive body fat implies specific behavior. There is the attributional component of willfulness, of motivated action --and thus sin or deviance. Fat is prima facie evidence of gluttony,

of transgression. A visible record of "badness."

From such considerations as these, then, fat emerges as a socially compelling object of interest. Its moral dimensions attain a certain complexity. Thus, while the properties and relevancies of human fat overlap a number of perspectival spheres (crossing, for example, nutritional, psychological, physiological, medical and other disciplinary boundaries), the present project intends to subsume these under a sociological rubric. In all that follows, the basic assumption is that fat is appropriately, if not preeminently, approached as a social object.

This study explores the contemporary social construction of fat, focusing on "theory" and "practice" as related aspects of the relevant reality - building processes. Fat theory represents the cognitive doctrine of fat -- that is, the objectified knowledge products which serve to "explain" it. In this regard, we review two major bodies of literature created by scientists and lay writers as legitimating lore which integrates the cognitive accounts of fat with its normative meanings.

Fat Practice refers to the ways of life of fat people, that is, people who identify themselves as "compulsive overeaters," people who diet, people who elect surgery for obesity, and people who are members of weight-reducing organizations. Here we describe some ways in which people confront the vicissitudes of fat in forging their lines of action, constructing subjective and intersubjective understandings and managing social identities.

Framework and Orientation

The dissertation has two primary structural aspects:

- (1) A summary presentation of professional-therapeutic lore and popular media constructions on "fat problems," their causes, consequences and cures, based on content analysis. We review the popular paradigms and clinical constructions of fat with respect to its definition, its physiological, psychological and symbolic interpretation.
- (2) A field study of fat consciousness and meaningful social action in situations where fat is a primary object of consideration. Based on interview and observation data and supplemented by analysis of written accounts and personal documents, we present what has been learned from fat people about being fat: Ways of life in respect to eating practices, dieting behavior --its meanings and consequences, participation in organizational strategies against fat, electing and experiencing surgery for obesity. The construction of fat selves, its interactional and reflective aspects, are explored.

The basic goal of the inquiry is interpretive: It seeks the social meanings of "fat" in the context of contemporary culture. Lodged within a sociology-of-knowledge perspective, this study draws on significant theoretical resources in the sociology of deviance, stigma and motivational processes. We do not attempt an explanatory system; nor do we intend any testing of hypotheses. The effort has been toward discovering, locating and describing the phenomena of interest -- identifying common elements, articulating recurrent themes.

The methodological principle to which this work aspires is that which has been called "naturalistic inquiry," (Blumer, 1969), meaning

the maintenance of maximum closeness to the empirical domain --to the actual character of social action in its ongoing formation. As much as possible, we have tried to enter the social worlds under study -- to take the view of the participants, learn their images and vocabularies, their orientations to their objects and to themselves. Interviews, participant observation and analysis of personal documents and literature have been the major research activities. The extent to which methodological ideals may be realized, is, of course, limited by many factors, including the practical exigencies of research situations. These problems, and related matters, are discussed in the Methodological Report (Chapter III).

Statement of the Problem

Below are listed six groups of questions which inspired the original formulation of problems for this study and guided research activity. In the concluding section of the dissertation (Chapter V), we return to the issues raised in these questions. We may then assess the extent to which these issues have been joined by the investigation, and the extent to which the investigation suggests new issues, better questions.

1. What is the meaning of being fat in contemporary society? What are the elements of a fat self-image and the processes of its construction. What kinds of accounts are given by individuals to explain the phenomenon of fat --in themselves, in others? Are there some behavior patterns or typified social actions which are especially associated with being fat. What, if any, special qualities attach to the social interactions of fat people?

2. What is the character and current status of social knowledge about fat/obesity/overweight --within professional/therapeutic spheres and in popular imagination? How does such knowledge impinge on the lives and consciousness of fat people?

3. What kinds of factors influence individuals to seek (or not to seek) remedies for fat? In particular, what factors operate in the choice of therapies? What kinds of consequences follow from radical changes of body size? What are some consequences of failed programs or treatments?

4. What social-structural factors may be involved in the social construction of fat? What institutional complexes or social control agencies (e.g., medical and religious) mediate individual thinking and action in respect to obesity/overweight? What norms, values or rules obtain and how are these built up in social interaction?

5. To what extent, if any, does being fat fit the model of a social role, in terms of felt "rights" and "obligations" of fat people; e.g., the sick role (Parsons, 1951) or the role of the "in-group deviant" (Goffman, 1963).

6. How does the experience of being fat vary with age, sex or class?

Major Concepts of the Study

The major objects and concepts of the study are identified below. Their further elaboration and empirical grounding will be developed in later sections.

Fat. In polite conversation, when applied to the human body, the

word fat rankles; it strikes a harsh, indelicate chord. People tend to prefer the gentler, less accurate designations --e.g., portly, stout, plump, etc. The tendency to favor the euphemistic forms is, of course, an indication of the normative status of fat and of the perjorative connotation of the word. Thus, the ordinary employment of tactful usage is, in itself, involved in sanctioning processes. We have, therefore, deliberately eschewed tactful terminology in all narrative portions of the dissertation. In the interest of accuracy and to separate sociological usage from that of everyday sociability, we prefer the simple, descriptive term, fat.

Toward clarity, a number of terminological distinctions will be critical for later discussions. We have used the term fat in a specifically sociological way: Fat refers to the social reality intended by participants --even though, as noted, participants often avoid the use of the word itself. Our usage is nominal: it stipulates fat as a social object, denoting both cognitive and evaluative orientations toward the object. The dictionary definition most clearly captures both orientations: "...fleshy with superfluous, non-muscular, flabby tissue"...."a graceless excess of flesh." (Webster's Third International).

The terms "overweight" and "obese" are often substituted for fat in common parlance. This usage appears to be intended as synonymous more than merely tactful, since both terms clearly imply negative evaluation and neither suggests redeeming qualities (as, for example, "plump" which connotes health, or "portly" which conveys dignity). In later sections, we have occasion to consider in detail certain meaning

complexes and definitional problems associated with the terms "overweight" and "obesity" as they relate to the concept of fat and within the context of specified milieux. For now, we may simply note that overweight has come to be associated with body weight (by spring scale measure) relative to height and frame size* while obesity seems to have been appropriated as a medical term having an illness connotation. Both of these terms --overweight and obesity-- have emerged from the ongoing struggle within knowledge producing milieux to create an "objective" definition of fat, i.e., to provide a "scientific" operationalization of fat which unties it from its everyday normative moorings. The character of this struggle is described further in Chapter IV.

Who, then, is fat? By our nominal definition, fat people are those to whom the label may be successfully applied --either by themselves or by others or by both. As we have suggested, some fat people may be defined as overweight while others may not fit this designation. Similarly, some overweight individuals are not fat. While most obese persons are fat, only a minority of fat people are labeled or label themselves obese. Some people, particularly women, tend to label themselves as fat without "objective" basis, i.e., irrespective of weight charts. Some persons may never apply the label to themselves even while it is applied to them by others.

The respondents of this study are characterized as "fat persons" on the basis of their own self-labeling activities; they are engaged in

*Very muscular individuals may fit standardized designations of "overweight" yet not present the corporeal image of fat (for example, body-builders or football players). Alternately, some persons who are not "overweight" may appear fat, i.e., excessively fleshy.

social action relevant to being fat -- e.g., dieting, membership in weight-reducing groups or election of obesity surgery. For present purposes, then, being fat is understood as a social position, sometimes a social identity, produced through interactional process -- not (a priori or necessarily) as a biological essence, either temporary or permanent. Fat will be viewed as a social object; its attachment to particular persons is always negotiated within a human dynamic.

Fat consciousness. This concept refers to the subjective and intersubjective apprehension of fat as a meaningful object in the everyday world and its relation to common sense problems of identity, ideology, motivation and behavior. The study will focus on two levels of apprehension: (1) The routinized, taken-for-granted level of pragmatic reckoning with facticity -- in which (for example) one "knows" that the dessert is fattening; and (2) An introspective, reflective level in which individuals conduct internal conversations with themselves, explaining conduct -- as (for example) "...I ate the fattening dessert because I have no will power."

Fat Theory. This concept, mentioned above, refers to written doctrine created by knowledge specialists of the society. Fat theory comprises the conventional wisdom of fat as abstracted by intellectually authoritative personnel. Two bodies of literature have been examined as components of Fat Theory: professional reports of obesity research and popular accounts of overweight in the lay press. These works, we suggest, constitute important aspects of a legitimating lore. They define and explain fat (e.g., "Causes, Costs and Control"*) within the

* We borrow here from the title of an important contribution to both professional and popular literatures of fat -- Jean Mayer's Overweight: Causes, Costs and Control, 1968.

bounds of a social justification --thus integrating its cognitive and normative contexts.

Both the integrating function and the cognitive character of legitimation instruments have been emphasized by Berger and Luckmann:

"Legitimation produces new meanings that serve to integrate the meanings already attached to dis-separate institutional processes.... Legitimation 'explains' the institutional order by ascribing cognitive validity to its objectivated meanings.... (and) justifies (it) by giving a normative dignity to its practical imperatives. It is important to understand that legitimation has a cognitive as well as a normative element. In other words, legitimation is not just a matter of 'values'. It always implies 'knowledge' as well (1967: 92.23).

By coordinating the facticities of fat within a framework of social sentiment, these two literatures provide theoretical forms of legitimation for fat-related social action. The popular writings -- best-selling diet books and magazine articles on overweight and reducing-- may fit what Berger and Luckmann suggest as a "second level" of legitimation: "... theoretical propositions in a rudimentary form ... explanatory schemes relating sets of objective meanings. These schemes are highly pragmatic, directly related to concrete actions" (ibid, 1967: 94).

A third level of legitimation described by Berger and Luckmann is that which "contains explicit theories" and "a differentiated body of knowledge ... frequently entrusted to specialized personnel" (Ibid, 1967: 94-95). The professional literature of fat --clinical reports and obesity research reviews-- seems to fit this description.

A further presentation of Berger and Luckmann on levels of legitimation is found in Review of the Literature, Chapter II of the

dissertation. In that section, and at other points, we pursue the extent to which Fat Theory may constitute legitimating lore. Here we merely introduce the concept and locate it within a sociological perspective; i.e., suggest its relevance in the social construction of fat.

Fat Practice. This concept refers to social action in which fat is a prominent situational feature. In particular it refers to eating styles and strategies (e.g., "compulsive eating," dieting, etc), to choices of fat therapy and participation in group-articulated philosophies (such as those associated with behavioral, spiritual and/or surgical fat remedies). In general, Fat Practice refers to ways of life and the construction of fat selves. It includes problems of interactional immediacy as well as introspective reflection on motivation and social identity. We have tried to explore the meaning of being fat as it emerges from both ongoing interaction and biographical recollection. Accordingly, interviews, participant observation and personal documents are appropriate to this inquiry. We talked with fat people about being fat, -- about dieting, and eating, about weight status, weight changes, their meanings and consequences, and about surgical therapy for "obesity." We participated in formal group discussions of fat problems and in informal conversation with group members. These activities and observations, conducted over a one-year period, are further detailed in the methodological Report (Chapter III).

Group Settings: OA (Overeaters Anonymous) and TOPS (Take Off Pounds Sensibly). The concept of group settings is understood to imply face-to-face interaction among a set of individuals who sustain a given system of situated meanings and activity. By "setting" we do not

specify any given locale, but rather the regularized social intercourse --usually meetings but also special events or other communication-- characterized by the mutuality of a circle of participants. The sharing of special problems and goals is a paramount feature of the concept intended here.

We have observed (as participant) two such group settings for the present project; --both are local chapters of nationwide organizations formally focused on fat problems and providing specific formats for discussion and solution of such problems. "Overeaters Anonymous" (OA) and Take Off Pounds Sensibly (TOPS) will be more fully described in succeeding chapters. We have distinguished, for both groups, between uniformities of formal and "official" policy and the particularities observed in local settings. In both cases, the chief interest has centered on the ways in which members interpret and implement elements of the official group philosophy--i.e., how the formal group strategy or theory may be translated into practice.

Our presentations of the group settings, then, rely on reviews of organizational literature as well as observation and participation in conversation with members. The methodological basis of our group-setting observations is given in Chapter III; the findings are presented in Chapter IV.

Obesity Surgery. A number of surgical techniques against obesity have been developed since about 1953. Persons whose body weight is either 100 pounds more than or twice the number of pounds said to be "normal" for their height, sex and frame category may become eligible for obesity surgery. Such persons are termed "morbidly obese" by

medical definition. Some of the earlier developed procedures have been largely abandoned; those still in use are in various stages of technological refinement.

The surgery generally involves cutting through the abdominal wall and restructuring either the intestines or the stomach. In the intestinal bypass operation, called jejunoileal anastomosis, the small bowel is shortened in length by disconnecting some portion and reconnecting shunted ends. Weight loss is produced by malabsorption. In the gastric bypass procedure, the stomach is partitioned by transection, creating a gastric pouch greatly reduced from normal size. Weight loss results from drastic reduction of calorie intake; i.e., intake exceeding the now-reduced gastric capacity produces vomiting.

Gastric bypass, initially a more difficult and time-consuming procedure than jejunoileal bypass, has been advanced by the advent, in 1971, of a "stapling" device which reduces operation time. A summary of professional literature on obesity surgery is provided in Appendix D. In Chapter IV, we present information on the experience of obesity surgery from the view of gastric bypass patients.

In the war against fat, institutionalization of surgical artillery surely represents the farthest technical extension of social control machinery in this arena. Clearly, the use of such procedures advances that general process which has been called "medicalization of deviance" -- i.e., changes of dominant deviance designations from moral-legal to medical categories (Conrad and Schneider, 1980). Also, it goes without saying that the willingness of patients to accept such a label as "morbidly obese" --to, in fact, voluntarily sacrifice body organs or

portions thereof in hopes of expunging fat-- testifies to the depth of the internalized devaluation of fat people.

The concept of obesity surgery, then, contains a panoply of sociological ramifications.

The Sociological Location of Fat Phenomena:
Theoretical Resonances

That fat is to be viewed here as a social object has already been stated as a fundamental premise of the inquiry. But what kind of social object is fat and to what sociological categories does its study belong?

Our research is identified as an empirical, descriptive enterprise. Yet we do locate the phenomenon of interest within a sociological matrix of theoretical conceptualization. We believe that fat -- both as social attribute and behavioral complex -- spotlights important issues in the theoretical discussion of social control and deviance, problems of social identity construction, motivational orientations and stigma processes.

It is hoped, then, that the description and interpretation of fat problems and the ways of life of fat people may contribute to general theoretical knowledge. This study may be relevant, for example, to questions of (1) The relations between deviant status and deviant motivation -- between deviant identity and deviant behavior: Specification of circumstances under which these may be differentiated or coextensive. (2) Motivational complexes involved in social control -- particularly "self-correction" (e.g., dieting or electing surgery) -- that is, self-imposition of sanctions. (3) Consequences of "self-correction" for deviant identities. (4) Factors predictive of social

control forms (e.g., legal, religious, medical) which may become ascendant as agencies of treatment or correction for given types of deviance.

(5) Stigma processes in relation to social control. (6) Consequences of legitimating lore for social identity.

The relevance of such matters to the study of fat and fat people will be taken up in the following chapter.

CHAPTER II

REVIEW OF THE LITERATURE

If, as noted, the humanly meaningful dimensions of fat suggest intriguing sociological problems, and given what has seemed to be a sociological penchant for focusing on disfavored, normatively exceptional populations, it is surprising to find that the sociological literature on fat is relatively thin.

Of the available empirical work, by far the greater portion consists of those statistical reports which locate social distributions of obesity and overweight with respect to age, sex, class and sometimes ethnicity. Such studies have often been conducted by investigators outside the sociological field --such as nutritionists, psychologists and medical personnel. Non-sociological disciplines have also supplied much of the existing research on social "attitudes" toward fat and fat people.

In a 1968 review of obesity studies, one writer said that obesity "is hardly ever mentioned by sociologists" (Cahnmann, 1968). Since that year, several empirical studies by sociologists have appeared. These will be reviewed here along with the main empirical contributions of non-sociologists to the sociology of fat. First, though, we begin with a core of comprehensive theoretical work--sociological analyses which, although they never mention the phenomenon of fat, embrace its most relevant social aspects.

Applications of Sociological Theory To

A Study of Fat

Toward a sociological location of this inquiry and to address those themes which have been most influential, we turn here to the issues of deviance and social control, social identity, motivational orientation, stigmatization and legitimation. For our purposes, the core contributions in these areas include the works of Talcott Parsons, Erving Goffman, Howard S. Becker, Edwin Lemert, David Matza, and Peter Berger and Thomas Luckmann. Important conceptual links have also been provided by Peter Sedgwick, Edward Sagarin, and Peter Conrad and Joseph W. Schneider.

The work of Berger and Luckmann has been specifically cited here in the review of the problem of legitimation. But their general influence and central importance to this whole effort is everywhere apparent. It is their approach to the sociology of knowledge --as outlined in The Social Construction of Reality (1967)-- which most cogently informs the present inquiry.

Fat as a Deviant Status

Clearly, in the context of present-day culture, fat presents a negatively-valued differentness --a departure from patterned expectations. Being fat is understood as being personally discredited and standing in need of "correction" and/or "treatment." Very fat people may elicit the censure, contempt or pity of others and sometimes their formal sanction; the societal response ranges from occasional exclusion to structured discrimination and isolation.

Do these facts warrant the assignment of deviant status? In the case of the sociological designation of deviance, the answer of course depends upon the definition of deviance and the theoretical analysis that informs the definition. Moreover, for most approaches, a decision about deviance would require more information than is given above: Nothing has been stated of relevant rules and/or norms regarding fat -- or of the orientations of fat people to such norms. Behavior itself has not been specified; what acts, if any, have been committed? Details of group membership and interactive processes of social identity have also been left unstated.

All such considerations -- the acts, the motivations and identities of actors, the group and its norms and rules-- have figured prominently in sociological formulations of deviance. Toward the sociological location of fat in deviance studies, we review briefly a selected sample of these formulations, insofar as they pertain to the questions at hand.

Norms and motivational orientation: The classical approach to deviance articulates its definition within a context of group membership and with reference to institutionalized norms -- to which all relevant actors are motivationally oriented.* From this view, and where the individual is taken as the point of reference, deviance always involves an alteration of individual motivation --a decomposition or change of orientation toward norms.

The motivational understanding of deviance may be traced from

*This approach to deviance, termed "etiological functionalism" and distinguished from labelling approaches has been fully described and analyzed by Charles Wright (1982) in press.

Durkheim (who cited societies' regulation of human desires as a factor in suicide rates) through Merton (who noted that socially-structured pressures toward deviance are created by conflicts between achievement motivation and commitment to legitimate means).

Parsons's discussion of the origins of deviance provides perhaps the most explicit and systemized treatment of relations between motivational/normative orientations and deviance. In the Parsonian paradigm, deviance arises from a disturbance to established expectations within interactive systems. Whatever the source of this disturbance, from the point of view of given individuals in the concrete case, it presents problems of adjustment and frustration. The individual is thrown into conflict associated with emotional attachments to persons and commitment to norms. The disturbance to expectations creates a motivational schism: a component of alienation enters into the actor's orientation toward norms - norms to which he has been committed through socialization. The result, Parsons posits, is the development of an "ambivalent attitude structure" --which constitutes deviant motivation and becomes the genesis for deviant behavior.

Deviance is defined for Parsons, as "a motivated tendency" to violate norms; the deviant actor is at once committed to and alienated from institutionalized norms. When this motivational imbalance tips toward alienation and when actively focused on norms, the resulting behavior is described as "in corrigibility" (Parsons, 1951: 259). Alternatively, the motivational structure may be dominated by conformity, resulting in compulsive enforcement of norms. The ambivalent attitude structure may lean toward alienative or conformative poles, may be

expressed in passive or active ways, and may be focused on norms or on social objects. But, in all cases, ambivalence is said to foster compulsiveness, of which deviant behavior is the expression.

How do these considerations apply to the situations of fat people? If, as we believe, the society values lean over fat, the concomitant norm to (literally) embody this value has been --ipso facto-- violated by the fat person. The consequent disturbance to interactive systems and mutual expectations would, plausibly, set the stage for the ambivalent motivational structure. According to this thesis, then, fat people may be disproportionately disposed toward deviant behavior. But, more generally, it is the quality of compulsiveness which is predicted in the Parsonian formulation of ambivalent attitude structure. Aside from rebelliousness, ambivalence may produce "compulsive performance," "compulsive withdrawal," or "compulsive acquiescence." In some fashion or other, such compulsive behaviors have indeed been observed in the empirical reports on fat people (as noted in later chapters).

It should be pointed out that being fat does not, in itself, constitute behavior. But this fact may be a moot point in view of the generally held beliefs (previously noted) about eating behaviors of fat people --of which we will have more to say in later sections. In any event, the present concern has focused on the paradigmatic interactive situation and the degree to which the very presence of fat may (regardless of behavior per se) introduce strain into that system --strain which results in changed motivational constellations and rearranged orientations to social objects and norms.

The fact that failure to realize a normative expectation of body

configuration may become a source of frustration and unease for all interactive participants has been brilliantly attended by Goffman. His analysis of this problem and its many ramifications is put forward most cogently in his 1963 work, Stigma. Focusing on what he calls "identity norms" Goffman says:

"Failure or success at maintaining such norms has a direct effect on the psychological integrity of the individual. At the same time, mere desire to abide by the norm --mere good will-- is not enough, for in many cases the individual has no immediate control over his level of sustaining the norm. It is a question of conformance, not compliance Only by introducing the assumption that the individual should know and keep his place can a full equivalent in willful action be found for the individual's social condition." (Goffman, 1963:128).

Thus the motivational aspects of sustaining identity norms take on a special complexity. Goffman suggests that the processes of stigma --understood in terms of patterned interactions between normals and stigmatized-- constitute a form of solution to the normative predicament of unsustained norms.

"Through these processes, the common ground of norms can be sustained far beyond the circle of those who fully realize them; this is a statement of course about the social function of these processes and not about their cause or desirability(I)nvolvement is a form of tacit cooperation between normals and the stigmatized: the deviator can afford to remain attached to the norm because others are careful to respect his secret, pass lightly over its disclosure, or disattend evidence which prevents a secret from being made of it; these others, in turn, can afford to extend this tactfulness because the stigmatized will voluntarily refrain from pushing claims for acceptance much past the point normals find comfortable" (Goffman, 1963: 129-30).

Reminiscent of Parsons, Goffman points out that from the point of view of the stigmatized individual, "tacit cooperation" in such mutually accommodating processes constitutes only one of several motivational

directions: An equally possible alternative is the alienative option; that is, one might also choose to reject or withdraw from the community which upholds the unattainable norm.

Goffman defines stigma as an attribute which, in relation to a stereotype, is deeply discrediting to social identity. He describes its sociological features as follows:

"...an individual who might have been received easily in ordinary social intercourse possesses a trait that can obtrude itself upon attention and turn those of whom he meets away from him, breaking the claim that his other attributes have on us. He possesses a stigma, an undesired differentness from what we had anticipated. We and those who do not depart negatively from the particular expectations at issue, I shall call the normals"...

"...we (normals) believe the person with a stigma is not quite human. On this assumption we exercise varieties of discrimination...We construct a stigma-theory, an ideology to explain his inferiority and account for the danger he represents..."

"...We tend to impute a wide range of imperfections on the basis of the original one, and at the same time to impute some desirable but undesired attributes, often of a supernatural cast, such as 'sixth sense' or 'understanding'" (Goffman, 1963: 5).

Although Goffman acknowledges the possibility that some stigmatized persons may be socially located so as to be oblivious or indifferent to the normative basis of their stigmatization --e.g., "Mennonites, Gypsies, and very orthodox Jews" -- he considers these to be exceptional cases. He emphasizes the extent to which stigmatized and "normal" individuals share common group membership, group values. The stigmatized individual, says Goffman, "tends to hold the same beliefs about identity that we do," and "in the deepest sense, makes the same claims to human identity" (Ibid: 7). It is in fact the common cultural ground

which enables the stigmatized individual to "be intimately alive to what others see as his failing, inevitably causing him ... to agree that he does indeed fall short of what he really ought to be." Shame then becomes a central possibility. (Goffman, 1963: 7).

Goffman emphasizes that stigma and the varieties of stigmatization process are widely diffused in society --such that the general script for the enactment of interactive stigma dramas is familiar to all members. The particular assignment of roles may shift circumstantially from person to person; since, for Goffman, "normal" and "stigmatized" merely represents ends of a continuum, on which one's placement may change with contingencies. Goffman says:

"The most fortunate of normals is likely to have his half hidden failing, and for every little failing there is a social occasion when it will loom large, creating a shameful gap between virtual and actual social identityThe role of normal and the role of stigmatized are parts of the same complex, cuts from the same standard cloth"(Ibid: 130).

The concept of deviance, for Goffman, "links the study of stigma to the study of the rest of the social world," (Ibid: 126). As does Parsons, Goffman begins with the assumption of normative expectations shared by all participants (1963: 127). Again, like Parsons, he notes the importance of motivational orientations that emerge from normative interaction contexts --particularly those which give rise to ambivalence (Goffman, 1963: 106). Whereas Parsons points to categories of compulsive behavior as expressions of ambivalent attitudes, Goffman examines types of group alignment and ego identity problems in relation to ambivalence.

As to the assignment of deviant status for stigmatized persons,

Goffman equivocates: He says that the bearers of stigma, if they be called deviant "might better be called 'normal deviant'" (1963: 131). Such designation is said to follow from Goffman's formulation of self-other, normal-stigmatized unity. He says that the two roles represent "not persons but rather perspectives" -- interchangeable perspectives generated by unrealized norms during situations peculiar to the particular encounters.

"The life-long attributes of a particular individual may cause him to be type-cast; he may have to play the stigmatized role in almost all of his social situations, making it natural to refer to him, as I have done, as a stigmatized person whose life-situation places him in opposition to normals. However, his particular stigmatizing attributes do not determine the nature of the two roles ...merely the frequency of his playing a particular one of them. ...(I)t should come as no surprise that in many cases he who is stigmatized in one regard nicely exhibits all the normal prejudices held toward those who are stigmatized in another regard." (Goffman, 1963: 138).

For Goffman, a classification that includes all "deviators" --defined as group members not adhering to group norms -- would be too broad and heterogeneous a category to warrant special analysis. Such persons, he says, "differ in many more ways than they are similar" (1963: 141). For example, Goffman speaks of the "clown" or "mascot" type of deviator found as individuals in small groups, e.g., "the village idiot," "the town drunk" and the "fraternity fat boy." In larger systems of reference, he cites priests and law officers as types of "deviators" who occupy specialized "morally mis-aligning" roles. Also deviators are those "eccentrics" and "characters" which Goffman calls "disaffiliates." All such types are part of a mixed bag of individual deviators which Goffman calls "in-group deviants." These are distinguished from social

deviants (e.g., hobos, addicts and prostitutes) which constitute deviant communities and represent a "collective denial of social order." Deviant communities constitute what, for Goffman, would be logical objects of the field of inquiry to be called "deviance."

The study of stigma, says Goffman, extracts its objects from the whole field of social problems: Social deviants, in-group deviants, minority group members, and lower class persons -- all may on occasion "find themselves functioning as stigmatized individuals ... in face-to-face interaction" (1963: 146).

Deviant status, then, may or may not apply to stigmatized individuals. Nevertheless, Goffman recognizes that from a social system perspective, stigma processes are highly relevant to social control. He notes that a general function of stigma processes is that of "enlisting support for society among those who aren't supported by it." (Goffman, 1963: 138). He suggests particular social control functions for each of the three types of stigma differentiated in the study. Stigmas of "bad moral record" are said to function as a means of "formal social control." Stigmatization of racial, religious and ethnic group members "apparently functions as a means of removing these minority groups from various avenues of competition." As for those bearers of stigmatized body disfigurements ("abominations") Goffman says these may be interpreted as functioning to narrow fields of courtship decisions* (Goffman, 1963: 139).

The view of fat as a stigmatized attribute fits well with Goffman's description -- particularly the concept of "a shameful gap" or "taint"

*Goffman credits this latter notion to a suggestion by David Matza.

upon social identity. The Greek use of the term stigma referred to "bodily signs designed to expose something unusual and bad about the moral status of the signifier." Goffman says that such signs were cut or burnt into the body to label criminals, traitors or slaves. Today, he says, the word applies to the disgrace itself, rather than its physical evidence (1963: 1-2). However, in the case of fat, the body presents the mark as well as its meaning.

The visibility or "evident-ness" of fat enhances its discrediting potential. Of the three stigma types discussed by Goffman -- body abominations, blemishes of character inferred from some known record, and tribal stigma -- fat could exemplify all. Yet of the many case illustrations presented in Stigma (e.g., blind, crippled, colostomized persons and mental patients), fat people do not appear.* Nevertheless, the sociological literature of fat does strongly reflect the influence of Goffman's conceptualizations, as will be seen in this review. The current project, of course, is also deeply indebted to Goffman work.

Rules and Societal Response. A second approach to the sociological designation of deviance is that which emphasizes the processes by which persons come to be labeled as deviants. The labeling perspective gives special prominence to the creation and application of the rules by which deviators are defined. It does not presume that all such rules derive from a common normative context -- i.e., that those who become labeled necessarily share the values of those applying the label. In this view, deviance outcomes are examined not in terms of the "causes" or qualities of deviant acts (or their motivational bases) but in terms of the

* Other than the passing reference to "fraternity fat boy" as one type of ingroup deviant, Goffman does not specifically consider fat within the purview of the analysis.

consequences of such acts for individual experience or biography. Deviance is defined by the societal response to persons or acts; its subjective understanding is pursued within the interactions relevant to that response.

Becker's 1963 statement was seminal for the labeling approach:

"...social groups create deviance by making the rules whose infraction constitutes deviance, and by applying those rules to particular people and labeling them as outsiders. From this point of view, deviance is not a quality of the act the person commits, but rather a consequence of the application by others of rules and sanctions to an 'offender.' The deviant is one to whom that label has been successfully applied; deviant behavior is behavior that people so label."
(Becker, 1963: 9).

Becker points out that many deviant acts may be unmotivated and unintended -- may be committed out of ignorance of an existing rule or its particular application in the given case. Also, he suggests that motivation to deviate, in all likelihood, exceeds actual deviation; that is, the "impulse" to deviate is more often held in check than expressed. Becker notes that behavior that is deviant in one social context may be conforming behavior in another context.

Building on the foundation laid by Lemert and Becker, the 1969 work of Matza provides perhaps the most detailed exposition of being and doing --the links and processes of their unification in deviant identity. Becoming Deviant elucidates the subtle nuances of collaborative interaction between the individual and the state in the deviance process.

For Matza, the human subject, being always the author of action, produces deviance; in reflection as in deed, deviant identity is ultimately self-ordained. But the State (Matza's Leviathan) is also a main

producer of deviance. Its heavy hand --often overlooked by criminologists who relegated it to the role of mere "correction"-- crucially extends into the intimate processes of deviant becoming.

The complicity of self and state is outlined by Matza through a series of events and stages which together constitute the process he calls "signification"-- the objectification of deviant identity via meaningful signs. The first element of signification is the authoritative act of ban:

"The moral transformation of activity is the purpose of ban...(its intent) is to predict that with time the activity will exist in guilt." (Ibid, 1969).

Ban bedevils the human subject. Activity which is banned is thereby deprived of all innocent context. Subjects may be undeterred but will surely be inconvenienced: Issues of supply, of secrecy and "commitment" are made problematical by ban. Participation once casual, is now careful. The logic of ban, says Matza, "creates the strong possibility that the subject will become even more deviant in order to deviate" (Matza, 1969: 148).

For one who has engaged in the behavior that is banned, a mood of "transparency" or self-consciousness may settle into his relations with innocent others: The possibility emerges of "giving oneself away" -- particularly in the situation where ordinary conversation turns to the abstract topic of the banned activity. The subject may find himself resorting to guile. In these and other ways, ban serves to "bedevil" the human subject. Alienated from conventional company and drawn to further consort within deviant circles, he becomes sensitized to a compounded experience of guilt. Thus, he is meaningfully prepared for the next

stage of signification: Getting caught.

Apprehension bestows the full complement of the meaning of signification. It completes the connection between deviant act and deviant actor. Once apprehended, the individual is registered and derogatively labeled. Now the subject may serve to signify the act -- to embody its meaning; he is made an example of, stands for the deviance itself.

"To make someone or something stand for yet something else is an act of genuine creation requiring an investment of meaning. Thus, signifying makes its object more significant --as we might expect. The object enjoys -- or suffers--enhanced meaning. To be signified a thief is to lose the blissful identity of one who among other things happens to have committed a theft" (Matza, 1969: 156).

But even while the subject may thus be made into a sign, Matza insists, he need not for himself, introject the terms of this signification into a construction of self. The subjective complicity of the signified person, though probable, is not inevitable. It depends, according to Matza, upon several contingencies. Exclusion from non-deviant circles will, of course, provide considerable affirmation for deviant identity. Another important contingency is how the signified subject interprets the importance of his apprehension. To view the event as merely consequential (for the group and himself) directs him to contemplate its external social meaning -- and thus averts the internal elaboration of identity. But if he views the event as "indicative" (i.e., revealing his "real" character, his "essence"), then deviant identity is thus built up by his own collaboration.

The most critical contingency of all, says Matza --the "acid test"-- is, "does he do the damned thing again?" Matza suggests that,

in the nature of the case, recurrence will be taken as evidence of "essential" identity. The subject, turning "star witness" against himself, is likely to conclude his own "philosophical apprehension" --to confer a deviant self.

Such conclusion, Matza notes, is logically erroneous: It conceives "a special relation between being and doing --a unity capable of being indicated" (1969: 170). While Matza's analysis emphasizes the reified character of this conception, it also indicates the potency of its social reality. For it is in the very processes Matza describes that a unity of doing and being is demonstrated. That such a unity is not necessarily inevitable - or may be logically unsupportable - does not negate its existential reality. The creation is.

Considering fat as a deviant identity may reflect another facet in the social alignments of being and doing. It may be proposed that, given identity, the imputation of deeds becomes the problem for social construction. For fat people, the homily "You are what you eat," expresses a special sense in which doing and being are unified in identity. The wont to equate being fat with overeating does not seem to differ in kind from the tendency to derive "a thief" from the deed of theft. Both conclusions represent "common" sense and both rest on a similar logical fallacy. In one case, deviant identity is conferred (inductively) with reference to acts. In the other case, deviant identity is "explained" and justified (deductively) with reference to imputed acts. The result is the same: A unity of act and actor, of doing and being, realized in the construction of deviant identity.

The labelist focus on "societal response" opens the possibility

that not only individual behavior but also individual conditions or situations may portend deviant outcomes. For example, sick, disabled or "ugly" may constitute deviant statuses. Edwin Schur has reference to instances of this type in pointing to "... (p) articular individuals who exhibit certain behavior or conditions ... about whom 'something should be done'" (Schur, 1971). In order to include such instances, Schur offers a working definition of deviance which underscores the importance of departures from expectations:

"Human behavior is deviant to the extent that it comes to be viewed as involving a personally discreditable departure from a group's normative expectations, and it elicits interpersonal or collective reactions that serve to "isolate," "treat," "correct," or "punish" individuals engaged in such behavior" (Schur, 1971: 24).

This definition has been accepted by Sagarin with the addition that under the same circumstances, human behavior or human beings may be spoken of as deviant (Sagarin, 1975). Sagarin's book, Deviants and Deviance considers "disvalued people and disvalued behavior that provoke hostile reactions" (1975: 9). The work contains a number of specific though brief references to obesity and fat people.

Fat is conceived here as both social attribute and behavioral complex. It is a significant object of situations of action and -- as a normative departure from expectations -- fits into most formats of deviance discussion.

In our review of fat as a deviant status, we have considered core sociological formulations on the structures of motivation and the processes of social identity. These theoretical problems, focused on the paradigmatic interactive system, are particularly salient to the study

of Fat Practice, i.e., the understanding of fat as an object of situations of action. For example, Parsons's analysis of compulsiveness (a trait commonly assigned to fat persons), emphasizes the motivational consequences of disturbances to interactive expectations. Similarly, Goffman's work on stigma elucidates the sense in which fat proffers the possibility of "shame" in the presentation of self. Matza's treatise, building on the work of others in the labeling approach, examines the process by which act and actor are welded together in the construction of deviant identity. It suggests a similar process that may operate in the attribution of deeds (e.g., overeating) to complement a fat identity.

Thus, articulated within the framework of action, these theoretical contributions have provided sensitizing concepts toward a sociological interpretation of fat.

Fat as a Health Status

By our premises, health --like fat-- designates a human construction. Its cultural determination and historical variation has been exhaustively documented by the microbiologist René Dubos (1959). To represent the social idea of health as a universal, desirable condition existing in the absence of known pathology, Dubos suggested the term "mirage." The equivalent sociological conception is that of norm.

The notion of health represents a complex of normative expectations. Concomitantly, illness or sickness or disease all refer to departures from health norms. That such departures present theoretical and definitional issues in the sociological consideration of deviance has been widely recognized in the literature. In regard to such issues and

to provide a focus on fat within the purview of illness as deviance, our discussion here takes up three areas of discourse germane to the present inquiry: (1) The inclusion of organic disease states within the normative context of illness. (2) The process of "medicalization" of deviance and its ramifications for social control. (3) The concept of "the sick role" and its implications for deviance theory.

"Organic" disease versus "social" illness. Peter Sedgwick has suggested that a good portion of social analysis of illness has unnecessarily limited its scope, erecting a false dichotomy between "organic" and "social" elements of disease. Such a dichotomy, he says, restricts sociological expertise to the latter category and allocates the former to "(p)hysical medicine ... the world of Fact, of the natural sciences of anatomy and physiology..." (Sedgwick, 1973).

Sedgwick finds it ironic that this radical split between "fact and value" --usually associated with positivist approaches-- is a common thread connecting various anti-positivistic critiques of the social institutions of insanity. His article, "Illness --Mental and Otherwise" is a critique of these critiques. The works of sociologists Goffman, Thomas Scheff and Edwin Lemert are cited as well as the "anti-psychiatrists" Ronald Leifer, R. D. Laing, Thomas Szasz, and David Cooper. Adding Michel Foucault to this disparate crew (and acknowledging their differences) Sedgwick refers to them all as "immanentists."

According to Sedgwick, the immanentist writings on mental illness --in exposing the political and social basis of its diagnosis and treatment (and questioning the appropriateness of a medical model for interpreting social behavior) -- leave unexposed and unquestioned the social

character and valuative basis of "physical illness." For Sedgwick, the unstated suggestion of these works is that while mental illness expresses social norms, physical illness has "objective existence in the body."

Sedgwick decries the implied schism of social and somatic objects; he recommends a unified view of all disease phenomena as "human inventions:"

"The blight that strikes at corn or at potatoes is a human invention, for if man wished to cultivate parasites (rather than potatoes or corn) there would be no 'blight' but simply the necessary foddering of the parasite-crop. Animals do not have diseases either, prior to the presence of man in a meaningful relation with them... (the animal) does not present itself as being ill ... except in the eyes of a human observer who can discriminate illness from other sources of pain or enfeeblement."

Thus, it is Sedgwick's position that illness or disease does not exist in nature but only where its meaning is humanly assigned. While bones do fracture, tissues rupture and tumors grow, these natural events do not constitute illness, disease or sickness prior to the human attachment of such meanings. The attribution of disease, Sedgwick says, "always proceeds from the computation of a gap between presented behavior (or feeling) and some social norm" (1973: 34).

In Sedgwick's view illness is "essentially deviancy;" that is, the concept implies there is some alternate, more normatively-desirable state of affairs. Considering the wide range of folk concepts and technical ideas about illness, Sedgwick says, it is "difficult to discern" the elements which distinguish it from other deviant forms. Provisionally, he suggests, a differentiating attribute of illness may include a "quest for explanation" -- i.e., a descriptive delimiting of individual causal factors.

The extent to which the social object of fat (as formulated here) may be admitted to sociological conceptions of illness is considerably amplified by Sedgwick's definition. Moreover, his remarks on the links between illness and deviance may be particularly relevant to our investigation of Fat Theory.

Sedgwick argues for a definitional unification of all illness phenomena-- whether conceived in localized bodily terms or within a larger view of human functioning. Insofar as all illness is understood as social value judgment, he advocates the "politicization of medical goals" to the end that health facilities may become responsive to social demands.

The "medicalization of deviance." It may be seen that Sedgwick's position comes close to advocating what has been called "the medicalization of deviance," --i.e., the appropriation of deviant objects for treatment, "cure" or control, under the auspices of medical structures. In their 1980 analysis of this process, Conrad and Schneider focus on the changing historical constructions of deviance definitions and the politics of social control agencies. Their work considers three types of social control exerted by medical agents: Technology (for example psychosurgery, behavior modification and human genetics), Collaboration - by which medical personnel cooperate with other types of authorities to serve social control functions (for example, certifications of sanity for legal purposes), and Ideology -- defining deviant behaviors or conditions as illness (Conrad and Schneider, 1980).

Among the important consequences of the medicalization of deviance Conrad, and Schneider include the following: 1. Under the mantle

of science and scientific neutrality, medicalization veils the moral and political aspects of social control. 2. Medicalization tends to remove responsibility from persons, thus creating dependents and dependencies -- "second class citizens." 3. The mystification of medical expertise reduces popular access and the capacity for evaluating the expertise; at the same time, the political hegemony of medical institutions is enhanced. 4. Medicalization extends the individualization of social problems-- the trend of "blaming the victim." 5. The medical ideal of early intervention may tend to increase the incidence of secondary deviance. 6. As religious and philosophical metaphors are replaced by disease metaphors, society loses its conception of "evil" (Ibid, 1980). The modern disease metaphors, as Susan Sontag observed, are "cheap shots" (Sontag, 1978:241), that is, oversimplifications.

Conrad and Schneider provide several empirical illustrations of deviance medicalization -- including the case of alcoholism and drug addiction, abortion and homosexuality. Based on their historical examination of such cases, they offer an inductive theory of the medicalization of deviance. In their sequential model of how deviant objects move from "badness" to "sickness" designation, the authors specify distinct stages. They speak of medical "prospecting," of rhetorical and instrumental processes of claim-staking and of types of institutionalization.

In the prospecting stage, "discovery" is announced, proposing a medical etiology for a deviant behavior or condition. Not all such announcements are taken up and championed; some may be ignored. Medicalization of deviance requires moral enterprise -- the banners and personnel to wage claims-making campaigns. The rhetorical stage of

claims-making usually involves a small segment of medical specialists, often those administratively associated with clinics or attached to institutions mandated to deal with social problems. A loosely aligned group of medical and non-medical personnel may organize workshops or seminars within professional organizations. They may attempt to secure organizational stamps of approval --for example resolutions by the American Medical Association -- which attest to the properness of the medical perspective on the behavior at issue. In the "Instrumental" stage, claims-making advances to court and legislative arenas. Vested corporate interests (e.g., pharmaceutical corporations) may join with medical interests to secure legitimation of medical social control. Where there has been no established criminal definition of the behavior, claims may be staked for exclusive medical jurisdiction. Otherwise, there may be a "grafting" of sickness conceptions onto the existing "badness" definitions. Often, the active work of the instrumental stage is predominantly carried by non-medical personnel, retaining for physicians a more dignified, expert role.

The outcomes of medicalization processes are described as institutionalization, of which Conrad and Schneider specify two types: Codification and bureaucratization. In codification, medical definitions become part of medical and legal codes -- e.g., manuals of diagnosis are created. Bureaucratization creates large scale organizations for the treatment of medically-defined deviance. For example, the federal agencies of mental health and the state system of mental hospitals are large-scale "medical industries" which support medicalization via research monies and technical assistance. With their enormous budgets and

many employees they constitute strong vested interests not only morally and therapeutically but economically and administratively they have a direct interest in supporting the medicalization of deviance.

Conrad and Schneider point out that only a small segment of medical practitioners are actively involved in debates over deviance designations. They stress that the process of deviance medicalization is not primarily a scientific or professional enterprise, but rather a political achievement. As such, they say, its progress is apt to be cyclical and often responds to "crises" of social control. Some deviance designations tend to be "hybrid amalgams" of badness and sickness --for example opiate addiction and sex offenses.

As a generalization, Conrad and Schneider note that medical deviances often point to behaviors of "compulsivity," which violate rational orientations of the society and seem to call forth a need for biophysical "explanation." They say that in American society, medical conceptions of deviance "have a cultural resonance with dominant values": The heritage of pragmatism, experimentation, individualism and utopianism is reflected in medicalization. Also, they argue that medical deviancy fits well into the Americanized, Protestantized logic of nature's law, God's will and positivistic explanations.

Our investigation of contemporary fat theory in popular and professional interpretation (see Chapter IV) reflects the influence of processes described by Conrad and Schneider. The appropriation of fat into the medical vocabulary of obesity --though fraught with scientific anomaly -- provides an ultimate justification of its normative status: If it could be shown that fat is "bad" because it is "sick," then its

disvaluation can be understood in terms more lofty than mere aesthetic preference. Thus, the medical conceptions of obesity provide ideological ("Scientific") support for rejecting fat, legitimizing an established -- but often ambiguous-- deviant status.

The Sick Role. Implied in the analyses discussed above is that the sociological concept of illness represents an elaboration of deviance theory and the processes of social control. As suggested, the attribution of illness can create a new deviant category, can transfer a deviant object from criminal to medical definition or can add normative substance to an amorphous category of disvalued behavior/condition. The Parsonian view adds the possibility that illness, conceived in a motivational matrix of role relationships, may provide a kind of social control defense against deviance process.

Parsons defines illness as "a state of disturbance in the 'normal' functioning of the total human individual, including both the state of the organism as a biological system and of his personal and social adjustments" (1951: 431). He includes, then, both somatic and social elements.

The Parsonian perspective on illness, in respect to deviance and social control, emphasizes the importance of the sick role as an institutionalized complex of rights and responsibilities available to persons located throughout the social structure. The sick role provides exemptions from normal role obligations while obligating incumbents to specific behaviors and relationships (e.g., seeking and cooperating with competent help). Parsons describes the sick role as a provisionally legitimate, contingent status: The incumbent is exempted from "blame" for the illness condition provided that he accepts the prescribed role

attitudes --in particular the affirmation of the undesirability of the condition.

From the point of view of the social system, the sick role constitutes an adaptive structure in the control of deviance; that is, although it is itself a departure from norms, it functions to isolate and insulate deviant motivation. It prevents the spread of deviant motivation by placing the sick person in a special relation to persons who are not sick; group formation among the sick or positive legitimation of deviance is thereby averted (1951: 312). The norm is affirmed even while (temporarily) unsustained.

In Parsons's presentation, the sick role appears as temporary (1951: 312), suggesting that incumbents of the sick role either "get well" or die -- in either case eventually vacating the role. The social control applications of this concept are less clear in cases where illness is chronic, or --put differently-- when conditions labeled as sick are not found to be susceptible to medical intervention. Somatic complaints of aging, physical disability and obesity seem to fit the latter case. In such circumstances, do the exemptions and the injunctions of the sick role continue to apply? Do the social control functions of the role remain operative?

A growing tendency toward group formation among those labeled sick or handicapped in the society may point to some failure of social control in this respect, or to some alternate conception of the sick role. For example, the idea of "support groups," such organizations as The Arthritis Foundation, the formation of "rights groups"* for the handicapped, the

* NAAFP, the National Association for the Advancement of Fat People (see below) is one relevant example.

feminist-health movement and self-help movements in general have been gaining ground in contemporary settings.

These trends may represent incipient formations of deviant subcultures, whose members -- having escaped the isolating and insulating effects of sick role incumbency -- may begin to generate collective claims for conditions or behavior formerly regarded as deviant. Thus, if Parsons is correct, from the point of view of the larger system, the failure of the sick role as a mechanism of social control signals the possibility of social change.

Considered from the perspective of the individual, the Parsonian conception of the sick role may be incompletely realized when occupied by fat people in contemporary society. The obese, viewed as sick, are expected to view themselves accordingly. They are expected to seek competent help and cooperate with their helpers--to define themselves and their condition as undesirable. Many, if not most, do comply with these injunctions of the sick role--if only during discrete periods of fat careers. Yet rarely it seems are they accorded the rights of the role: They are neither absolved of "blame" for the condition nor, in most cases, released from normal role obligations.

Yet, despite these inequities, it often seems that fat people purposively seek incumbency of the sick role.

Goffman has suggested that those who are defined as sick--along with those he calls "the eminent" --occupy a special position with respect to social identity. They "can be free ...to be deviators precisely because their deviation can be fully discounted, leading to no re-identification" (Goffman, 1963: 141). This view accentuates the "privilege "

components of the sick role.

Under the shadow of an identity-tainting social attribute, fat people may well prefer the sickness designation to that of "badness." But, as Parsons insists, sickness is conferred at a price (1951: 312) -- the acceptance of one's condition and associated behavior as undesirable and the injunction to seek competent help. That is, the price is the extracted promise of self correction, i.e., to change one's self or behavior in the direction of conformity. As we will see, many fat people have paid this price --and continue to pay --with a lifetime of help-seeking and self-devaluing.

This discussion of fat as a health status emphasizes the normative context of illness and illness designations, directing attention to agencies and mechanisms of social control, their functions and processes relative to Fat Theory and Fat Practice.

Sedgwick's view of disease as "human invention" underscores the normative basis of all medical designations -- dissolving implied disciplinary boundaries between social and somatic objects. Our investigation of "obesity" as a clinical construct of Fat Theory supports this view.

In the review of Conrad and Schneider's analysis of medicalization of deviance, we foreshadow our own interest in consequences of Fat Theory for Fat Practice -- that is, the potential politicization of fat knowledge through agencies of social control.

Our review of the Parsonian conception of the sick role raises some questions regarding its application in the case of obesity (as well as for other recruits to the medical model for which medical ministrations have not proved effective). In the case of fat people, it seems, the

sick role may be incompletely realized --even though its social control functions may continue to obtain.

Thus, fat, considered as a health status, resonates a number of theoretical subtleties for problems of social control and deviance -- problems which, as we have indicated, are central to the interpretation of Fat Theory and Fat Practice.

Fat Theory as Legitimizing Lore

Our interest in the social construction of fat has given special prominence to the content of fat knowledge productions. In this we are importantly guided by Berger and Luckmann, for whom,

"...the role of knowledge in the dialectic of individual and society, of personal identity and social structure, provides a crucial complementary perspective for all areas of sociology" (1967: 186).

As noted in Chapter I, our concept Fat Theory points to the process of legitimation as described by Berger and Luckmann, i.e., the "second-order" objectivation of meaning. In the legitimating lore of fat theory, social action and its normative bases are made manifest -- are outlined and codified in tangible form. The clinical constructions and popular paradigms of the literatures we examine provide "manuals" of meaning for the actors to whom they are most relevant.

Thus, the "first-order" objectivations which arise from established institutionalization are reiterated or "seconded" as they become available in the legitimating forms of popular and research literature. In the work of legitimation, cognitive and valuative contents --explanation and justification--are united and made intelligible. The process,

say Berger and Luckmann, is an integrating one; it joins tradition to subjective plausibility (1967: 92-93).

Berger and Luckmann speak of four analytically distinguishable levels of legitimation: incipient legitimation, rudimentary theory, specialized theory and symbolic universes. Incipient legitimation is present in vocabulary itself --in the very transmission of human experience through language. It is the foundation of "self-evident knowledge," by which one acquires the elementary information of the cultural tradition.

On the second level of legitimation are pragmatic explanatory schemes --Rudimentary theory. These include proverbs, moral maxims and wise sayings which directly relate to action.

The third level of legitimation is specialized theory; it goes beyond pragmatic matters of action to a sphere of autonomy and "pure theory." Specialized theory is elaborate and formal and is usually administered by "full-time legitimators."

The fourth and most comprehensive level of legitimation is that of "Symbolic universes." This level transcends the scope of everyday reality --integrating all provinces of meaning within a single, ultimate frame of reference (Berger and Luckmann, 1967).

The analysis of legitimation levels helps to locate our report on Fat Theory and considerably sharpens its focus. On such a continuum--between "incipient" and "ultimate" legitimation levels --Fat Theory might be placed at mid-range. Taken separately, the popular and professional literatures we investigated seem extraordinarily well-suited to the middle levels in the Berger and Luckmann model: Rudimentary and

Specialized theory, respectively.

As rudimentary theory, the popular diet books and magazine articles explain and justify "overweight," and provide formulas of appropriate action with regard to it. Sad tales and success stories are commonly featured, providing a "legend" of fat. Weight charts and calorie counts serve to codify the meanings of "too fat" and "bad eating habits." In this literature, moral maxims abound. For example, the wisdom of "eat to Live - Don't Live to Eat" expresses a sentiment which, in a Protestantized culture that values aesceticism, makes sense.

Specialized Theory is exemplified in the professional literature of obesity, as we have defined it. This lore is administered by full-time specialists, characterized by complexity and differentiation and formulated according to standardized criteria. As legitimation, it provides in Berger and Luckmann's terms, "fairly comprehensive frames of reference for the respective sectors of institutionalized conduct." The science of obesity provides rationales for its treatment and control--i.e., has consequences for pragmatic application. However, as can be seen in Chapter IV, in some respects the development of obesity theory has come to be at odds with the prevailing therapeutic ethos.

That the autonomy of knowledge specialization may get "out of line" with the ideology of its institutional supports was recognized in the Berger and Luckmann analysis. "The body of scientists," they note, "may set up its own institutional processes over against the institutions that the 'science' was originally intended to legitimate"

(1967: 95). Parsons also anticipated this possibility in his discussion of "communication gap" between the layman and the work of scientists -- in which the former fails to see "any use" for the latter (Parsons, 1951: 338). As we shall see in our examination of Fat Theory, certain disjunctions between popular and clinical constructions nicely illustrate these sociological twists.

In summary of the above discussions, our review indicates significant ways in which sociological theory embraces relevant aspects of fat phenomena. Particularly to the work on deviance and to the sociology of knowledge perspective, the present inquiry acknowledges its conceptual indebtedness.

Having considered what we believe are the master theoretical moorings for a study of Fat Theory and Fat Practice, we now turn to a review of prior empirical work.

Empirical Studies of Obesity and Overweight

In the vast literature of empirical work on obesity and overweight, frequent mention is made of "social factors." However, only a small portion of this literature may be characterized as specifically or predominantly sociological in content or perspective. It is this portion we present here in brief review. These studies deal with obesity in relation to social distributions, social attitudes and social worlds. As noted earlier, some of this research has been conducted in fields other than sociology.

The social distribution of obesity. A number of surveys have

reported age, sex and race distributions for obesity based on large probability samples. Certain findings tend to recur in these studies and constitute widely-accepted generalizations. These include: (1) An increase of "overweight" with advancing years through the fifth decade of life, (2) Higher incidence of obesity among women than men from the fourth to the sixth decade, (3) An inverse relationship between obesity and socio-economic status among women in younger and middle adult age groups, and (4) Obesity differences between white and non-white groups -- differences which reverse direction with gender.

The Midtown Manhattan Study (Goldblatt, et al, 1965) found that an inverse relation between obesity and socio-economic status held for both sexes, but the relation was stronger for women. Using a measurement of socioeconomic status (SES) devised by Leo Srole and based on occupation, weekly income, education and monthly rent, the authors found that social mobility as well as SES were predictive of obesity for women. Downwardly mobile women --those for whom SES was lower than that of their parents -- tended to have greater incidence of obesity than stationary or upwardly-mobile women of their sample. Similar obesity trends were found with respect to male social mobility, but these findings were not statistically significant.

That "social and economic factors are strong determinants of obesity" is a chief conclusion of Sims's review of the major governmental statistics compiled on obesity distributions and prevalence (Sims in Bray, 1979). The Ten State Nutrition Survey of 1968-70, Sims reports, showed that obesity was more common among white than

among black men but that the opposite was true for women. For men of both races, lower levels of obesity were associated with lower levels of income. Lower income among women was predictive of obesity only in the younger age groups. Among older women, lower income is associated with lower prevalence of obesity, for both races. According to the Health and Nutrition Examination Survey (HANES) 1971-74), in general, black women show markedly greater incidence of obesity than white women.

With regard to historical trends, the prospective Framingham Study, Sims reports, found each age cohort of men was progressively heavier than its predecessor at corresponding ages. For women, the reverse trend was shown: though taller, women born later in the century were correspondingly lighter (Sims in Bray, 1979). This same pattern was also found in a study of a British population as reported by Montegriffo: "The present day male population is becoming more obese since 1878...present female population less obese"(Montegriffo in Keil, 1974).

The extent of obesity, according to many reports, is said to be "epidemic" (Sims, Keys, Bray, Stuart and others). Estimates of its prevalence in the United States tend to range around 40% -- i.e., four of every ten persons in given age groups may be described as obese according to some definition (see Appendix B on prevalence and Appendix A on measurement techniques).

Social attitudes toward obesity and the obese. In his 1968 discussion of obesity in sociological perspective, Cahnmann concludes that the obese teen (1) is discriminated against, (2) is made to understand that he deserves it, and (3) comes to accept his treatment as just"

(Cahnman, 1968).

Social attitudes toward overweight or obese people, the treatment they receive from others and the problems of self-esteem implied by internalization of negative attitudes -- these aspects have been featured in much of the empirical work. The problem of the attribution of "blame" has also drawn research attention; that is, the degree to which negative attitudes toward fat people may be associated with the assignment of responsibility for their condition.

Data supporting the negative evaluation of overweight and the notion of imputed responsibility was presented by Maddox, et al (1968). They surveyed 199 outpatients of a public clinic who were weighed and categorized as to weight status. The subjects were asked to rank pictures of various body types. Negative rankings of overweight body types were found among subjects of all weight categories.

An earlier study by Maddox and Liederman (in Keil, 1973), reported that among medical practitioners "the overweight patient also clearly invoked a strong negative effect in these respondents." They found that medical doctors characterized obese patients as "weak-willed" and "ugly" and preferred not to manage overweight patients. The study found that while MD's were reluctant to characterize "patients in general," this reluctance was overcome in relation to obese patients.

Marked discrimination against obese students, attributed to "unconscious prejudice," was found in one study that compared proportions of obese and non-obese college acceptance. Canning and Mayer (1966) compared two high ranking colleges with an excellent suburban high school system on prevalence of obesity. Obesity was significantly

lower in the colleges, particularly among female students. The study showed that the obese apply to colleges in the same proportion as the non-obese but are accepted less frequently. Examination of application rates and academic records ruled out "lack of interest and qualifications as explanations." The researchers concluded that "marked discrimination exercised by teachers and college interviewers against obese adolescent females" may be a contributing factor in the relation between obesity and social class among women. They postulate that "it is not social class pressures that keeps higher class membership less obese, but their being less obese initially that contributes to their higher class status."

In the study by Richardson, et al (1961), a uniformity of negative societal response to obesity was found among children of diverse racial and ethnic origin --boys and girls aged ten to eleven including those with physical handicaps. The children were presented drawings of six other children: one obese child, one child with crutches and a leg brace, one child in a wheel chair, one child with a missing hand and a facially disfigured child. Asked to rate the drawings according to friendship preference, the majority of the children placed the obese child last. The research indicated no significant influences on the rating by the characteristics of the raters.

A similar type of research was conducted by DeJong (1980) to test teen-age girls' responses to obese peers and to assess the role of "blame" in influencing response. Subjects looked at folders containing photos and statements of introduction of an overweight girl or a "normal" weight girl. Some folders contained statements "explaining"

that a thyroid condition was a cause of overweight for the pictured girl.

Results of the study were said to "demonstrate that a derogation of the obese results from the presumption that such persons are responsible for their physical deviance." DeJong suggests that unless the obese can provide "excuse" or show a recent weight loss, "their character will be impugned." In this respect, he says, the "obese have more in common with those who possess a characterological stigma" than with those who are physically handicapped or disfigured.

In another study of teenaged subjects, Huenemann, et al. (1966) surveyed and took weight measures of 1,000 students, testing the same group for three years from ninth grade through twelfth grade. The survey indicated a high degree of interest in and dissatisfaction with the size and shape of their body among both boys and girls. The researchers classified 48 of the girls as "overweight" but found that 63 percent of all the girls in the ninth grade "wanted to lose weight." The percentage of girls wanting to lose weight increased with each grade. Boys, on the other hand, tended to want to gain weight.

The intensity of interest in "overweight" by teen-aged girls is again affirmed in the 1968 research by Canning and Mayer who noted "an obsession... (with overweight) ...to such an extent that nonrelated areas become involved in the issue." The authors found that junior and senior high girls-- both obese and non-obese -- often responded to sentence-completion blanks in terms of food or weight-status concerns. For example, 53.9 percent of the obese informants, in completing the sentence "she often wishes that ..." responded in such terms. Of the

non-obese girls, 20.2 percent gave completions related to weight or overweight. Other sentences that drew this reaction included, "She was depressed about ...", "She felt nervous about," and "She became scared when ..."

Canning and Mayer say their findings correspond with those of Monello and Mayer (1963) on the preoccupation of the obese with their condition. They liken this "obsessive concern" to the feeling states of minority group members as described by Allport. Using word association tests, picture stories and sentence completion tests, Monello and Mayer measured personality traits of obese and non-obese adolescent girls. They found that the obese group was characterized by "obsessive concern with one's status, acceptance of dominant values, passivity, withdrawal and perhaps strengthening of 'in-group' ties." These traits were said to be similar to those found in "victims of prejudice"-- i.e., the racial and ethnic minorities studied by Allport.

The social worlds of fat people. Here we review five descriptive studies conducted in the natural settings of fat people and using qualitative types of data.

Laslett and Warren (1975) investigated by participant observation the organizational setting of a commercial weight reducing group in California (unnamed). Their study focuses on the organizational strategy for "changing the behavior of fat people so they will become thin." The authors find that the organizational strategies of the group tend to reinforce and promote the acceptance by members of a stigmatized "fat" identity as a means of normalizing their behavior. In contrast to Lemert's concept of secondary deviation, say the

authors, the result of self-labeling here is believed (by members and the organizational strategy) to produce not the stabilization of deviance but "conventionalization" of behavior, i.e., eating behavior.

A second participant-observation study conducted in a reducing group is that by Allon (in Howard, 1975). Allon observed ninety meetings of "Trim Down" from 1967 to 1971. She reports that dieters conceive of overweight as either sin or crime. She says that in relation to food behavior, dieters speak of themselves in religious metaphor --("saint, sinner, angel, devil..."). Allon, like Laslett and Warren, also notes a reinforcement of stigma by the group strategy.

English and Loro (unpublished), observing a weight-reducing therapy group, describe three types of "accounts" by which fat people explain their condition, their food behavior, and lapses of "willpower." These types are termed "excuses," "justifications," and "apologies." Excuses involve admissions of culpability and a claim of "tragic flaw" of self control. Justifications point to extenuating circumstances. The concept of apology, taken from Goffman (1971), involves dissociation from the offending self and affirmation of the violated rule; apology is accompanied by exaggerated vows of penance.

The authors say that fat people "engage extensively in the use of accounts to explain their eating behaviors and weight problems ...as a reaction against the stigmatization to which they are subjected." The accounts, they say, represent acceptance of the "societal view of their weight problem; namely, it is their own fault or responsibility." At the same time, say English and Loro, the accounts "serve to mitigate personal responsibility in a socially acceptable fashion." The authors

note with surprise that none of their respondents invoked "the excuse of 'biological drives'," or organic explanations of fat.

By far the most extensive study of fat people in social worlds is that of Millman (1981). Her book, Such A Pretty Face, describes "some characteristic ways of viewing the world and living in it that are prominent in the biographies of fat people." Drawing on interviews and other qualitative data, Millman presents sociological aspects of the fat experience --particularly in relation to sex role conflict and sexuality. She considers the personal and political ramifications of various self-improvement programs and typified "explanations" of fat causes and consequences. Also, she reports on several institutionalized settings --including a summer diet camp for teens and a local chapter of the "fat rights" group, National Association for the Advancement of Fat Americans.

Millman's focus, within the context of contemporary, urban, middle-class American culture, is on the concept of career:

"Being fat, like having a work career, is something that is experienced over time. It has its routines and expectations, its characteristic ups and downs; it has its crises, adventures, romances, panics, depressions and rewards. People who are otherwise different but alike in being fat therefore often build a life in similar ways" (1981: xiv).

Being overweight, Millman says, is "imbued with powerful symbolic and psychological meanings that deeply affect the person's identity in the world." She finds that fat incites a puzzling depth of societal response --from loathing to fear and dread; it is likely to be interpreted in terms of weakness or defiance but in most cases

greeted with hostility. Fat people are aware of --even participate in --these perceptions, says Millman. As a result, they find themselves in a "special, marginal relationship to the world," --frequently excluded and when not excluded, beset with tension, uncertainty and self-consciousness.

Millman says fat women are accorded a non-sexual status; alternately (and less publicly) they may be cast into a degraded, "lower-class," freakish, exaggerated type of animal sexuality. The former status is conferred by the assumption that fat women "have chosen not to make their bodies attractive, chosen to avoid sexuality and sexual relations." The degraded form of sexuality assigned to fat women arises from an assumption of a voracious sexual appetite paralleling the presumed food hunger.

Fat men, Millman suggests, experience obesity much differently from fat women. They tend to be less self-conscious about their weight, less inclined toward introspection about its significance in their lives, and less likely to equate fat with "character."

"Being overweight is a more powerful and pervasive experience for a woman than for a man. In our culture being fat more deeply affects a woman's self image, her social identity and her treatment by others. Even when a woman is only 20 or 30 pounds overweight, her life is often greatly affected by her weight, while men are allowed a much greater margin of weight variance before they are defined by others as "overweight" or see themselves that way. Even men who are 200 pounds overweight by conventional standards told me that being fat wasn't very important in their lives ...didn't cause them suffering in work or in their personal relationships" (1981: 216).

Millman interprets much of the differences in men's and women's experience in terms of their respective sex roles and the differential

meanings attached to men's and women's bodies. The social value of women, she notes, is primarily calculated in relation to their status as sexual objects for men. The social worth of women declines when their looks depart from media standards of desirability. But men, says Millman, are primarily evaluated by criteria unrelated to physical appearance; for then, the impact of obesity is felt in its association with aging or sickness (1981: 224). Millman suggests that it is the approval of men which is important to both sexes.

"...whereas women felt that being fat made them less successful as women in the eyes of men, who were the judges, men seemed to be saying that their excess weight diminished them as men in the eyes of other men rather than women. ... (I)t is men who set the standards of sexual success and failure and men who constitute the critical audience" (1981: 224).

However, Millman concludes that physical attractiveness is becoming more salient to men "as they are increasingly evaluated according to media images."

Millman's work identifies two important themes in the lives of fat people, particularly women. The first is the theme of "disembodiment"-- a split between mind and body in which the self is dissociated from its despised somatic entrapment. One exists "from the neck up"-- disattending the body, avoiding its reflection in mirrors, hiding in coats and billowing garments. The alienated body is viewed as a foreign defilement of the face and head--as an "enemy" of the self which defies its control.

A second theme is "Before and After" --the fantasy of a future transformation from fat to thin, from ugly to beautiful and from reviled

to revered. Millman suggests that fat, more than other stigmatic attributes, particularly lends itself to this syndrome: Blindness or lost limbs are viewed as permanent conditions. But the cultural legend of fat holds out the hope of change; it is judged as an "intentional" and thus reversible state. As a consequence, Millman says, many fat people live a "postponed life." They disparage the present self and discount its circumstances, investing all reality in a fantasized future of being thin and realizing all thwarted dreams.

"Like Cinderella or the Frog Prince, the fat person lives with a double identity. Her present self-in-the-world may be fat, ugly, despised or disregarded, but inside, carefully nourished, is a private future self that is beautiful, powerful, lovely" (1981: 203).

"Such a pretty face" expresses, for Millman, the sense in which fat people experience a gap of integrity between the self and the body. The phrase, she says, captures "the hope and tragedy" built into a disembodied, postponed identity. In the schism between a hated present life and a magnificent future hope many fat people render themselves remote and immobile. Suspended in bodily estrangement and social isolation, they cast themselves out from life.

CHAPTER III

METHODOLOGICAL REPORT

We have pursued two main avenues of inquiry in this work -- communication and examination. As academic methods, these may be termed "field work" and "content analysis."

Field Work

In the context of the present project, field work meant engaging with authoritative persons in the field, i.e., people with personal knowledge about being fat. During the course of one year, employing the specific techniques of depth interviewing and participant observation in groups --as well as in other, less structured situations -- we have communicated with many fat persons. We have interviewed sixteen patients and prospective patients of obesity surgery, have interacted with and collected biographies among the membership of two local weight reducing organizations over a six month and three month period (respectively) and have spoken to numberless persons about fat problems and fat experience.

The specific research activities of field work, their relation to the problems of the inquiry and some of the attendant pragmatic and ethical issues are presented below.

Interviews. Depth interviews lasting from 90 minutes to two hours were usually conducted in the home of interviewee or interviewer. Most of these were tape recorded, with the approval of the respondent. Other long interviews were conducted in less formal circumstances. For example,

one interview took place in a bar after a group meeting; another interview was conducted "in lieu" of a group meeting, when only two members were in attendance --the interviewer and the interviewee. Several full biographies were collected over a series of telephone conversations and other interactions with members of TOPS and OA. All interviewee-respondents understood they were speaking to a person with research interests in the subject of overweight and fat problems and that information they provided would be used in academic or other types of written reports. They were assured of confidentiality and anonymity.

In the selection of surgical patients for interview, a "snowball" technique was employed. Beginning with initial informants, we asked to be referred to other potential interviewees. In almost every case, our respondents were able to locate others who were willing to be interviewed. This method of selection was convenient and provided a measure of autonomy for the interviewee; of course it also, necessarily, limited the variability of the respondents in social respects (as to social class, for example), as well as in other respects (in particular the range of outcomes of the surgery). For these reasons, we are careful to make no claims about the representativeness of the group of respondents and accordingly, to limit generalization to wider patient populations.

The interviews of surgical patients provided biographical information, some medical history, detailed experience of dieting and other weight reducing strategies as well as introspective accounts of fat --motives, feelings and "explanations." Because of anticipated "sensitivity" on the question of scale weight, it was decided not to ask this information directly; and few respondents volunteered it directly.

However, many respondents were willing to disclose their weight indirectly. That is, they told the number of pounds they wanted to weigh and the number of pounds they needed to lose to reach this "goal weight." This bit of artifice was not intended as deception; rather it was mutually understood as a delicate dodge for the sake of diplomacy. For, beyond a certain range, one's scale weight represents not merely a number or quantity but a stigmatizing label. One woman, after divulging her weight in the surreptitious manner, paused and then stated it baldly. "I can't believe I actually gave you the figure," she said.

Table 1 provides weight information for gastric bypass respondents. Data shown includes preoperative scale weight, goal weight, weight at time of interview and number of months elapsed since time of the operation. Percentages of overweight (preoperatively and at time of interview) were calculated based on desired weight as defined by the respondents themselves. In most cases these desired weights corresponded closely with those provided in standardized height-weight charts, which have been widely publicized in the popular literature of overweight (see Chapter IV).

In addition to interviews with surgical patients, prospective surgical patients, and members of OA and TOPS organizations, we were also able to secure interviews with a number of persons unaffiliated with groups or concerted fat action. This was possible through an advertisement placed in the classified section of a local newspaper. The ad read as follows:

"Trying To Lose Weight? Join with others to discuss problems of overweight and dieting experience. Share information and insight for research project. Call,..."

The initial research plan called for setting up a panel discussion group to be tape recorded (overtly). Although this did not prove feasible,

TABLE 1
WEIGHT INFORMATION FOR RECIPIENTS OF GASTRIC BYPASS SURGERY
(N = 13)*

CODE NAME ¹	KR	SR	SC	BN	WA	SJ	XB	BL	HB	MK	SB	EC	BC
MOS. POSTOP	29	22	16	15	14	13	9	9	6	5	5	5	3
PREOP WT. ³	285	273	316	220	216	303	331	350	300	220	280	230	313
GOAL WT. ⁴	135	135	146	150	135	140	180	140	130	135	135	130	148
PREOP OWT. ⁵	111	102	116	47	60	160	83	150	62	62	124	100	111
WT @ INT. ⁶	160	165	195	160	135	136	180	254	220	160	230	180	249
\bar{X} RATE LOSS ⁷	4.3	4.9	6.3	4.0	5.7	10.0	16.77	11.55	13.33	12.0	10.0	10.0	21.3
OWT @ INT. ⁸	26%	22%	34%	7%	-0-	24%	-0-	81%	69%	19%	70%	38%	68%
AGE	28	43	33	39	34	32	24	36	32	25	44	19	34
SEX	F	F	F	F	F	F	M	F	F	F	F	F	F

* Information for some respondents not included because either they declined to give scale weight (N=1) or because they were interviewed less than one month after surgery (N=2).

¹ Code Name: Used to protect the privacy of respondents.

² MOS. POSTOP: Number of months following surgery at which time interview was conducted.

³ PREOP WT: Preoperative weight = the scale weight of the respondent before the surgery, as given by the respondent (in pounds).

⁴ GOAL WT: Goal Weight. The number of pounds which, according to respondent is proper, i.e., desired weight. In most cases, these corresponded with conventional height-weight standards.

⁵ PREOP OWT (%): Preoperative Overweight (percent). Preoperative weight less desired weight divided by desired weight.

⁶ WT. AT INT: = Weight at time of interview. Some respondents gave their current weights. Others gave preoperative weights and the number of pounds they wanted to lose to achieve desired weight. Current weights were calculated accordingly.

⁷ \bar{X} RATE LOSS: = Average rate of monthly weight loss. Number of pounds per month lost as quotient of preoperative weight less current weight divided by number of months since date of surgery.

⁸ OWT @ INT (%): = Percent overweight at time of interview. Given by current weight less desired weight, divided by desired weight.

the ad (which ran two times on succeeding Thursdays-Fridays-Sundays-) produced many callers, of whom several were willing to be interviewed personally. These respondents provided valuable information on dieting experience outside the context of group settings and medical auspices.

Other perspectives were pursued in interviews with persons in various positions of observation: We interviewed a former "lecturer" for Weight Watchers International, a former manager at Professional Reducing Centers, a social worker who leads a support group for patients and prospective patients of obesity surgery, and a newspaper reporter who observed that group and wrote a story on it.

Participant Observation. There would seem to be few situations of social interaction which can be directly observed by human beings who are not, in some sense, participants. In most cases, one who would observe must also participate -- that is, take a role. From the perspective of research, the problem becomes one of discovering or constructing a role which is most appropriate --or, more accurately, is least inappropriate: A role which neither contaminates the observation nor compromises those observed.

For this study, we entered two group settings as a member. Like other members, we brought to the setting our own unique constellation of personal perspectives and experience. Like others, we observed as well as participated. We made no special announcement of the "scientific" character of our observation; on the other hand, we did make known our academic interest in the subjects of overeating, overweight and problems of being fat. In various informal ways, that is during the course of normal interaction, we described our project as a written, graduate-school production in connection with a sociological course of study.

This information was usually greeted with mild interest; in no case did it inspire any remarkable response.

The legitimacy of our membership in these settings was never questioned --by others or by ourselves. We were, in fact --and in spirit-- a genuine member of both groups; did, in fact, share in the perspectives and experiences relevant to their interaction.

As a member of Overeaters Anonymous, we attended weekly meetings over a period of six months. For a brief part of this time, we served in the capacity of "librarian" --that is custodian of books and pamphlets which are sold and loaned to members. In this role (not a leadership position) we performed as substitute for a temporarily absent member. The organizational structure of OA does not provide for officers as such. Regular participants alternate as leaders of the meeting. Since the local group is small, almost every member takes a turn performing this function. The meetings (further described in Chapter IV) are informal; they consist of a few prayers and ritual readings interspersed with spontaneous conversation. In addition to the meetings, members of OA regularly converse by telephone. In spite of the tradition of anonymity (which is upheld by non-disclosure of last names), relationships between OA members often attain a special depth. We established close associations with three members of this group, extending the interaction of the meetings to other situations.

As a member of Take Off Pounds Sensibly, we attended weekly meetings for a period of three months. We also attended the after-meeting suppers at restaurants. The TOPS group takes up a number of activities outside of its weekly meetings. On approximately a monthly basis, the

members ride to a nearby city for "rallies" -- at which inspirational speeches are given, skits performed and special awards presented. The members share a meal after these occasions. Sometimes "salad suppers" are featured in homes after the regular meetings.

In contrast to the anonymity of OA, TOPS membership encourages personal familiarity among its members. Anniversaries and birthdays are acknowledged. Members' names, addresses and phone numbers are listed on a membership roster --along with birthdays and anniversaries. Members often share rides to the meetings, restaurants and events. New members are asked to introduce themselves and tell something about their personal lives, their work, their families, etc. A member who misses a meeting receives a telephone call from another member. Absences may be "excused" by calling in advance to inform the appropriate member of the reason for the absence. In summary, then, the TOPS setting provides abundant opportunities for interaction.

In both of these group settings, our participant observation consisted of listening, watching and asking questions. Our "data" consisted primarily of conversation, but also included observed action such as (especially in the case of TOPS events) eating behavior. We focused particular attention on the ways in which group policies and philosophies were articulated and implemented by the members. We listened for common interpretive themes of fat experience and fat problems. In the meeting situations it was sometimes possible to take very brief notes. But for the most part it was found that notetaking was a distraction from both observation and participation. The most successful method of recording observations and participation was to do a "write-up" after each session

of interaction -- whether it be a meeting or a rally or a phone conversation. In retrospective notes we were able to record large quantities of information (including subjective "introspective" data). At each recording session, after writing up the immediate scene, we reviewed earlier write-ups for new clarifications or significance. From these efforts, a system of notation, organization and analysis emerged, so that we were able to develop categories and themes for tentative application to later observation. As one outcome of this process, we were able to discern certain "patterns" and "moods" that fat people associate with "compulsive eating," and to discover some specific elements of the meaning of dieting (see Chapter IV).

A support group:--the initial forays into the field. In the earliest stages of this research, we attended two meetings of a hospital-sponsored support group for patients and prospective patients of obesity surgery. This group had been recently formed and had not yet constructed rules governing its membership. (It was later learned that our presence at these meetings provided the impetus for a group decision about who may be admitted and who excluded.)

After having attended two meetings of the group (time and place of the meetings was regularly posted in the local newspaper), we petitioned for "official" acceptance in the role of observer. Our research purposes were explained to the gatekeepers --a social worker and a nurse.

The request to observe was denied --but not immediately. At first it was agreed that the decision would rest with the group members rather than the gatekeepers, since it was "their group." We were to present our appeal in person at the next meeting of the group. Later, we were

told that the request would have to be in written form and we would not be allowed to appear. This ruling was explained on the grounds that fat people, having been "rejected so often themselves" are unwilling or unable to reject others --"even when they do wish to do so."

The final decision was made entirely by the gatekeepers. We were told that the group was "too new" to allow the influence of "being studied," that this would tend to "inhibit" the members, and that: "We are not a zoo."

Our failure to gain entry to this setting was both substantively and methodologically instructive. It may have provided a glimpse of fat stereotypes within the helping professions. Also, it underscores the lesson that gatekeeping authority, like any authority, is not readily relinquished in favor of democratic principles.

Content Analysis

We have collected and examined a great volume of written material as data for this investigation. Four separate sources of information have been explored: (1) Popular literature of fat, (2) Professional literature of fat, (3) Personal Documents, and (4) Organizational literature. Below we describe the data, the method of its selection and some principal personnel involved in its production. We also discuss the relevance of each source to the problems of the inquiry.

The contents of popular and professional literature are analyzed with respect to the concept Fat Theory, as defined earlier (see Chapter I). We inspect these doctrines as cognitive legitimating lores, focusing on four components of their empirical presentation: their definitional,

physiological, psychological and symbolic constructions of fat.

The contents of personal documents and organizational literature have been interpreted with reference to our concept of Fat Practice, that is, ways of life and world views of fat people. In the personal documents, we seek records of social action, experiential accounts of feelings and motives, reflections on the meaning of being fat and the construction of fat selves. The organizational literature was examined for statements of policy and philosophy, i.e., the strategies of action recommended to fat people for coping with and solving fat problems.

The Popular Literature of Fat

The data includes 26 popular diet books, innumerable articles from popular periodicals, several television shows and one movie. The books were selected from two decades of best-seller lists as provided by major bookstore chains, with special emphasis on those which have sold well over long periods and those with highest current sales. Magazine articles were chosen (on an availability basis) from those listed in Reader's Guide to Periodical Literature under the headings of "weight" and "reducing diets." (Reader's Guide does not use the word Fat in its headings.)

Television talk shows frequently provide a format for popular expertise, and the topic of fat is frequently chosen. We have attended these showings on every possible occasion, seeking out their listings in the TV schedules. In some cases, transcripts were available by mail. A recent movie which featured a fat person in the lead role was called Fatso, starring Dom DeLoise and Ann Bancroft.

Since the books and magazines were more accessible for review, we have relied more heavily on them for analysis than on the other media. We do believe, however, that the fundamental imagery is consistent in all the forms of popular literature. Indeed, the successful marketing of diet books is considerably dependent upon promotional coordination with other media.

Many diet book authors become media personalities and their diet programs household words. In the 1970's, diet entrepreneurship was typically legitimated on a foundation of medical authority; several diet doctors became celebrity experts. For example, Dr. Irwin Maxwell Stillman (the "water diet"), promoted the sales of his book via numerous television appearances. On the jacket of its latest paperback edition, The Doctor's Quick Weight Loss Diet proclaims "5,500,000 copies sold." Another medical practitioner became famous with Dr. Atkins' Diet Revolution (1973).^{*} Now in its tenth printing, Dr. Robert Atkins' book advocates the program known as "the low carbohydrate diet."

In the diet-book market of the 1980's, celebrity by itself may have outstripped medical authority as a basis of mass appeal. Currently, the most visible of diet entrepreneurs is Richard Simmons. His book, Never Say Diet (1981) recommends diet and exercise programs on the charismatic authority of the author himself, an ebullient show business performer and promoter. Simmons appears in regular syndicated and network television series; he tells viewers that he was once fat but now

^{*} Dr. Herman Tarnower also became famous after publication of his "Scarsdale Medical Diet" in 1978. However, some considerable portion of Dr. Tarnower's fame must be attributed to his death by gunshot and the sensational murder trial which followed it.

has discovered a path to permanent slimness.

Because of its wide accessibility to diverse populations, the popular literature of fat is an important source of knowledge production. Its contribution to the social construction of fat -- in terms of integrating cognitive and normative elements -- becomes evident in the analysis of its content. To some degree the popular literature disseminates the content of professional, specialized knowledge -- i.e., "translates" the authoritative message of science into everyday parlance and prescriptions for action. This is implied in the authority of "celebrity experts." At the same time, however, the popular presentations represent a kind of revolt against the "higher" reaches of knowledge. By simplifying, they relativize the abstracted authority of science. By reiterating the ideological constraints on science --i.e., the demand to solve problems of action -- popular literature reaffirms the "corrective" stance toward fat, as over against its purely naturalistic understanding.

To Fat Theory the popular literature contributes activism, optimism and normative certainty. It supplies both the moral legends and the folk remedies of fat.

The Professional Literature of Fat

We have collected and reviewed over 150 articles on obesity from the professional journals of nutrition, medicine, psychology, biochemistry and allied therapeutic fields. In addition, we studied a large volume of material on the surgical treatment of "morbid obesity." Most of the journal articles were selected from the 1978-1981 listings

of Index Medicus, under the heading "obesity." The remainder were located from bibliographical citations within the articles. Only the most representative and/or those cited in the dissertation narrative are included in bibliography. In Table 2. we present a partial list of professional journals which have published articles on obesity (and in parenthesis the number of articles from each that were surveyed for this report).

In addition, to the above material, we studied the following major reviews of the obesity literature, published by top authorities in medical, psychiatric, physiological and nutritional fields:

1. The Obese Patient, by George Bray, M.D., 1976.
2. Obesity in Perspective, George Bray, M.D., editor, 1973 (proceedings of the Fogarty International Conference on obesity).
3. Obesity in America, proceedings of obesity conference, George Bray, 1979, sponsored by the National Council on Obesity, U.S. Department of Health, Education and Welfare, Public Health Service.
4. Energy Balance and Obesity in Man, J. S. Garrow, 1974.
5. Obesity, Albert J. Stunkard, editor, 1980.
6. Overweight: Causes, Costs and Control, Jean Mayer, 1968.
7. Recent Advances in Obesity Research, Alan Howard, Editor, 1973.
8. The Psychology of Obesity, Norman Kiell, editor, 1973.

From our review of obesity literature, four names emerge as clearly among the most prominent contributors (in terms of both frequency of their research contributions and numbers of time cited in the work of others):

George Bray, M.D., Professor of medicine at University of California Los Angeles (Harbor Medical Center Campus), Dr. Bray served as chairman

PARTIAL LIST OF PROFESSIONAL AND SCIENTIFIC JOURNALS WHICH HAVE PUBLISHED ARTICLES ON OBESITY RESEARCH. (And the number of articles reviewed from each).

Addictive Behavior (3)
American Journal of Clinical Nutrition (30)
American Journal of Gastroenterology (3)
American Journal of Medicine (1)
American Journal of Proctology Gastroenterology Colon and Rectal Surgery (2)
American Journal of Psychiatry (1)
American Journal of Psychology (2)
American Journal of Public Health (1)
American Journal of Surgery (3)
American Family Physician (1)
Archives of Internal Medicine (3)
Archives of Surgery (2)
Annals of Internal Medicine (1)
British Journal of Clinical Practice (1)
British Journal of Nutrition (1)
British Journal of Medicine (1)
British Journal of Surgery (2)
Canadian Journal of Surgery (1)
Canadian Surgery (1)
Canadian Medical Association Journal (1)
Clinical Pharmacological Therapy (1)
DM (Disease of the Month) (1)
Experimental Aging Research (1)
Hormone Metabolic Research (1)
International Journal of Obesity (15)
Journal of Abnormal Psychology (1)
Journal of the American Dietetic Association (2)
Journal of the American Medical Association (14)
Journal of Clinical Psychiatry (1)
Journal of Clinical Psychology (3)
Journal of Consulting and Clinical Psychology (4)
Journal of Health and Social Behavior (3)
Journal of Lipid Research (1)
Journal of the Oklahoma State Medical Association (1)
Lancet (6)
Maryland State Medical Journal (1)
Mayo Clinic Proceedings (1)
Minnesota Medicine (1)
New England Journal of Medicine (9)
Nutrition Review (1)
Pharmacological Biochemical Behavior (1)
Psychosomatics (2)
Physiological Behavior (1)
Practitioner (3)
Surgery (1)
Surgery Annual (1)
Surgery, Gynecology, Obstetrics (1)
Surgical Clinics of North America (4)
Surgical Forum (1)

of the 1973 Fogarty International Conference of Obesity, editing the volume cited above. He also chaired the National Council on Obesity conference in 1979, editing its conference report. Bray serves as the American editor of International Journal of Obesity. A prolific contributor in all aspects of obesity research, Bray also performs surgery and has reported extensively on obesity surgery.

Jean Mayer, Ph.D., D.Sc. Professor of nutrition and chairman of the Harvard School of Public Health, Dr. Mayer's contributions to obesity study number over 500 articles and several major reviews. He has served on a number of governmental research panels on nutrition, fitness, and food resources. He writes extensively for both popular and professional audiences and is particularly noted for his work on the relation between obesity and exercise.

Albert J. Stunkard, M.D. Professor of medicine in the department of psychiatry at University of Pennsylvania, Philadelphia. Dr. Stunkard is noted for clinical work in the psychotherapeutic analysis of obesity and also for the classic experimental study of gastric motility (see Chapter IV). He has authored several major reviews on the status of obesity research.

John S. Garrow, M.D., Ph.D. A British physiologist and professor of medicine, Dr. Garrow is associated with Medical Research Council of Clinical Research Centre, Middlesex, England. His work deals with basic bio-science in obesity study.

Other major approaches to obesity theory and research are represented by Hilde Bruch (noted authority in the psycho-analytic treatment of obesity and eating disorders such as anorexia and bulimia), Judith

Rodin (Yale researcher in the field of physiological psychology), Ancel Keys (nutritionist who developed military "K" rations, a critic of insurance company conclusions on the relations between obesity and heart disease) and Carl Seltzer (Harvard biological anthropologist, critic of insurance company statistics on overweight).

The professional literature of fat constitutes the highest level of empirical legitimation within Fat Theory, as conceptualized here. Scientific study of obesity elaborates the cognitive meanings of fat and integrates these with normative orientations. In many cases, the product of this knowledge process provides a guide for socially appropriate therapeutic practice. However, because of the independence of scientific enterprise from its ideological moorings, knowledge may at times fail to ratify the institutional ethos. This problem has been more fully discussed in other chapters.

Personal Documents

For present purposes, personal documents include written materials in which people present biographical details of their own experience along with meaningful interpretations of that experience. We have assembled a large sample of such materials published in the form of letters, biographies, manifestos, testimonies and stories.

The letters are drawn from "To the editor" sections of Weight Watchers Magazine and Big Beautiful Woman (BBW) Magazine. Some letters to Weight Watchers Magazine were collected into a book published by the founder of that organization, Jean Nidetch (1975). We located three book-length biographies by women focused on the experience of being fat

and losing weight: Diary of A Fat Housewife, by Diane Cook; God Knows I Won't Be Fat Again by Karen Wise; and Winning the Losing Battle by Eda LeShan.

We also include as personal documents the works by two men -- Marvin Grosswirth (Fat Pride: A Survival Handbook) and Llewellyn Louderback (Fat Power: Whatever You Weigh Is Right) -- both writing in the format of the "manifesto."

A wealth of personal testimony is available in connection with fat problems, particularly testimonies that endorse particular programs for reducing. We have drawn from a book of testimonies published by Overeaters Anonymous. The book includes Chapter-length autobiographical accounts by 30 persons describing the "illness" experience of compulsive overeating and their process of recovery through the OA program.

Stories of transformation from very fat to fashionably thin are commonly found in ladies' magazines. We have located a number of these stories for use as personal documents.

Organizational Literature

Information on the policies and philosophies of the OA and TOPS groups was available in pamphlets, books, newsletters and manuals. The OA network maintains a publishing office in connection with Alcoholics Anonymous World Services, Inc., P. O. Box 459 Grand Central Station, New York, NY, 10017. The organization of TOPS clubs is centered at 4575 S. Fifth Street, Milwaukee, WI. Members receive monthly copies of TOPS NEWS, which contains reports of activities and awards, before-and-after pictures of members who have lost weight, and inspirational messages of various type to encourage dieters. In addition to the

newsletter, TOPS members receive a "Manual for New Members" outlining the organization's history and its approach to reducing.

In summary, our research activities for this project have pursued two kinds of objects --people and their products. Toward the study of Fat Theory, we reviewed written materials as products of action. Our account of Fat Practice derives from observations of and interactions with people, and from their own reports--in interviews, conversations and written documents. From these materials, the interpretation of meaning rests on a shared human intersubjectivity; that is, we understand human action by being human, not via methodological technique per se.

CHAPTER IV

THE FINDINGS

Of the humanly-meaningful dimensions of fat, this study pursues two interpretive aspects: The cognitive context of objectified knowledge, which we have called Fat Theory, and the experiential sphere of social interaction and individual reflection, which we term Fat Practice.

Fat Theory describes the facticities of fat as portrayed in popular paradigms of media imagery and clinical constructions of professional-therapeutic lore. We examine two bodies of contemporary fat literature, with particular focus on the empirical formulations about (1) the definitions of fat, (2) its organic essence, (3) its psychological understanding, and (4) its symbolic cultural importance. Between the two stocks of knowledge, some broad comparisons are drawn; yet there is no attempt to evaluate or rank the respective knowledge products -- or in any way to make assessments of truth value. Neither do we intend a specific analytical enterprise, such as testing a sociological "theory of fat theory." The effort has been merely to render the basic content of the material, indicating elements of its tone and character.

Fat Practice explores some ways of life of fat people; that is, interactive and reflective facets of the fat experience. Here we consider varieties and commonalities of individual social action -- (particularly means-ends patterns of conduct)-- within situations where

fat is a prominent feature. We focus on choices of action, vocabularies of motive, problems of identity--that is, on the forging of fat selves in special action. The basic data is that which communication yields; thus we present, in synthesized form, biographical material from interviews and the conversation of participant observation. Personal documents have also contributed to the description and interpretation of Fat Practice.

These two contextual categories do not, of course, exhaust all possible human orientations to fat. We have not attempted a full presentation of its social construction. Our inquiry is limited to designated aspects of a conceptual machinery and individual expressions of its application in interaction processes. Theory and Practice, then, point to ways of knowing about and being fat in contemporary society.

Fat Theory: Popular Paradigms and Clinical Constructions

In terms of primarily cognitive orientations toward fat in our culture, we have studied two chief repositories of empirical lore -- the lay literature of popular media and the professional production of research reports, reviews and editorials in specialized journals. These documents and the manner in which they were collected and reviewed as data have been described in the previous chapter.

The two bodies of doctrine produce markedly distinct portraits of obesity/overweight and the status of cultural knowledge about fat. This is so, even though some portion of the popular literature has been authored by professional "experts" -- (e.g., variously certified practitioners of medicine, psychology or nutrition).

A reading of the information provided for public consumption tends to foster the impression of closure, consensus and clarity; such terms as "proof," and "breakthrough" and "solution" are freely employed. By contrast, the professional writings on obesity seem to emphasize questions rather than answers; anomalies abound and relationships are indeterminate.

The popular press often refers to what it calls "medical science," -- by which is meant a circumscribed body of doctrine and research activity within a particular institutionalized milieu. Readers are encouraged to believe that medical science: a) has established the existence of an entity called "obesity," the conceptual content, definition and measurement of which is agreed upon and unproblematical. b) Understands an unambiguous causal relation between obesity and dietary intake. c) Takes a consensual position that obesity is "bad for health."

As will be seen in following sections, none of these presumptions can be supported by examination of the professional literature. Neither medicine nor any other disciplinary milieu of applied science or basic science has succeeded in establishing uncontested definitional boundaries for the concept of obesity. Even though certain conventions have been followed in the use of indicators, these are far from being widely endorsed as satisfactory. The effects of dietary intake upon obesity -- object of a great number and variety of investigations -- are very uncertain. As for the relation of obesity to human health -- which has been actively debated in the literature -- there is an abundance of statistical data but its interpretation is often in doubt.

"See your doctor." That is the universal aphorism of all popular diet books. It implies that medical practitioners are both informed and interested in the problem of overweight and that medical means exist for its assessment and treatment. Yet, as we have seen (in Chapter III) earlier, obesity expertise is not identical with medical practice. Moreover, the level of medical competence for treatment is uneven at best. Also as shown in the study by Lieberman and Maddox (see Chapter II), physicians often prefer not to treat the obese -- either for obesity or for other complaints.

Of our two sets of cognitive data, four separate questions have been asked: 1. What is the phenomenon of fatness; i.e., how is it defined? Here we discuss the attempts to operationalize the concept, "too fat." 2. What are the physiological understandings about fatness -- its properties, functions, and mechanisms within organic systems? Here we consider and compare etiological and pathogenic hypotheses. 3. How is fatness related to persons or groups? That is, what are the behavioral or personality characteristics of fat people? 4. What is the cultural significance of body fat? What does it symbolize? Here we discuss the Disease Model of fat.

Definitional Constructs: Operationalization and Measurement

"Fat. Obese. Overweight. Tubby.
Portly. Corpulent. Rotund.
Call yourself anything you want.
You know what you are."

Thus begins the opening chapter of Dr. Robert Linn's best-seller The Last Chance Diet (1976): xiv), giving -- like many of its genre --

rather short shrift to problems of definition. While not all popular diet books have dismissed the issue in so cavalier a fashion, most tend toward a generalized tone of unconcern with definition, a reluctance to impose complicated standards or criteria upon readers. Instead of defining fatness, the popular media prefers discussion of ideal or desirable body weights, and the problem of fatness is rendered in the common coin, "overweight." Frequently, diet books include tables of weight by height, sex, age and "frame size." (These tables, compiled by insurance companies, are discussed further below.)

The professional literature is replete with tortuous, sometimes contentious, definitional distinction and qualification. Obesity, the operative word for fatness in most clinical reportage, is fairly uniformly described in terms of "excessive adiposity." This formulation has two acknowledged problems, one theoretical and the other practical. The first is the need for a consensual criterion for the meaning of "excessive." (How much adiposity -- either absolute quantity or quantity proportionate to lean body mass -- is too much?) The second problem is that of access to adipose tissue for purposes of measuring. In living persons, the elements of body composition (organ muscle, bone, water and fat) are not directly sensible. Thus, as is stated by Garrow, most of what is known about human body composition is based on the analysis of cadavers (Garrow, 1974: Chapter 6).

Chief among what is known is that body fat content varies by sex and age. Significant sex differences in fat proportion (and fat distribution) have been shown as early as the second to the fifth day of life (Bray, 1976). Infant girls had higher total fat ratios (and fatter hips)

than infant boys. Studies show that these sex differences in fat content become increasingly significant at puberty. When the pubertal growth spurt begins in girls, body fat content usually increases so that by the end of puberty (age 16), it represents approximately 24 percent of body weight. For boys, body fat rises from 12 percent at age 5 to approximately 17 percent by age 10; with puberty, percent of boys' body fat declines to 11 percent by the age of 16 (Bray, 1976).

For both sexes, it seems, body fat increases and lean body mass decreases with age. Dr. Bray notes "a steady increase in percentage of body fat ... from age 20 through the fifth and sixth decades" (Bray, 1976: 14). He adds: "In many adult humans, body fat is proportionally as high or higher than in the whale!"

Certain aspects of the intended conceptual content for the professional term obesity, then, can be inferred from the literature: Fatness in a quantity (or proportion) which is in excess of some statistical norm, taking into account body composition, age and sex. These definitional elements do communicate a narrowing (in statistical terms) of the idea of "excess" and do capture three associated qualifying variables. Yet they do not provide the clinically satisfying tool that is sought: a uniformly accepted obesity criterion which can be suitably operationalized for diagnosis and treatment.

That no such tool is currently available is evidenced by the number and variety of measurement techniques suggested in the literature. Appendix A gives a list of measuring techniques that have been mentioned in the professional literature. These are of three types: "Rules of Thumb," "Anthropometric" and Chemical Indicators.

On practical grounds, and despite continuing theoretical objections, clinicians and researchers have for decades inferred fatness from indicators of body weight. Several measures of "relative body weight," are in conventional use. These are expressed as percentages of "appropriate," "desirable," "ideal" or "average" weight according to standardized height-weight tables. In almost all cases, the standard tables have been those provided by the insurance industry from policy-holder data processed by the actuaries. Standards based on life insurance data have been used since the first such table was published in 1912. (Seltzer: 1965).

The validity of this life insurance data has been sharply criticized. Methodological flaws are frequently cited, such as the use of "crude" weight-taking techniques, "guesses," or self-reports of the insurance applicants (Keys in Bray, 1973). The representativeness of the policy-holder sample has been severely called into question by several writers (Keys, 1973; Seltzer, 1965). Keys says that the notion of frame size in the insurance data represents not anthropometric standards but "an actuary's imagination" (Keys, 1973). In the 1966 government publication, Source Book on Obesity, the U.S. Department of Health Education and Welfare, it is flatly stated that the most frequently used table "should not be used as a standard for desirable weight." Seltzer has compared insurance statistics with those gathered by a U.S. Public Health Survey, using a probability sample and concludes that the average weights in the U.S. are underestimated by the former. Seltzer says men weigh 9 to 10 pounds more and women 3 to 4 pounds more in the government survey than policy-holders of the insurance company data

(Seltzer, 1965). He says, "there is no valid basis of life insurance company claims that insured persons resemble closely the general public."*

It is widely recognized in the professional literature that the issues surrounding definition and measurement of fatness present significant problems of validity and comparability of obesity research. Yet factors of convenience and tradition seem to have prevailed over other considerations. As a result, the definitional construction of obesity contains a chaotic mix of components: The word obesity itself derives from Latin roots meaning over-eat ("of," over; and "ese," eat). The intended conceptual content of obesity is over-fatness. But its conventionally-accepted indicator is heaviness -- and this despite the fact that of all body components, fat is least heavy by weight. Moreover, the adequacy of standard guidelines for relative weight have been severely questioned.

This situation presents difficulties throughout the various disciplines of obesity study. But the problems seem to be especially acute in the case of medical practice where the lack of adequate conceptualization and measurement is coupled with a need to link obesity with illness. Issues in the medical justification for obesity concepts are discussed in later sections. Here we merely note the observation of one researcher on the dilemma of the medical practitioner, who "confronts patients who are overweight but unconcerned, and patients who are concerned but debatedly overweight" (Garrow, 1974).

* Insurance company height-weight data are given in Tables 3 and 4. These charts have been employed as standard clinical tools for determination of overweight. Table 3 gives United States government statistics on height and weight.

Table 3. Average Weight of Americans According to Insurance Industry Society of Actuaries, Chicago, 1959.*

MEN									
Age Range									
Height		15-16	17-19	20-24	25-29	30-39	40-49	50-59	60-69
Feet	Inches								
5	0	98	113	122	128	131	134	136	133
5	2	107	119	128	134	137	140	142	139
5	4	117	127	136	141	145	148	149	146
5	6	127	135	142	148	153	156	157	154
5	8	137	143	149	155	161	165	166	163
5	10	146	151	157	163	170	174	175	173
6	0	154	160	166	172	179	183	185	183
6	2	164	168	174	182	188	192	194	193
6	4	..	176	181	190	199	203	205	204
WOMEN									
4	10	97	99	102	107	115	122	125	127
5	0	103	105	108	113	120	127	130	131
5	2	111	113	115	119	126	133	136	137
5	4	117	120	121	125	132	140	144	145
5	6	125	127	129	133	139	147	152	153
5	8	132	134	136	140	146	155	160	161
5	10	..	142	144	148	154	164	169	..
6	0	..	152	154	158	164	174	180	..

*Adapted from table on average weights and heights (in pounds according to height and age range) in Build and Blood Pressure Study, 1959, as reported in Sourcebook on Obesity, 1966.

Table 4. "Desirable Weights" of Men and Women According to Insurance Industry Society of Actuaries, Chicago, 1959.*

Height		Small Frame	Medium Frame	Large Frame
MEN				
Feet	Inches			
5	2	112-120	118-129	126-141
5	3	115-123	121-133	129-144
5	4	118-126	124-136	132-148
5	5	121-129	127-139	135-152
5	6	124-133	130-143	138-156
5	7	128-137	134-147	142-161
5	8	132-141	138-152	147-166
5	9	136-145	142-156	151-170
5	10	140-150	146-160	155-174
5	11	144-154	150-165	159-179
6	0	148-158	154-170	164-184
6	1	152-162	158-175	168-189
6	2	156-167	162-180	173-194
6	3	160-171	167-185	178-199
6	4	164-175	172-190	182-204
WOMEN				
4	10	92-98	96-107	104-119
4	11	94-101	98-110	106-122
5	0	96-104	101-113	109-125
5	1	99-107	104-116	112-128
5	2	102-110	107-119	115-131
5	3	105-113	110-122	118-134
5	4	108-116	113-126	121-138
5	5	111-119	116-130	125-142
5	6	114-123	120-135	129-146
5	7	118-127	124-139	133-150
5	8	122-131	128-143	137-154
5	9	126-135	132-147	141-158
5	10	130-140	136-151	145-163
5	11	134-144	140-155	149-168
6	0	138-159	144-159	153-173

*Adapted from Metropolitan Life Insurance Co., New York, weight standards for men and women. Statistical Bulletin 40:3, November-December, 1959.

Table 5. Average Weights of Americans According to United States Government Statistics.*

WEIGHT (IN POUNDS)							
Height	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75-79 years
MEN							
62 inches	137	141	149	148	148	144	133
63 inches	140	145	152	152	151	148	138
64 inches	144	150	156	156	155	151	143
65 inches	147	154	160	160	158	154	148
66 inches	151	159	164	164	162	158	154
67 inches	154	163	168	168	166	161	159
68 inches	158	168	171	173	169	165	164
69 inches	161	172	175	177	173	168	169
70 inches	165	177	179	181	176	171	174
71 inches	168	181	182	185	180	175	179
72 inches	172	186	186	189	184	178	184
73 inches	175	190	190	193	187	182	189
74 inches	179	194	194	197	191	185	194
WOMEN							
57 inches	116	112	131	129	138	132	125
58 inches	118	116	134	132	141	135	129
59 inches	120	120	136	136	144	138	132
60 inches	122	124	138	140	149	142	136
61 inches	125	128	140	143	150	145	139
62 inches	127	132	143	147	152	149	143
63 inches	129	136	145	150	155	152	146
64 inches	131	140	147	154	158	156	150
65 inches	134	144	149	158	161	159	153
66 inches	136	148	152	161	164	163	157
67 inches	138	152	154	165	167	166	160
68 inches	140	156	156	168	170	170	164

*Adapted from National Center for Health Statistics: Weight by height and age of adults, United States, 1960-62. Vital Health Statistics. Public Health Service Publication No. 100--Series 11, No. 14, May, 1966.

Physiological Constructs: Fatness and Somatic Systems

This section reviews cognitive construction on the physiology of fat, i.e., those hypotheses and models which understand the phenomenon in terms of organic functioning. Here we include mechanistic, pathological, etiological and developmental factors but we exclude behavioral and cultural levels of explanation -- which are deferred to later sections. As in the previous discussion, we examine popular paradigms and clinical constructions from the two respective data sources -- lay literature and professional lore.

Again, we find divergent generalization in the two stocks of knowledge. As presented in popular writings, the physical essence of the human body has the primary character of plasticity -- its properties susceptible to change via willful manipulation. The problem of overweight is conceived of as a mutable state, alien to "the natural body," a temporary disequilibrium. The condition is held to be easily reversible by appropriate intervention, according to clearcut recipe knowledge -- the recommended diet. Very often, the programs offered in diet books are alleged to rest upon scientific knowledge; thus dietary instructions are rationalized in terms of "scientific fact," simplified for popular understanding.

The professional literature presents a directly contrasting portrait, emphasizing somatic autonomy and organic immutability of the human body. Obesity problems are felt to be complex, enigmatic, "polygenetic," "refractory." The body, it seems here, "has a mind of its own." In a governmentally-compiled review, obesity was characterized as

"an integrated process... a kind of steady state obesity in most individuals represents a stable condition regulated by homeostatic mechanisms" (HEW, 1966: 59).

These discrepant framings are congruent with dissimilarities in specific formulations. In respect to what has come to be called "energy balance equations," we have organized a discussion of these formulations in three categories.

- A. Explanatory sufficiency of dietary factors in the solution of human energy equations.
- B. Importance and role of physical activity in energy equations.
- C. Status of etiological and pathogenic hypotheses in the explanation of obesity/overweight.

A. Dietary Factors: The most treasured notion of the popular press on overweight -- its common thread of presumption -- is this: That overweight and/or fatness is a result of dietary behavior, i.e., that food intake is necessary and sufficient cause. By this it is meant that overweight individuals eat more and/or differently than others. Variants of this proposition have to do with dietary composition and timing of food behavior.

The earliest known diet book, entitled Letter on Corpulence, appeared in 1864. It was written by a very fat English undertaker who reported losing weight on a "non-farinacious" (no-starch) diet permitting high daily calorie intake. The principle of Banting's diet -- manipulation of dietary composition without regard to quantities of food -- has waxed and waned in public favor through the years. Variations of the same diet principle have been offered for popular readership through decades of media interest in overweight. The most

recent resurgence of the Banting principle is found in the 1973 best-seller, Dr. Atkins' Diet Revolution.

The basic type of popular diet regimen is that of the "balanced diet," in which total calories are reduced, retaining elements from all food groups. Weight Watchers Diet, The Redbook "Wise Women's Diet," and the "Exchange Diet" are examples of balanced diets (Berland, 1979).

The variety of popular reducing schemes appears to be remarkable. There are enzyme diets, liquid formula diets, high fiber diets, low carbohydrate diets and grapefruit diets. To the seasoned dieter, the programs of well-publicized reducing diets -- like the melodies of hit songs -- can be instantly identified by name: "The Rice Diet," "The Air Force Diet," "The Beverly Hills Diet," "The Water Diet," and the "Scarsdale Diet," are a few of the more colorful sobriquets attached to some diets of currency (Berland, 1979).

Underlying this seeming variety of approaches, is a single methodological principle -- the belief that a temporally-limited program of diet modification is the means of permanent deliverance from overweight. The leit motif of all diet manuals is the promise of slender salvation through self-help. Optimism and the celebration of individual initiative and active mastery over nature dominate the diet book presentations.

But the logic and success claims of all such dietary programs are severely challenged by findings in the professional literature. Here, the expected relations between food intake and fatness have not been confirmed. In 1979, a comprehensive review of dietary behavior studies on obesity (including both laboratory and natural settings)

stated the following:

"The belief that obese people 'overeat' is so widespread that one wonders if this conviction will give way to the actual data ... The critical assumption that overeating accompanies obesity cannot be supported. Several decades of research have shown that, on the whole, the obese eat no more than the lean" (Wooley, et al., 1979).

Another researcher, author of the prestigious review, Obesity and Energy Balance in Man, states:

"... we have experimental evidence that there is virtually no correlation between states of energy balance and voluntary intake ... no evidence of any relation between energy intake and body weight in man" (Garrow, 1974).

Perhaps for obvious reasons, this type of information has not found its way into the popular literature -- is in fact, specifically disallowed. In media typifications, fat people who claim, "I really don't eat that much ..." are frequently discredited as either dishonest or inattentive.

The failure to confirm differences in intake quantities between obese and lean subjects has been noted in the professional literature since at least as far back as 1961, when Thomson wrote in The Lancet:

"While it seems reasonable to infer that in healthy populations, heavier members will eat more than the light, the observed facts, surprisingly, do not accord with this ... Obese subjects do not as a rule eat more than non-obese controls and may indeed eat less" (Thomson, 1961).

Not only intake quantities but eating style and food choices have been investigated for links to obesity; but research has repeatedly failed to isolate differences between obese and lean in their overall diet behavior. The Health, Education and Welfare's Sourcebook

on Obesity, for example, reports:

"There is no evidence for claims about the relation between weight loss and proportions of carbohydrate, protein and fat consumed ... no consensus on the most desirable frequency of eating ..." (HEW, 1966: 8).

Dr. Bray (1976) reports that patterns of intake, while they are known to affect cholesterol and glucose metabolism, have "no effect on accelerating or retarding weight loss in subjects on hypocaloric diets."

Despite the lack of evidence that obese individuals eat more or differently than lean, dietary treatment modes continue to receive clinical trials which are reported in the literature. Evaluations of the success of such treatment, usually in terms of amounts of body weight shed and duration of the maintenance of weight loss, have been consistently dismal. The following statement by Dr. Albert J. Stunkard has become famous in the professional lore because of the number of times it has been quoted and echoed by his colleagues who report similar results:

"Most obese persons will not stay in treatment for obesity. Of those who stay in treatment, most will not lose weight; and of those who do lose weight, most will regain it" (Stunkard, 1959).

That the results of outpatient diet therapy have been uniformly disappointing has not been taken to mean that basic energy equations are in error. Both animal and human studies do show that food deprivation of sufficient severity and over sufficient duration will indeed reduce body weights. But weight losses tend to fall far short of expectation according to energy balance theory. For example, in a Minnesota study of total starvation involving supervised inpatients,

weight losses were said to "compare favorably" to other forms of therapy results; yet many patients were unable to lose significant amounts of weight (Keys, et al., 1950). Conversely, in the Vermont Study of Experimental obesity (Sims and Horton, 1968), nine normal weight male prison volunteers age 21 to 33, were over-fed to raise their weights 25 percent above initial baselines. Most of the men demonstrated difficulty in gaining weight and required calorie intakes above predicted levels to reach obese weight goals. Moreover, at the conclusion of overfeeding, these men spontaneously and rapidly reverted to initial weights.

Thus, it seems, overeating alone is not sufficient to cause most people to become or remain obese; and food restriction -- even to the limits of total starvation -- will not predictably reduce body weights in all cases.

The important practical difficulty for dietary treatment, as emphasized by Wooley and Associates, is that of reducing "the essentially normal" intakes of many fat patients (Wooley, 1979).

A second difficulty with dietary therapy -- and apparently not a trivial one -- is the finding of an adaptive bodily response to diminished food supplies. Both human and animal studies have shown metabolic changes to accompany food restriction, such that the body's energy expenditure is lowered to preserve intake, thus slowing or halting weight loss. Wooley, et al., says this effect (called "conservation in the face of scarcity") is found to be most marked in those with lowest initial metabolisms -- and especially the obese with low metabolisms rates. They review one study showing that weight losses diminished by half from the first to the second month of a 500 calorie

daily deficit diet. They add:

"Adaptive changes in energy expenditure may become more pronounced with each diet ... (There is) evidence that with longer periods of underfeeding, recovery of metabolic rate to pre-restriction levels takes longer ... With each diet, the effect is greater.

In summary, the metabolic changes associated with dieting not only predispose to rapid gain, but bias the system toward excessive storage of adipose tissue. Dieting changes the body and makes it more likely to get fat ... as though braced for future food shortages" (Wooley, et al., 1979).

The observation of decreased metabolic rates in fat patients losing weight is described by Garrow as "the most significant contribution to the understanding of refractory obesity."

Thus, while both popular and professional literatures focus a good deal of attention upon dietary factors in problems of overweight or obesity, the popular paradigms are very different from the clinical constructions. In the former, diet is both cause and remedy for overweight: the relationships are relatively straightforward, intuitively satisfying and suggestive of practical action.

In contrast, the professional literature admits to a number of theoretical and practical puzzles in the relation of diet to fat. While there is some broad-based presumption that diet influences body weight and fat storage, confidence is limited by the ambiguities of empirical findings (e.g., experimental overfeeding and starvation studies), by the discouraging results of diet-based therapies, and by poor understanding of the mechanisms by which diet and fatness may be related. Moreover, it is generally accepted that factors as yet

unidentified may be prior to dietary factors; that is, intake itself is viewed as a regulated variable.

As for the therapeutic implications of the professional knowledge of dietary factors, one writer has said:

"The practicability of treating the obese without being able to manipulate the underlying mechanisms is open to doubt" (Apfelbaum in Bray, 1973).

B. The Activity Factor: The popular media treatment of what is sometimes called "calorie theory" partly parallels professional considerations on "the energy balance equation." In both discussions, the body is heuristically posited as an energy-processing system in which greater or lesser states of homeostasis are maintained, depending on the balance of fuel intake and expenditure. Both literatures seek principles that may be applied in predicting or effecting changes in body weight or adiposity.

For popular readers, a calorie is nominally defined as a "unit of heat;" but the term is primarily employed in providing a quantitative rating scale for the "fattening" propensities of common foods. The explanation of calorie theory is embodied in the lesson that calories ingested in excess of maintenance requirements will increase body weight. Correspondingly, a calorie deficit between intake and maintenance requirements will decrease body weight. In many, but not all, popular tracts on overweight, this formula is specified in detail. It is stated that one pound of body fat is equivalent to 3,500 calories of food.

Since calories also rate the value of food fuel used by the body in work performance, calorie theory suggests that in principle, weight may be reduced either by decreasing intake or by increasing calorie

expenditure. Diet, as noted, has received by far the greater emphasis. But there is a tendency for the popular press to at least "tip its hat" to the expenditure side of energy equations by including exercise recommendations. Conceived of as variously specific types of voluntary movement within a set time span, exercise is most often viewed as a secondary aid to weight reducing, usually an adjunct to diet therapy.

"Exercise is a highly recommended diet aid; but keep this in mind always: no amount of exercising will reduce you if you overeat. To get down to ideal weight, combine proper exercising with swift reducing ..." (Stillman, 1968: 246).

These lines are from Dr. Stillman's 252-page best seller which devotes less than three pages to the subject of exercise. Another writer for the public market, Berland, sums up the majority attitude on exercise in popular literature:

"To slim your figure you must lose weight. And the place to start is at your mouth. It is the only part of your body you should exercise less" (Berland, 1980: 26).

Thus, while exercise -- when it receives mention at all -- is heartily endorsed in the popular press, its role in achieving weight reduction is generally believed to be minor. As compared to diet therapy, exercise recommendations are rarely accompanied with the promise of quick or dramatic results. Whereas, Dr. Stillman tells his dieters,

"You will be so delighted and impressed by seeing the decided drop in weight when you step on the scale each morning, that you'll keep dieting another day, then another and another ..." (1968: 56),

the results of exercise are presented much more somberly:

"Exercise can slim your body and firm your sags. But few people lose weight from exercise. That's too difficult and time-consuming. To take off a pound you have to spend an extra 3500 calories The 345 calories in a waffle with butter and syrup could be used by walking for 66 minutes, jogging for 35 minutes, swimming for 41 minutes or cycling for 52 minutes Dieting is far more effective than exercising for losing weight" (Berland, 1980: 29).

With respect to the activity factor, then, its presentation within the popular press tends to appear (if at all) under the general rubric of the Calorie Theory. Exercise is often (although not always) recommended; its health benefits are often (albeit faintly) praised, but its instrumental value toward the goal of weight reduction is downgraded.

This pattern in the popular paradigms on overweight is much lamented by Dr. Jean Mayer, a prominent nutritionist who writes for both public and professional audiences. Mayer says:

"The view that exercise expends relatively little energy is completely erroneous. The fact that it is erroneous is known today by all nutritionists and all physicians. It should be similarly known by most alert laymen because of the wide exposure I and several of my colleagues have given it, in popular periodicals, the press and on both television and radio. It is vital that it be recognized by every healthy person who aspires to combat obesity for too long, it appears, too many people were told too often, frequently misled by 'authorities,' that exercise is of no value as a reducing agent" (Mayer, 1968: 69).

Mayer is among the most prolific contributors in the obesity field, having conducted both animal and human researches in laboratory as well as natural settings. His work on the activity levels of adolescent and worker groups -- although receiving little popular dissemination beyond his own efforts -- has been extensively quoted in all major outlets

of the professional literature for several decades.

It is Mayer's conclusion that, "With respect to physical activity, obesity ... is clearly 'a disease of civilization'; and that inactivity is the most important factor explaining the frequency of 'creeping' overweight in modern societies" (Mayer, 1968: 82).

Mayer's studies call particular attention to the role of inactivity in its relation to voluntary food intake or appetite on the one hand, and in relation to body weight on the other hand. He and his Harvard collaborators investigated the food intake of white rats under various exercise conditions. They found that rats that were exercised one or two hours daily did not eat more than did unexercised rats -- indeed ate somewhat less; and they decreased in body weight. Rats exercised for periods between 2 and 6 hours tended to increase food intake in accordance with exercise duration and they maintained constant weight. Rats exercised longer than six hours daily decreased food intake and body weight. These results were interpreted to indicate that voluntary food intake adjusts to expenditure only within "the range of normal activity," but that this adjustment fails to operate at both "sedentary" and "exhaustion" levels of activity.

In their classic study of obesity in a teenage girls camp, Mayer and associates found one group of obese girls ate slightly less than matched girls of normal weight but had much lower levels of observed activity. In a second group of obese girls, food intake was higher than for the matched normal-weights and activity levels were no different.

These findings point to the importance of inactivity in energy balance considerations but are not believed to establish causal

connections for the general relations between activity and body weight. Mayer's belief that, "exercise is the great variable in energy expenditure" has not been universally embraced in the professional literature. In fact, some current work has specifically devalued the importance of mere voluntary activity in the whole energy equation.

For example, Brownell and Stunkard explain:

"Physical activity and energy expenditure are often equated even though physical activity usually constitutes only a small portion of energy expenditure. Lower levels of activity of the obese may not represent lower energy expenditure because of greater caloric cost of activities for the obese. Resting metabolism is responsible for a far greater percentage of total energy expenditure than physical activity" (Brownell & Stunkard in Stunkard, 1980).

The British physiologist, J. S. Garrow, makes much the same point in his extensive review of energy balance studies. He states that the observation that the obese may be less active than the non-obese, even if accurate, "makes a quantitatively small contribution" to the understanding of energy balance in obesity: Firstly because of the greater energy cost of moving the heavier body; and secondly, because voluntary activity is "a small proportion of total energy balance" (Garrow, 1974: 161).

Garrow has specifically denied that inactivity plays a causal role in the etiology of obesity, saying that while it may contribute to its persistence, "it cannot be a main cause" (Ibid, 161).

Untangling activity factor causes and effects and contributing variables is made more difficult in the study of human obesity by the fact, not unnoted in the professional literature, that most human activity is social activity. All physiological factors aside, it cannot

be avoided that some inactivity of the obese must be attributed to social consequences of obesity, i.e., the fat get excluded from participation; hence the plausibility of obesity leading to inactivity is at least on equal footing with that of the reverse proposition.

At least three different causal paths have been followed in the professional investigation of exercise effects. First is the possibility that exercise levels affect appetite. Mayer's research on exercised rats, as noted, approaches this problem, indicating that the effects of exercise on appetite are different for different levels of exercise. The finding that low levels of energy output are -- paradoxically -- associated with higher intakes and with increasing body weight, has been confirmed through numerous animal study replications.* However, even if the effects of exercise on appetite were established and predictable with precision (which currently they do not seem to be), the consequence for obesity would not thus be made clear. This is because, recalling the earlier discussion, consensus is still lacking on the relation between food intakes and body weight.

The second possible causal path is that from exercise to body composition. E. S. Horton reported on this question to the 1973 Fogarty Conference on Obesity. He found that while rats reduced by exercise lost no more weight than those reduced by diet, the losses of the exercised rats were shown to be 78 percent fat while only 62 percent of the weight shed by dieted rats was fat content. Thus, he concluded, exercise may effect changes in body composition -- enhancing the preservation of

*An unexplained exception is the female rat, who does not always eat more at low activity levels or gain weight. Her departure from the male pattern (although not consistent from study to study) remains an anomaly (Bray, 1973).

lean body mass by promoting higher relative proportion of weight loss from adipose tissue (Bray, 1973).

Thirdly, the effects of exercise on endocrinological states have been investigated. While much of this work is inconclusive at present, there is evidence that changes may be brought by exercise upon insulin blood concentrations. An association between obesity and pancreatic insulin secretion and thus with insulin concentrations is commonly noted in the professional literature. Tissues of obese persons are said to demonstrate an impairment known as "insulin resistance." However, the nature of the association and the mechanism of insulin resistance by obese tissues have not been determined.

In summarizing the professional literature on activity factors, we may say that here -- as in the popular press -- less attention has been paid to the expenditure side of the energy equation. Similarly, with respect to therapeutic implications, there appears to be little to cheer those who in Mayer's words "aspire to combat obesity." While the relation between activity and obesity has not been determined in the professional literature, the research confronts complexities which are scarcely hinted at in the popular discussion of exercise: 1) The differentiation of voluntary activity from the total energy expenditures; i.e., those reflected in basal metabolic rates. 2) The paradoxical responses of appetite to low and high ranges of activity. 3) Activity factors in the potential control of body composition and serum insulin levels.

C. The Status of Etiological and Pathogenic Hypotheses: In this section we explore the two literatures for cognitive constructions

that take the form of explanatory models on the organismic level. While fully-articulated physiological theory, in its strictest sense, is altogether absent from the lay literature, we do find a number of well developed hypotheses in the professional lore. Of these, we will review four which seem to have drawn the most explicit attention and/or empirical testing:

1. The Genetic Hypothesis
2. The Fat Cell Hypothesis
3. The Hypothesis of "Set Point" Regulation
4. Hypothalamic Obesity: Thesis of Dual Brain Control

Generally speaking, the models may be said to be of two types -- etiologial or pathogenic -- representing a dichotomy sometimes employed in professional discussion of fat causation. Etiological approaches are those concerned with ultimate, formative or underlying cause -- usually impinging upon systems from without. Hypothesis Nos. 1 and 2, may be of this type. Pathogenic approaches deal with mechanisms and functions within systems that contribute to their ongoing maintenance, development or adaptation to disturbance. Hypotheses Nos. 3 and 4, are in this category.

In the popular media, while we do not find parallel exposition of such explanatory models, we do find occasional implicit reference to the notions embodied within them. For the most part, however, the lay literature is either not conversant with or explicitly rejects organismic-level, system-type models for explaining fatness. This is especially true where such models (as they often do) cast shadows upon therapeutic hopes.

(1) The Hypothesis of Genetic Obesity

The Genetic origin of obesity, i.e., single gene inheritance, must be distinguished from congenital obesity (that which is present at birth and may or may not persist) and familial obesity (that which is observed to be associated with environmental family influences).

The phenomenon of human genetic obesity is said to be manifest in two ways: a) Through a group of rare disease syndromes in which genetic factors are known to be important and in which obesity is one symptom.* b) Through evidence of "genetic factors" which under appropriate environmental conditions lead to development of obesity, as elucidated from studies of twins, adopted children and family studies (Bray, 1976: 166).

A large body of work on the latter type of evidence, after some decades, remains equivocal. Even while some researchers obtain unambiguous results, others report equally persuasive data in support of contradictory conclusions.

For example, in a 1980 review of genetic obesity studies (Stunkard, 1980) we learn the following: One prominent researcher posits a purely environmental origin for obesity on the basis of his finding that the correlation of skinfold thicknesses between parents and adopted children was the same as that between parents and biological children. A second researcher supports genetic origins for obesity, reporting zero correlations between measures of obesity of parents and their adopted children and highly significant correlations between those of parents and biological children. A third researcher

*Characterizations of these syndromes are provided in Appendix C.

finds that while skinfold thicknesses of parents and their children -- who share common genes and environment -- are positively correlated ($r = 0.30$), the correlation of skinfold thicknesses of marital partners, who share only their environment, is almost as high ($r = 0.25$) (Stunkard, 1980).

Garrow has concluded that, "To distinguish accurately between genetic and environmental influences requires a controlled experimental situation which cannot be achieved in human subjects" (1974: 89).

Similarly, Bray has said that while he believes genetic factors may be involved in the transmission of obesity in man, " ... from the practical point of view, in susceptible individuals (those predisposed genetically to obesity) environmental factors play a role of overriding importance" (Bray, 1976).

Stunkard summarizes the status of knowledge on the genetic hypothesis as follows:

"It may come as a surprise to many readers to learn ... the extent of our ignorance about the heritability of human obesity. Textbooks of biology and medicine have for years included brief accounts which imply that we know a good deal about the topic and that genetic factors play an important part in human obesity. In fact ... we know very little. Much of what little knowledge we had about the heritability of human obesity had actually been knowledge about the heritability of either body weight or height. The heritability of human obesity can be very different from either."

The heritability of obesity in rats, by contrast to that in humans, has seemed to rest on much more solid footing -- its study having escaped the finer ethical strictures of research on human subjects.

Three major varieties of fat rats have been produced by genetic

manipulation as laboratory "preparations" (as they are called in experimental research). There is the yellow-coated mouse whose obesity is inherited from a single dominant gene and is resistant to dietary restriction. This mouse gains body weight even on very small amounts of food. There is the Bar Harbor (ob/ob) mouse, with obesity from a recessive gene, who tends to lose weight on restricted diets but retains high proportions of fat on the carcass even when body weight is lower than controls. There is the New England mouse which is selectively bred for obesity (Garrow, 1974).

While it is beyond the present scope to review the voluminous experimental literature on rodent obesity, a few key findings may be briefly noted. First the obesity of these rats only becomes apparent a few weeks after birth. Second, they show hyperinsulinemia and relative insulin resistance. Third, they are unable to generate body heat when exposed to cold and are apt to die (Mann, 1974: 181).

Mouse-based arguments for genetic obesity have been centered on the concept of inherited physiological defect -- for example, in adipose tissue itself, in the action of steroid hormones, in enzymes, in insulin processes, or in the hypothalamus of the brain.

How do these diverse animal models help with the explanation of human obesity? While they have been extensively cited throughout the literature, the "preparations" themselves as Dr. Mann has said, "... offer neither understanding nor solutions." He concludes:

"The variety of rodent obesity is so great that one can find a model to suit one's convenience for application to the enormously more complicated human disorder" (Mann: 1974).

(2) The Fat Cell Hypothesis

The "Fat Cell" hypothesis poses the following question: Given that obesity represents the enlargement of adipose tissue (as opposed to other types of tissues or organs), is this enlargement accomplished by increased numbers of fat cells or by increased size of existing adipocytes?

The raising of this question seems to have coincided with a technological development, sometime in the 1960's, making it possible "by a painless ... method of needle aspiration" to count and size the fat cells taken from living humans (Hirsch and Knittle, 1970: 1516).

Researchers pursuing this methodology found that, in adult groups, adiposity of the obese was greater in both cell number (hyperplasia*) and in cell size (hypertrophy*), than the adiposity of controls. But when the obese were reduced in body weight, although their fat cells decreased in size, their numbers did not decrease. The formerly fat subjects were left with large numbers of abnormally small "empty" fat cells.

The Fat Cell Hypothesis then developed as follows: Adipose tissue grows in infancy (or within some critical period of maturation) by an increase in cell number; after that period the number of cells becomes fixed and any increase in fat tissue is accomplished by expanding size of the cells. The number of fat cells is irreversible. A corollary statement of the hypothesis is that obesity of early onset may be associated with greater increases in cell number than obesity beginning later in life.

Stunkard has suggested that since the early exposition of the

* See Glossary of Technical Terms, Appendix E.

fat cell theory in the 1970's, it has become "current orthodoxy," and that it carries the implication "that adipose tissue (anatomy) is destiny" (Stunkard, 1980: 5).

A recent elaboration of the fat cell hypothesis, has been added by studies of Sjostrom, who found cell number increases in eight-year old girls and in middle aged women. (Sjostrom in Bray: 1980). Sjostrom proposes that attainment of some maximum cell size (i.e., getting as fat as possible by hypertrophy of cells) evokes a physiological stimulus or signal which initiates the proliferation of new fat cells (hyperplasia*). This raises the possibility that each new period of weight gain brings a new, irrevocable, increase in fat cell number.

In popular literature, the fat cell theory has been represented metaphorically by the analogy of "a sponge." Dr. Solloman tells the readers of his book, The Truth About Weight Control:

"The number of fat cells may be determined in early infancy. Just as a sponge with numerous cells will soak up more water and hence become heavier than one with fewer cells, if your number of fat cells is greater than average each of your multitudinous fat cells will absorb fat ... One can squeeze water out of the sponge and even though it then weighs less, the cells remain There is no way in which you can rid your body of them.... The only thing you can do is to avoid an excessive amount of calorie intake throughout your entire lifetime" (1971: 36).

These are discouraging words for dieters. It is doubtless for that reason that most of the lay literature avoids reference to fat cell theory. Clearly, the notion of "adiposity as destiny" is anathema to diet book sales.

While the hypothesis of hypercellularity in obesity continues

* See Glossary of Technical Terms, Appendix E.

to receive important professional attention, it does have its current challengers among workers in the field. In 1979, Bulfer et al. suggested that some of the early research "may have been accepted too hastily." They cite three experimental problems with the fat cell theory: First, the use of subcutaneous fat deposits as samples may not be representative of total fat cell populations. Second, the technique of cell counting is imperfect. Third, the short-term nature of much experimentation does not correspond with time spans involved in development of obesity (Bulfer, et al., 1979: 740). Similarly, George Mann has criticized the theory on methodological grounds, suggesting that the counting and measuring of adipocyte populations has been prone to systematic error, underestimating the number in thin persons. He concludes,

"The fatalistic hypothesis (of fat cell theory) is both implausible and unjustified. Its founders on methodologic problems."

(3.) Set Point Hypotheses

In obesity study the notion of set point refers to an automatic regulation -- analogous to that of home thermostat heaters -- of either body weight or proportion of body fat. Such a notion is intuitively suggested in the casual observation that for most adult individuals a given size and shape appears as a constant over time; i.e., size and shape are biologically "attached" to persons. Set point hypothesis asks the question, Is there a physiological, involuntary mechanism for regulating human body weight? And if so, is obesity the result of some derangement or peculiarity of the mechanism?

The Set Point Hypothesis is the postulation of some such mechanism, the operation and character of which is conceivable but has not

been determined. The acceptance of this hypothesis varies among researchers. There is, in fact, disagreement over the extent to which variables of body composition and/or energy balance may be characterized as "normally" constant.

For example, George Mann writes:

"The majority of people in a food-abundant society adjust their energy balance with an astonishing sensitivity so that they remain within narrow limits ..." (Mann, 1976).

Bray says, "Body weight can change but long term changes occur slowly and are relative small" (1976: 4). Garrow has said that "energy balance in man is certainly not maintained within fine limits either in short term or long term" (Garrow, 1974).

Garrow modifies his statement by adding that there is "some mechanism" that seems to prevent large-magnitude changes "in most people." Garrow suggests that 10 kg. or about 22 pounds may be regarded as a significant amount of body weight change. But the question of how much change represents a departure from constancy and the appropriate time frame for considering such changes in relation to human characteristics has been largely left unspecified in the literature.

R. E. Keesey notes that the "wide variability" of human body weights from individual to individual is in marked contrast to that of other species, in which "individuals rarely differ by more than 10 percent above and below the mean." Yet Keesey strongly supports the concept of set point regulation of body weight in man on grounds of weight constancy over time for given adult humans (Keesey, 1980).

Aside from the engineering-type model offered by the analogy

with thermostatically controlled heat machines, few other system possibilities have been suggested as regulatory mechanisms. The work of Garrow, however, is original in this respect. Garrow believes that "at least the outline of a control system is undeniable." But he is reluctant to assume that such a system would necessarily operate outside of voluntary control -- or that it operates with any notable degree of efficiency.

As an example of purely physiological mechanism, Garrow points to the regulation of calcium concentrations in blood plasma -- "regulated within narrow limits, errors rapidly corrected and the person unaware of the process and unable to influence it voluntarily." Garrow's example of a less purely physiological mechanism is the pulse rate which, he says, "is not a pure form because of subjects' awareness and the potential for voluntary control." His example of a non-physiological regulation is intended to be humorously personal: a researcher's control over the size of his pile of unread research literature. Its range of variation is individualistic; there is no automatic compensation for disturbances of equilibrium (e.g., "postal strike"), and it is theoretically -- but often not realistically -- open to voluntary control.

Garrow concludes that a long-term energy balance regulation in man would be somewhere between the pulse rate and the piles of research literature. He believes that whatever mechanism does operate, it "is not precise; if it were, there would be no obesity"

In response to what some have observed as weight stability among the obese, discussion of set point theory has often postulated that fat persons have adequate regulatory mechanisms but that these are set "too high." Garrow says this hypothesis "is attractive because it would

explain why some thin people remain effortlessly thin, while some fat people reduce with great difficulty and regain this weight rapidly as soon as their efforts are relaxed."

However, the idea of a higher set point for obese must be rejected, Garrow states, because it requires evidence that the obese eat more than the lean. Such evidence, as repeatedly noted by Garrow and others is altogether lacking in the professional research.

(4) Hypothalamic Obesity

Hypothalamic obesity is found in laboratory rats whose brains have been experimentally damaged in the ventromedial region of the hypothalamus*(VMH) known as the "satiety center." These brain-lesioned rats: 1) Eat voraciously immediately and for several weeks following the surgical manipulation. This period of hyperphagia* is called the "dynamic stage" in which the animal attains enormous body weight. 2) Reach a static phase in which food intake decreases to a level only slightly above that of control rats, but body weight does not drop. 3) Defend their higher body weights against dietary manipulations, e.g., food restriction, force feeding and changes in caloric food densities. They often eat less frequently and more rapidly while consuming slightly greater total quantities than control rats. Also, they show apparently less motivation than controls for securing food in the face of mechanical obstacles, such as heavy food hopper lids. 4) Are characterized as more "emotional" and irascible than control rats. 5) Show insulinemia* and other hormonal irregularities. 6) Tend to be inactive relative to controls.

* (See glossary in Appendix E.)

This classic animal "preparation" forms the basis for the hypothesis that the fundamental mechanisms of food intake and/or body weight are located with specific brain regions. Lesions to the lateral sector of hypothalamus (LH) have, correspondingly, been associated with aphagia* in the rat. Thus, observation of VMH and LH animals led to a model of a dual hypothalamic brain center for the central control of feeding behaviors.

For the several decades in which hypothalamic obesity has been induced in laboratory rats, researchers had hoped to isolate the specific mediating mechanisms that govern hunger and satiety. It was also felt that the VMH syndrome would provide essential information about set points and critical clues for long-term body weight regulation (Rodin, 1979: 37). However, recent statements in the literature suggest that, because of unexpected complexities introduced by later work on this model, its initial promise may be unfulfilled or redirected.

Judith Rodin writes that the dual center model "is now untenable in the light of recent research." She says that the feeding behaviors of hypothalamic rats can no longer be attributed to damage in the specific (VMH and LH) brain sites but result from damage to closely situated neural pathways. These pathways, she suggests, serve general behavioral functions, of which feeding systems may be only a part (Rodin, 1979: 30).

Similarly, Edward M. Striker, in a 1978 article for the New England Journal of Medicine writes:

"The central systems that have been under investigation are involved in the control of many behaviors besides food behavior It is no

* (See glossary in Appendix E.)

longer appropriate to consider food behavior only from the perspective of energy balance Hunger can be viewed more generally as a disturbing stimulus" (1978: 8).

Striker describes six models of hyperphagia in rats, of which the VMH syndrome is only one. He refers here to laboratory experience that rats overeat and/or become fat in response to insulin injection, stress (measured by a "tail pinching" procedure), factors of genetic obesity (abnormal generation of adiposity), and so-called "diet palatability." Rats with lesions that deplete brain serotonin become large rather than obese.

Thus, the hope of explaining hunger and satiety as simple physiological functions of specific brain mechanisms has been largely frustrated. Striker writes:

"... attempts to identify the precise signal for hunger have been unfruitful. It is not clear what specific event provides initial stimulus, where this event occurs, and how it is communicated to the brain. An emergent picture is one of a central excitatory neural system ... not restricted to feeding but participating in its control by mediating components of arousal and motor function common to all voluntary behaviors" (Ibid.).

and

"Satiety is more than the absence of hunger; it involves the active suppression of interest in food and of feeding behavior. If no other strong stimuli are present, satiety may be associated with drowsiness, contentment and a general disinclination to behave" (Ibid.).

Fuller understanding of eating behaviors, appetite and perhaps body weight regulation now are said to await further research in the newest areas of neurological inquiry, especially those focused on endocrine links.

At present, according to Rodin and others, the chief significance of the hypothalamic model arises from the motivational correlates of the VMH syndrome. The study of these brain-lesioned rats has inspired a number of behavioral propositions about human obesity. These will be taken up in the next section in which we turn from these organismic considerations to issues of whole persons, relations between persons and relations between the personality and the organismic system.

Psychological Constructs:

The Psychiatric and Behavioral Models

Are fat people different from others in important psychological ways? Do they behave differently, have unique personality traits? If so, do these differences precede or result from being fat?

This section examines the constructs of lay and professional literature that inform on these questions.

The Popular Psychology of Fat:

The Jolly Fat Person, held to be a persisting cultural stereotype, has been vigorously attacked in the popular press. Indeed, from the point of view of diet advocacy, to be fat and happy is a contradiction in terms. Misery and shame, not jocularity, are believed to characterize the true psyche of fat people:

"... a miserable unhappy person who hated myself and everyone else. I can still close my eyes and feel as I did when I was fat. The hate you feel for yourself! ... You want to die ... " (Gold, 1968: 22).

In such terms Ann Gold describes her own mental state before becoming slim, developing a diet program and publishing Diet Watchers Guide.

Along with others in the diet genre, Gold's book implies that unhappiness is inherent -- even appropriate -- to the fat condition. There is the suggestion that to be fat and not hate oneself represents at best, either falsification or foolish complacency. Thus Gold's introductory chapter (entitled "You Have to Hate Yourself Enough"), addresses itself to fat people who "tell themselves they are not as fat as they really are:"

"You may be fooling yourself ...(if you think you are 'a little overweight') ... You may even tell yourself that the little extra roundness makes your chin look stronger. You don't see your face imprisoned in the fat, trying to get out."

The contradictory themes of self-hate and self-justification are closely entwined in the popular psychology of fat. A published collection of letters to Weight Watcher's Magazine, includes this statement from an anonymous fat person:

"Fat is beautiful. Trying to make everyone chicken-like is trying to make everyone one color -- it can't be done, and thank God for that! I'm happy -- and mortality rates? I wouldn't be sorry if I died tomorrow" (Nidetch, 1975: 18).

Jean Nidetch, founder of the Weight Watchers organization, answered the letter as follows:

"... I find it difficult to believe you mean what you are saying. I don't think that fat is beautiful, and I don't think many other people think so either ... Some authorities state that obesity is a manifestation of a death wish Many people, myself included, have had the same or similar feelings, and lost them when they were able to admit that thin is beautiful."

The notion of self-hate appears as a popularization of the

concept of internalization; i.e., fat persons respond to themselves as despised cultural objects. Self-justification (said to be manifested either by denial of excessive eating, by "blaming it on their glands," or by claiming that "fat is beautiful") often is popularly understood as a psychological defense against feelings of self hate.

A second pair of contradictory personality traits popularly assigned to fat people are those of anger and hostility on the one hand and docility and subservience on the other hand. A common formulation of diet book psychology has it that fat people turn their anger inward, often using food to calm feelings of hostility. The repression of rage then requires compulsive expression of its opposite, with overly ingratiating, deferential behavior. A lack of assertiveness, often attributed to fat people, appears here as a psychological defense against the eruption of anger.

"One of the reasons most of us got fat in the first place," writes Eda LeShan, "is that we allowed ourselves to be exploited." She adds:

"We eat too much when we feel people are eating us emotionally. If we want to stop eating too much, we have to put a limit on other people's claims" (LeShan, 1979: 146).

A third psychological theme of prominence in lay literature, is the dichotomy of control versus self indulgence. Fat, in most cases, is taken to be the visible evidence of gluttonous self-indulgence, clearly a loss of self-control. The prototype of the binge eater is explained in this way. Yet the psychological states associated with such compulsive food behavior -- such as anger, depression, sexual drive

-- are said to be extinguished by eating; that is, the fat person controls the expression of negative feelings through food. Julius Fast quotes this example from a personal interview:

".... I eat because I get crazy. It has a lot to do with hostility and rage. I have a terrible temper, and if I eat something when I get angry it helps me It's better than running out and killing someone" (Fast, 1981: 35).

There are, then, two sides to the psychological explanation of compulsive food intake: On the one hand, it represents the abandonment of control, a loss of will, and sometimes a "backlash" against previous dietary deprivations. At the same time, the psychological function of the behavior may be the very essence of self-control -- the suppression and rechanneling of strong emotions. Overeating can be an affirmation of self will, an assertion of autonomy, in the sense that it reappropriates the individual's power to provide his own pleasure, her own comfort.

The popular literature often takes account of these conflicting psychological aspects of control without explicitly relating them in this fashion. For example, Dr. Linn says:

"An obsessive-compulsive person tries to control everything and everyone -- including himself or herself. We all know that absolute control is an impossibility. So, say the psychiatrists, an obsessive-compulsive will mutate "control" into total lack of control. This type of person becomes fat because he or she has abandoned all attempts to curb gorging" (Blackburn, 1977: 4).

Even while the psychological vocabulary of popular diet tracts may run the psychiatric gamut from guilt to depression to compulsion, its focus is primarily on food behavior rather than underlying

personality constellations. Two distinct postures emerge from the popular psychology of fat -- each positing a motivational pattern in relation to food behavior and involving processes generally described as "unconscious."

In the first pattern food is said to be used as a means of altering consciousness -- for example, assuaging anxiety, extinguishing anger, and as a "substitute for love." Eda LeShan describes such a pattern from a personal history:

"Food served to make me sleepy, lethargic. I sometimes dreamed of myself as a hippopotamus, lying in a mud puddle in the sun. Eating too much, being fat, was a way of controlling libidinal drives that frightened me. I was afraid to deal with the energy that smoldered within" (1979: 10).

In the second pattern, food behavior is merely used as a means of getting fat, and it is the state of being fat which is itself the goal -- providing secondary gains for the fat person. Being fat is said to provide a kind of psychological "armor" -- protection from the expectations of self of others, from competition, from various types of threatening relationships or social encounters. Thus, it is suggested that as LeShan puts it, fat people are "terrified of being thin."

Being fat, in addition to its protective value, is also said to have compelling symbolic importance for fat people. It variously represents: Strength and/or personal significance, rebellion (and/or alternately, conformity), pregnancy or potency, neediness (a silent request for sympathy), and loyalty.

The symbolic usefulness of fat for the fat person has been explored in a feminist context by Susie Orbach. She writes that, for

women,

"Fat is a response to the many oppressive manifestations of a sexist culture. Fat is a way of saying 'no' to powerlessness and self denial, to a limiting sexual expression which demands that females look and act a certain way, and to an image of womanhood that defines a specific social role" (Orbach, 1978: 21).

Orbach echoes LeShan's observation of the "fear" of being thin. She adds that for women, the sexual prospect of being thin carries added dimensions of conflicts. Even while a woman believes fat to be sexually undesirable and a limit to her choice of potential partners, Orbach believes she will choose to be fat in order to avoid the social role of women as sex objects of market consumption.

In the mother-daughter relationship Orbach finds a great source of the symbolic value of being fat. Since, in sexist society, the mother is charged with "preparing her daughter for a life of inequality," the mother must try to "hold back her child's desire to be a powerful, autonomous, self-directed energetic and productive human being." The ambivalence of this task creates inevitable tension which may come to be expressed in food behaviors and fat symbolism.

Orbach provides several statements that typify psychological messages that fat daughters may be sending to their mothers.

"My fat says to my mother: I'm substantial.
I can protect myself.

"My fat says to my mother: Look at me. I'm
a mess. I don't know how to take care of
myself. You can still be my mother.

"My fat says to my mother: I'm going out in
the world. I can't take you with me but I
can take a part of you that's connected to me.
My body is from yours. My fat is connected

to you. This way I can still have you with me" (Ibid: 21).

Through such psychological functions and symbols, then, fat and its associated behaviors are understood as solutions as well as problems for fat people.

It is not clear in the popular psychology of fat whether overweight is primarily viewed as a cause or a consequence of psychological disturbances. The two perspectives sometimes are presented interchangeably. Where obesity appears as an adaptive response to common human woes and deep-seated unease, it is not always explained why eating behaviors rather than other types of behaviors would be involved. To the extent that being fat brings psychic suffering, the diet books tend to favor action over analysis. Diets are the recommended remedy: Get thin, they say, and troubles will end.

The Professional Psychology of Fat

Two approaches can be distinguished in the professional psychology of obesity -- the psychoanalytic/psychiatric and the behavioral/motivational. The former concentrates on basic issues of personality organization, its formation and constitutive elements over time. The latter focuses on systems of stimulus and response, especially the interactions of organisms and environments.

The theoretical work most closely identified with psychoanalytic approaches to obesity has been that of Dr. Hilde Bruch, whose 1951 contribution, The Importance of Overweight is still extensively quoted in the literature. Bruch characterizes obesity as a personality disorder symptomized by excess weight. She says:

"Excess weight is only the visible symptom of failures in many areas of functioning with serious defects in initiative, autonomy, experience of control and self-regulation. ... The underlying defect in obesity is the brain making the error of interpreting various tension states as 'need to eat' ... (The obese) have an inability to correctly identify hunger or to distinguish it from other states of bodily needs or emotional arousal" (Bruch, in Bray, 1973).

Bruch's expertise in eating disorders includes clinical experience with both obesity and anorexia nervosa, a psychoanalytic syndrome characterized by refusal to eat, denial of hunger and resultant emaciation. While she draws no elaborate parallels between the two types of cases, both appear to involve perceptual distortions of hunger awareness.

The normal development of hunger processes, Bruch suggests, requires learning organization established in early life experiences. Inappropriate or confusing experiences lead to distortion and falsification. Bruch states:

"if the mother offers food only in response to signals indicating nutritional need ... a definite concept of hunger distinct from other needs will develop. If the mother's reaction is inappropriate ... neglect, over-solicitation, inhibition, or indiscriminate permissiveness ... the outcome is confusion" (Ibid.).

The pathologic outcomes from early feeding confusion extend beyond the disturbance to hunger awareness. Bruch speaks of a generalized deficiency including "inability to experience self as in control of the body functions ... a deficit in the sense of separateness -- diffuse ego boundaries."

The absence of firm identity sense or definite ego boundaries is said by Bruch to be manifested behaviorally as a "lack of self

confidence in self-initiated action."

Bruch rejects what she calls the recent tendency to explain the causes of psychological problems of the obese as resulting only from hostile social attitudes. She states that:

"The lack of opportunities and outright rejection from which many obese people suffer ... may be related to their own character traits and not only to social prejudice, real enough as it is" (Ibid.).

This position represents a minority view among current professional obesity researchers. Most workers believe that the causes and consequences of obesity are far from clear cut -- that psychological, social and physiological aspects of its manifestations are sufficiently entangled as to preclude most statements of causal priority. Studies on human subjects have failed to isolate any "single psychiatric disorder or personality deviation which could be etiologic of obesity" (Hirsch in Bray, 1973). For example, when Solow, et al. observed the response of massive obese patients to weight loss following intestinal bypass surgery, they found significant,

"Reversibility of many of the psychosocial disturbances associated with severe obesity, supporting the view that they are as much the consequence as the causes of excessive adiposity" (Solow, et al., 1973).

Similarly, Weinberg, et al. (1961) tested six psychological traits in obese and normal men finding no significant differences.

The results of most human-subject psychiatric inquiries have been generalized by Bray, indicating that while moderate depression has sometimes been noted in connection with weight reducing programs, and certain distortions of body image have been found among juvenile-onset

obese types, "no serious psychiatric illness" has been found to be associated with obesity as such.

Thus, the unitary concept of an obese personality structure -- the notion of an underlying "obesity psychosis" -- has not attained solid confirmation in the professional literature. With the failure to find significant difference between obese and normal groups, the poor results of psychotherapy for weight reduction, the status of psychiatric explanations of obesity declined (Bray, 1973; Wooley, et al., 1979).

The attention of psychological research now turned to behavioral approaches, i.e., the study of motivational correlates in food behavior.

The behavioral understanding of obese food behavior emerges from an experimental tradition deriving parallels from the observation of fat rats and humans. The history of these observations seems to begin with the hypothalamic obese rat, whose experimental career has been described earlier.

The VMH rat, it will be recalled, is characterized by inactivity and emotionality; his food intake is more rapid and less frequent and (in static phase) is only slightly higher than that of the counterpart. Also, the lesioned rat seems less willing to take extra trouble getting food when obstacles impede.

In a well-known article entitled "Some Extraordinary Facts About Obese Humans and Rats," Stanley Schacter and colleagues trace a series of experimental researches suggesting what they describe as "mind-boggling" analogies between obese human behavior and that of the brain-damaged rats. Their surveyed studies indicate that obese humans,

like the lesioned rats, eat only slightly more than normal-weight counterparts, eat less frequently and more rapidly and are less active. They cite evidence from studies showing greater "emotionality" (defined as heightened reactions to emotionally charged stimuli such as dramatic tape recordings) for obese than normal weight humans.

To test human response to obstacles impeding food access (paralleling the rats' condition of heavier food hopper lids), Schacter et al. designed the following study: They offered nuts to obese and non-obese groups; in one condition the nuts were shelled and in the other condition the nuts were unshelled. The results of this study were dramatic. All but one subject of the obese group ate nuts that were pre-shelled, and only one of the obese group ate nuts when the shells were left on. In the normal-weight groups, about half of the subjects ate nuts whether or not shells were left on.

What emerged from the findings of such human-rodent behavioral parallels was the notion that obesity may represent an abnormal or altered pattern of stimulus response; i.e., augmented response to stimuli outside the organism and attenuated response to internal signals. External reactivity in the obese was believed to account for overeating and rapid eating in the presence of salient food cues, as well as for the apparent lessening of internally motivated food drive in the face of access obstacles. Also, the so-called "hyperemotionality" of obese was explained in terms of generally heightened reactivity to external stimuli.

This formulation, which came to be known as the Theory of Externality, received its earliest explicit statement from Schacter and associates based on their interpretation of a previous work on human

expressions of hunger. Stunkard and Koch (1964) found that reports of hunger feelings among the obese as contrasted with those of normal-weight did not correspond with measures of actual stomach contractions. Fat women failed to report hunger in the presence of gastric motility; fat men reported hunger in the absence of gastric motility.

These findings, along with other evidence, led Schacter to conclude: "Whether or not the obese subject describes himself as hungry seems to have almost nothing to do with the state of his gut." The externality thesis, then, proposes that eating behavior of obese subjects, unlike that of normals, is largely motivated by external, environmental cues and less by internal, biological signals.

The externality doctrine excited special attention in the professional literature because of its therapeutic potential. Externality concepts provide basic rationale for the newest -- and, according to some writers, most promising -- techniques against obesity: the application of behavioral modification principles. As applied to the goal of weight reducing, behavioral therapy involves the control of eating environments (where eating takes place, the utensils used, the size of platters, etc.), reinforcement of food abstention via non-food rewards, and aversiveness training (whereby the pleasure sensations associated with certain foods are transformed into unpleasant sensations).

Early reports of results in using these methods indicated that while weight losses were modest, maintenance of lower weights seemed to be "better than average" (Wooley, et al., 1979). Yet, later assessments have not confirmed even this minimal optimism. In 1980, Wilson reported that outcomes have been unpredictable, with high variability from

individual to individual, and that the magnitude of weight losses was not significant. With regard to long-term maintenance of weight losses, Wilson says, "behavioral treatment presents no exception to the general tendency toward relapse" (Wilson in Bray, 1980).

Wooley and associates have pointed out that behavioral therapy, when reduced to its common denominator, must be viewed as an elaboration on dieting. Its basic assumption, that obesity is caused by overeating, is not new and is subject to the same treatment dilemmas as dieting -- the empirical anomalies of human energy balance (see preceding sections) and the difficulties of reducing essentially normal food intakes in the obese. These authors conclude that "physiological facts seem to outweigh the importance of externality factors" (Wooley et al., 1979).

Meanwhile, popular acceptance of behavioral techniques has been on the rise since the middle of the 1970's. The appointment in 1977 of Dr. Richard Stuart as program consultant to the giant dieting corporation, Weight Watchers International, seems to mark a significant event in the therapeutic institutionalization of behavioral principles. Because of the great size and influence of that organization, Dr. Stuart's advocacy of behavioral principles have been widely disseminated. Several of the most recent best-sellers on weight reduction have promulgated behavioral modification for obesity (Fanberg & Snyder, 1975; Rader, 1981). In 1976 the popular magazine, Psychology Today, featured a May cover story on "behavior mod - the SCIENCE method to keep out calories" (Mahoney and Mahoney, 1976).

Ironically, the waxing of lay enthusiasm for behavioral principles coincides with the waning of the externality doctrine in

professional literature. While the behavioral approach retains its therapeutic adherents, its theoretical importance has declined. One of its earliest proponents, Schacter's student and co-worker, Rodin, has directly repudiated the explanatory power of "externality" in obesity development:

"The role of external responsiveness in development or obesity has not received extensive confirmation. Most people, in all weight categories, are highly responsive to external food cues.... The original hypothesis which appealed to Schacter was disconfirmed when gastric motility was shown not to be crucial ... that eating proceeds normally even without gastric motility ... " (Rodin in Stunkard, 1980).

Some recent work has suggested that particular behaviors once interpreted as evidence of externality in the obese may be better understood as artifacts of dieting histories. For example, a lack of perceptual sensitivity to caloric food densities, preference for sweets, and various derangements of satiety mechanisms -- all previously associated with obesity itself -- have now been found to vary more closely with biographical experience of food deprivation (Herman and Polivy, in Stunkard, 1980).

"Dieting not obesity per se is the critical correlate -- and in our view the cause -- of some of the anomalous phenomena ordinarily attributed to obesity.... Dieters lose sensitivity to calories which unrestrained eaters retain" (Herman and Polivy in Stunkard, 1980).

Also, Rodin has found that food behavior differences between groups of moderate and extreme levels of obesity may be as great or greater than differences between obese and normal-weight levels. She finds evidence of "curvilinearity between obesity and externality" such

that the highest-weight categories are less responsive than moderately obese to external stimuli. Rodin concludes that while the concept of externality may have validity for human motivational systems, it does not seem to be peculiar to obesity.

In summary, then, it may be said that the professional literature reflects no scientific consensus on the psychological basis of human fat. Neither a specific "psychiatric status" for fat people nor comprehensive motivational systems peculiar to obesity have been established in clear-cut terms, despite considerable research effort toward both of these goals. The confounding of causal and consequential effects, as elsewhere, presents problems for disentangling psychological, biological and social elements.

Much of the psychological work -- in both psychiatric and behavioral perspectives -- seems to focus on aberrations of response mechanisms. However, even if such mechanisms could be identified and their organization in personality be understood, it is not yet clear how professional obesity psychology might apply such knowledge to account for social distributions of fat, e.g., by sex, race and class.

Symbolic Construction of Fat: The Disease Model

What cultural significance has been assigned to fat in the lay and professional literatures? This section explores the terms by which overweight and obesity writings justify their interest in fat -- their stated or implied judgment of its ultimate (i.e., culturally symbolic) importance.

It is bad to be fat. That is the sine qua non of popular

paradigms. So well-entrenched is this sentiment,* so taken-for-granted to common perspective, that some diet writers have not bothered to argue its merits. The majority, however, make a show of persuasion -- presenting "good reasons" to reduce. They offer pro-forma rationales, of which there are three types. One type of appeal is from the aesthetic realm: Fat is ugly; thin is beautiful. A second appeal is to fashion and social acceptance: "Thin is in; stout is out" (Fast, 1981). The third appeal -- usually presented last and with trump-card flourish -- is to health.

The litany of these appeals is recited with a certain rhythm: A perfunctory chant for the "merely cosmetic" woes of overweight; then a gathering invocation of the social sufferings of fat in a culture of the lean. Finally, a crescendo of medical exhortation against the health ravages of fat.

Most popular authors, particularly those with medical credentials, identify their own value interest most strongly with the health appeal. They suggest that while it is okay for readers to be motivated by beauty and fashion, the "best" reason to fight fat is to win good health. Thus, in convincing readers to reduce, they reserve their strongest language for the appeal to health. For example, Dr. Linn tells readers that overweight:

"... bothers you. It depresses you. And it should frighten you. You've been warned, time and time again what that oppressive extra burden could mean to your health -- high blood pressure, heart attack, diabetes ... early death ... If your fat doesn't shorten your life, it surely makes it less rewarding, exciting,

*The term sentiment is used here as Parsons has used it -- to describe cultural organization of feelings and values toward a given object (Parsons, 1951: 41).

worth living. You are sentenced to death row in a prison of your own adipose tissue. You have a medical problem and it must be treated as such" (Linn, 1976: xiv-xv).

And Dr. Rader says:

"... (you are) suffering from a disease, a physical and psychological disorder ..." (1968: 14)

Dr. Stillman writes that overweight is important "in every fact of social and business life," and that "you'll certainly look more attractive to yourself and others (if thinner)." But, more dramatically, he says,

"... lose the dangerous excess weight that it is urgent for you to take off for your health's sake. ... (overweight) is endangering and shortening your life ... is a kind of death for most everyone, slow for some, quicker for others" (1968: 15).

Dr. Sollomon writes:

"... you may be endangering your health and indirectly cutting your life short. Look around: how many old fat people do you see? Not very many!" (1971: 127).

Thus, while fat is attacked on other value fronts, its overriding importance has been cast in medical terms. Incantations of health risks in the popular press, especially when offered by medically accredited writers, carry the weight of legitimized authority. They tend to imply that "medical science" has established the following as fact:

- 1) That overweight is, in itself, medically defined as a dangerous disease.
- 2) That excessive body weight causes other diseases, e.g., coronary heart disease, hypertension, diabetes and others.
- 3) That weight reduction is therapeutically accepted as a preventive and ameliorative measure against a number of disease states.

These "facts" have been widely publicized and their popular acceptance would seem to gauge the degree to which fat has been "medicalized" in its social construction. Indeed, the appropriateness of fat for medical jurisdictions has not seemed to be seriously questioned, either in the popular media or (with certain exceptions to be taken later) in the professional lore. In both cases, the properness of the medical model appears to rest on the presumption embodied in the statements above, i.e., an association between fat and disease; either fat is a disease, or fat causes disease.

What is the status of such presumption in the professional literature? Our study suggests that while there are strong biases in favor of disease conceptualizations of fat, the literature contains important sources of dissensus and disconfirmation. We have already discussed certain phenomenological quandaries -- i.e., problems of the definitional, physiological and psychological attempts to render obesity as a disease entity in itself. Here we examine the content of the professional literature with respect to the symbolic identification of fat -- its ideological location in a medical matrix. For, if fat cannot be understood as disease per se, then the justification of professional interest in fat must -- according to the values of professional discipline -- rest upon a relation between obesity and disease, obesity and death.

Yet, despite intense research effort, the nature of relations between obesity and specific disease states has not been inarguably resolved. Significant gaps in present knowledge are widely acknowledged. Moreover -- and perhaps more important -- the efficacy of medical

treatments for obesity has been universally disappointing.

The failure of treatment methods to cure or reverse fatness, has two separate kinds of consequences for the status of obesity knowledge: First, it demonstrates the failure of current theories to predict outcomes -- thus invalidating causal understandings. Secondly, it dims the hopes of using clinical trials to assess the effects of obesity upon given disease states. As Mann has observed:

"It is suggestive that weight reduction has rarely been shown to be a useful treatment for any of the chronic diseases. The irony of this argument is that treatments of obesity ... are so ineffectual that their effect on any disease cannot be properly evaluated" (Mann, 1964: 179).

Diseases that have most often been associated with obesity are those involving three major physiological systems: digestive, endocrine and cardiovascular (HEW: 59). Digestive disorders (cholethiasis* and cholecystitis*) have received less attention in connection with obesity than endocrine (chiefly diabetes) and cardiovascular disease (arteriosclerosis, coronary heart disease, hypertension and stroke). While gall bladder disease has been associated with obesity, according to a government sourcebook on obesity, it "has not been proved to be caused by it ... nor is loss of weight of proved benefit in patients with gall bladder ailments" (HEW, 1966: 10).

In adult-onset diabetes, weight gain is associated with onset of the disease. Also, weight loss is said to reverse impairment of glucose tolerance and to diminish diabetic symptoms (Bray, 1976). However, not all diabetics develop obesity and not all obese are diabetic (Ibid, 1976).

* Gall bladder disturbances (See Glossary, Appendix E).

The effect of obesity on coronary heart disease (CHD) has seemed to attract the majority of research work. Although it has been reported that instances of cardiac enlargement and congestive heart failure were attributable to obesity alone, the more significant obesity links to cardiac dysfunction have been the observations of blood pressure in the obese (HEW: 24-25). Studies indicated that blood pressure was elevated (hypertension) in the obese as contrasted with non-obese. Obese hypertensive subjects were shown to experience greater CHD risk and greater mortality rates than persons with obesity alone or hypertension alone.

Yet conclusions on hypertension and obesity have been seriously compromised by the discovery of potential systematic error in the measurement of blood pressure in the obese. The method of measurement requires compression of the upper arm by a standard-size cuff with a 42 cm. bladder. But larger arm-sizes in the obese subject require greater compression force to be encircled; thus measurement distortions may have overstated the effect of obesity on blood pressure.

In a summary of extensive American and European data gathered on heart disease over a five year period, Keys reports, "If other characteristics are equal (smoking, age, etc.), there is no significant relation between relative weight or obesity and coronary heart disease using any diagnostic criterion" (Keys in Bray, 1973: 221).

A statistical study of 1,005 British subjects, randomly selected and stratified on age and sex, found that "apparent effects of obesity on CHD incidence may be due (at least in men) to the effect of the associated hypertension...." Multiple regression tests in this study

were said to indicate "no clear association between obesity and other established factors of CHD" (Fuller, et al., in Howard: 1975). The authors of the study concluded, "we should look again at the advice (to reduce) offered to the profession and the public."

Thus, even while the majority of medical opinion leans toward a general indictment of obesity as a health hazard, research has not supported a scientific consensus specifying the nature of the associated medical risks. A U. S. Public Health report assessing health implications of obesity, concludes that:

"To the question of whether or not obesity is a health hazard, no unequivocal answer is possible at this time" (Hew: 1966).

That equivocations on this issue are not new to medicine, has been pointed out by Keys, who quotes the following contradictory passages from Hypocrates (Keys in Bray, 1973):

"Aphorism II.44: Sudden death is more common in those who are naturally fat than in lean persons."

"Aphorism II.35: In all maladies, those who are fat about the belly do best; it is bad to be thin and wasted there."

Such diversity of internal medical opinion on obesity, has been largely absent from public pronouncements by the professions. The 1969 edition of Today's Health Guide, an official "health education" document of the American Medical Association, informs the public as follows:

"Most physicians consider obesity to be an important factor in human health for three reasons: 1. It is common. 2. It is associated with increased sickness and death rates, notably in respect to heart, circulatory, kidney and metabolic disorders as well as surgical and obstetrical complications. 3. It can be treated with success as one practical way to help

control associated medical conditions.

"The conviction that illness can be reduced and death delayed through correction of obesity assumes that two things are true: That weight reduction can and does lower the risk of disability and death and that weight reduction can be achieved and maintained" (1969: 1942) (*italics added*).

The AMA statement treads very nicely over the question of whether these "two things are true," admitting in later paragraphs that " ... correction of obesity does not always insure elimination of the added risks associated with this condition" and that "obesity is not always readily subject to treatment." As to the nature of the relations between obesity, sickness and death rates, this AMA publication acknowledges a lack of "positive proof" on the establishment of cause and effect, yet it concludes:

"The evidence for generally adverse effects from obesity are too massive and too consistent to be ignored unless and until definite evidence is forthcoming to the contrary, it appears reasonable to advise apparently well and afflicted individuals alike to avoid overweight ... and if overweight to reduce" (Ibid: 142).

Here, we find what Scheff and others have described as the medical penchant for diagnosing illness rather than health (Scheff, 1966). There is the tendency to prescribe across-the-board fat therapy (weight reduction) -- even in the absence of apparent affliction, without reference to possibly harmful effects of the therapy,* and despite considerable evidence that the therapy doesn't work.

Thus, it would seem that the recruitment of fat into medical purviews has been relatively independent of scientific validation for

* Depressive syndromes, body image distortions, metabolic alterations -- all mentioned in earlier sections -- are untoward consequences of dieting noted in the professional literature. Less common therapies have been known to bring other side effects.

its appropriateness. The designation of illness, while remaining technically undocumented, has been sought through moral enterprise. Even the pragmatic failure to demonstrate technical control over obesity has not diminished its incorporation into medical territory. What Veatch has called "generalization of expertise" meaning the assumption that scientific expertise qualifies one for moral decisions, seems to be illustrated in the following statements of medical authority (Veatch, 19):

"The low success rate achieved by many diets does not, however, negate the importance of caloric restriction in treating obesity. It indicates, rather, the chronicity of the problem and the weakness of the individual whose problem it is" (Bray, 1976: 303),

"... effects on mental health indicate sufficient reason for health professionals to be concerned obesity and weight control. The benefits of improved appearance, better social acceptance, greater physical fitness and feelings of well-being, although difficult to quantify loom larger as immediate justification for weight reduction than the more delayed expectation of lessened morbidity and improved longevity" (HEW: 10),

"... the need for weight reduction, the amount of weight an adult person needs to lose and the specific therapeutic measures to be taken -- all these determinations should be made by a physician. ... weight reduction is desirable for all obese individuals who are otherwise healthy" (HEW: 1976).

Jurisdictional claims for the exclusively medical control of fat may have begun to waver somewhat in recent years. In the recommendations summary of the published proceedings of a 1973 national obesity conference, it was noted that "the medical profession frequently argues that it is desirable for patients to lose weight, but documentation of

this position is not available." Conference participants recommended the development of "meaningful criteria to justify weight loss programs," stated that "values of leanness differ by social class within culture" and noted that "failure to stay reduced" is a common feature of therapeutic experience. They asked the question, "Are some obese best left alone? If so, which?" (Bray, 1973).

Several reports have indicated that medical practitioners are far from enthusiastic about treating the obese -- either for obesity or for other complaints (Maddox, et al., 1966; Maddox and Lieberman, 1968). One researcher referred to obesity as "a peculiar disorder at that, with the disability that the body is more efficient than normal" (Durnin in Bray, 1977: 237).

Bray has called for more contributions from public and private sectors in obesity control. In 1979 he wrote:

"... widespread efforts to control obesity is passing to nonmedical agencies and it appears likely that this trend will accelerate; the most promising new measures for controlling obesity may be almost entirely outside the province of the medical profession" (Bray, 1979: 13).

But the softening of disciplinary boundaries over control and treatment will not be likely to alter the basic symbolic construction of obesity that has emerged from the professional literature: The model of disease appears to be locked into the professional perspective. For example, a 1980 contribution to the International Journal of Obesity, recommends a conceptual shift in the therapeutic goals of obesity -- from "cure" to "remission." In view of past failures and the common occurrence of relapse, the author believes that the goal of cure -- thought

of as the patient's ability to return to normal life style having attained idealized weight -- is medical "fantasy." Instead, she proposes that doctors should be satisfied with remission, wherein weight is stabilized, follow-up is a matter of course, and situations of "exposure" and low resistance must be avoided. The "disease is accepted as permanent" (Haber, 1980: 265-266). By this formulation, the disease of obesity is present even when outer slimness is achieved.

The extent to which obesity represents socially-legitimized medical "turf" in the designation and control of deviance cannot be directly gauged by examination of the professional literature. For, as Conrad and Schneider have pointed out, the staking of such territorial claims is always a political, not a scientific, endeavor (1980; 273). Yet, it is clear that the rhetorical appellation of disease for obesity expresses the symbolic -- if not the scientific -- justification of medical interest in human fatness.

In summary then, Fat Theory represents two levels of the empirical lore of fat. In the popular paradigms of the lay press, fat, defined as "overweight," appears as an unaesthetic aberration of the natural body -- a temporary and reversible condition caused by over-eating, which is itself a wrongful behavior associated with lapses of moral character. In the clinical constructions, fat, styled as "obesity," is a perplexing entity which eludes most conventional operationalization and defies clear causal postulation in both physiological and psychological studies.

But popular and professional literatures both agree that fat is bad. In both doctrines the badness of fat is signified in terms of the

ultimate values of health. While the popular press suggests that "medical science" has established the health hazards of fat, the professional literature -- within the confines of its internal discussion -- fails to fully ratify this position. At the same time, the public pronouncements of organized medicine continue to support popular condemnation of fat as a threat to health. Undoubtedly, the participation of medical practitioners in the marketing of diet books also contributes to this ideology.

Thus, the empirical legitimation of fat -- the integration of its cognitive character with its normative status-- is advanced by Fat Theory. The popular paradigms provide practical schemes for expunging overweight, and the clinical constructions provide models toward the rationalization of obesity therapies. However ineffective the diet schemes may prove to be --however contradictory or non-predictive the models adapted for therapy-- both spheres of knowledge tend to confirm the appropriateness of the "correctional" approach to fat. Thus, on both levels of Fat Theory, knowledge production is coordinated with normative institutionalization.

The correctional approach, of course, implies action: Something must be done about "the problem." Having presented the definitional, physiological, psychological and symbolic framings of fat in Fat Theory, we now turn to the perspectives of individuals in social action. That is, to the construction of Fat Practice.

Fat Practice:

Ways of Life and Strategies of Action

This section will consider the experiential context of fat, i.e., the ways of life of fat people engaged in social action relevant to the problems of being fat and the interpretations of its meaning. We focus on situations and behaviors in which fat is a prominent feature -- eating styles and strategies, choices of therapy such as dieting and obesity surgery, participation in groups that offer fat philosophies and policies of action. Based on interviews, personal documents and participant observation we convey what has been learned about the beliefs and practices of fat people and the construction of fat selves.

Eating Styles and Strategies

In our study we have noted a partial correspondence between the stereotyped notions of fat food behavior and the perceptions of respondents themselves. It is generally believed that fat people eat great quantities of food, eat frequently and rapidly, prefer sweets and high calorie "snack" foods. What is also believed is that fat people often deny eating such quantities -- claim to eat small or normal amounts.

Our study indicates that fat people do believe they consume large amounts of food. They "own up" to it -- sometimes even dramatize it. Often, however, when pressed for quantifications, they seem unable or unwilling to document this -- especially when it comes to describing food intakes that may have led to their becoming fat, i.e., prior to fat self-definitions.

SJ: "I was always overweight, all my life.

I can't remember eating that much when I was young, before I realized I was really this overweight ... but I'm sure I did ... and the wrong things. I would eat three meals a day and whenever food was there. Even at the grocery store."

XB: "I was always chubby ... oh heavy at certain times. But about five years ago was when I really went over the line. I ate like a shark. Four maybe five thousand calories a day. Not exercising. Of course I wasn't counting calories so I couldn't tell you the amounts. But fat people are notorious for being 'innocent' of the food they eat. They tend not to count it; you eat so fast that you discount the food eaten."

Thus the fat people of this study, for the most part, tend to share the popular conceptions of how fat people eat. They usually interpret their own experience in light of these conceptions, believing that being overweight is, in itself, evidence of overeating.

Yet almost all the respondents, in one respect or another, express certain puzzlements about the presumed equivalence of being fat and eating excessively. For example, many observe that others in their milieu seem to eat large amounts without gaining weight. Some recall discrete periods of their own history in which they gained weight but did not believe themselves to be increasing their food intake. Among those who were not fat as children, the beginning of being fat frequently is marked in terms of specific life events unassociated with food behavior -- a car accident, a pregnancy, a new job, a marriage, a divorce, a graduation. Such events often take on a causal primacy in the conversations of fat people; yet their more explicit explanatory formulations are couched in the relating of such events to "bad eating habits."

Compulsive Eating: Three Patterns.

The discussion of eating habits is tirelessly pursued by fat people, among whom certain concepts seem to have been exquisitely elaborated. Those who identify themselves with a (conceivable) range of fatness and who regard their fatness as undesirable seem to agree that the typified food practices of fat people may be characterized as "compulsive eating." This designation includes an array of behavioral patterns and modes of consciousness. Our information suggests that three patterns of compulsive intake may be distinguished in terms of temporal dimensions of behavior: The Binge, The Graze and the Nocturnal Feed. From information about moods or attitude that accompany these compulsive eating behaviors we conceptualize five separate "consciousness modes" -- the Furtive, the Therapeutic, the Opportunistic, the Obligatory and the Ceremonial. Below is a description of these patterns and modes, as they emerge from the reports of respondents and personal documents.

(1) The Binge. A binge encompasses a specific period of time, ranging from a few hours to several days, during which an individual is devoted exclusively to eating and securing more food to eat. All other activity is forsaken. The eater consumes huge quantities as rapidly as possible. The eating is inclusive rather than selective; for example, whole cakes, not pieces of cake, whole boxes, not peices of candy -- in some cases, pantries and refrigerators may be emptied of edible contents. A binge usually takes place in the home and in private, although some binges involve restaurant food and occasionally (though rarely) a companion may participate.

PR: "I would start at the Burger Chef with the biggest that you could get and fries and a shake

and eat that there and leave with stuff to go and stop at the donut place next door and get maybe a dozen donuts and eat that on my way to the Dairy Queen at which time I would buy two or three sundaes and a cone to eat on my way home. By the time I got home I might look in the refrigerator and see whatever else was in there."

MU: "I'd go out and take the car, hit all my favorite drive-in windows, the 7-11, et cetera. Then before I even get it home, I'd start eating. Then I'd turn on TV, sit on the couch and eat 'til I could hardly move. Usually fall asleep right there on the couch."

A binge is said to have a beginning and an end. ("You know when you're going to do it, and nothing can stop you. Then when it's over you feel terrible and hate yourself.") After a binge, feelings of remorse are often accompanied by vows of future food deprivation.

Binge eaters often say that during a binge they do not taste the food eaten; they say that feelings of guilt and the need to eat rapidly prevent enjoyment of the food. Some say that the food itself is unimportant during the binge -- that it is the act of eating that is paramount.

LL: "You just want to eat and sometimes you don't care what you eat. You just want to do the thing and get through eating and have it over with."

The binge, then, is distinguished as a temporally-compressed eating experience. It is a discrete event in the life of a person -- rather than a characteristic eating pattern. However, for a few binge eaters, the experience may be sufficiently frequent as to become a relatively routine practice.

(2) "The Graze." Grazing, or "snacking" or "nervous eating" as it is variously known, refers to a habitual type of compulsive eating.

In contrast to the binge, grazing takes place in an everyday context of low awareness. It is temporally elongated; eating is slow and continuous, or nearly continuous. While the separate increments of intake may be relatively small, total calorie accruals can be great.

Usually, the graze eater experiences himself or herself as primarily engaged in some activity other than eating -- to which eating is unpurposively appended. Grazing is practiced WHILE cooking, working, watching television, etc., and is thought of as incidental to the primary enterprise. It is "off-handed" eating. In this pattern, foods chosen are those with easy accessibility --typically, snack foods and others which require no preparations, no utensils or plates.

MM: "I usually ate a big breakfast before going to work. Then on the way to the office I'd stop off and get a couple donuts and a coke. Of course I'd have something with my coffee at break. And for lunch at lunch I'd grab some packages of chips and candy bars for munchies in the afternoon."

DB: "The worst time was after I quit work to stay home with my daughter. I kept a clean house, but every time I'd go into the kitchen I'd open the refrigerator. And cooking dinner, I'd just about eat a full meal while fixing it. Then I'd sit down and eat again. Sometimes I'd bake and like as not I'd have it half eaten before anybody else ever got a chance."

Some respondents suggested that all of compulsive eating practices, nervous eating or "grazing" was most insidious and most difficult to control.

(3) The Nocturnal Feed. A night-eating syndrome described by many fat persons is characterized by absence of hunger in the morning hours, skipping breakfast and eating lightly or not at all at lunchtime. The evening meal may consist of normal or large quantities, but it is

sometime after this meal that eating commences in earnest. Nocturnal eaters feed continuously, starting sometime after the last "official" meal of the day. They may consume snack foods or may prepare elaborate dishes. Often they report problems of insomnia, which they feel are relieved by eating large quantities of food.

The nocturnal pattern may incorporate elements of either of the other two patterns -- may involve either grazing or binge-eating, or some combination of both. However, its distinguishing characteristic is the occurrence at night.

PH: "Usually I'm all right during the day. Can't stand breakfast and don't eat a very big lunch, unless maybe there's some big occasion. My problem is at night after supper, and sometimes before I even finish the cleaning up in the kitchen. I'll get to nibbling and it seems like the more I eat the hungrier I get. But it's not really hunger. Just nervous eating. Sometimes I'll wake up at night and eat when everybody is in bed."

IW: "Like last night, I got up and drank maybe half a gallon of milk in the refrigerator. I don't even remember doing it, but my father said he saw me and it was gone in the morning. So I guess I did it."

The night-eating pattern, like the graze pattern, is said to be repetitive (nightly). These two types of compulsive eating are typically spoken of as habitual behavior -- as opposed to the binge, which is characterized as episodic -- an unanticipated event, sporadic and unpredictable.

These three classifications of compulsive eating are, of course, analytical abstractions. They do not, qua categories, appear

in the social reality of fat people.* Nor is it suggested here that given patterns attach to given individuals -- or, indeed, that compulsive eating is itself exclusive to fat people. We merely submit that the three classes, distinguished specifically by temporal dimensions of intake, may be said to emerge from the discussions and written documents of fat people.

Compulsive Eating: Five Moods

For most respondents, the temporal dimensions and other characteristics of intake itself are much less important than are the feelings and attitudes associated with compulsive eating. Five kinds of "moods" or consciousness modes have been described by respondents in discussions of compulsive eating.

(1) "Furtive." The most dramatic and most frequently-discussed feeling-state arises from the fear of being discovered in the acts of compulsive eating. Respondents speak of feeling shame and disgrace -- of "sneaking" food and hiding evidence of its consumption.

GAW: "... I became a sneak eater. I nibbled while I cooked, then ate a large meal and finally I cleaned off all the plates and finished whatever was left in the serving bowls. After that, I tucked several slices of lunchmeat into the pocket of my robe ... My desk drawer at work ... had bars of candy ... I ate in the car ... I would throw away the wrappers and cartons before I got home."

MB: "My husband had bought a box of chocolate-covered cherries, to be saved for our party on the weekend. I was at home alone that day, vacuuming. somehow I couldn't stop thinking of the cherries."

*The terms "binge" and "night eating" are widely familiar, but the threefold classification scheme, as such, has not been a part of the common or specialized lore. The currency of the term "graze" is unknown; it was suggested by a respondent in the study during conversation in a group setting. Members of the group seemed to endorse the aptness of this term in relation to common experience.

They were in the bedroom. I saw that a few were missing from the top layer. I ate a few, and then closed the box. But eventually I ate them all. Of course I had to go to the store and replace the box. And, also, I ate a few more from the top layer of the new box, so no one would know.

The fear and guilt of this kind of furtiveness does not arise from official or coded sanctions of the behavior; that is, food eaten compulsively is rarely described as illegally obtained -- or even as being outside the bounds of household budget. The moral source of ban which respondents apply to their compulsive eating is not Leviathan as described by Matza (See Chapter II); rather, ban is constructed in consciousness through the moral process of dieting, which we discuss further.

(2) "Therapeutic." Some component of compulsive eating is conducted in a therapeutic mode, by which the individual reasons that food will solve some present or future problem. Respondents have said that they eat in the absence of hunger in order to prevent some later, untimely, occurrence of severe hunger. Often, they fear an episode of binge that may strike in a public situation.

FW: "I was afraid I would eat too much at the picnic so that morning I fixed up an extra batch of chicken and ate it before I left."

The therapeutic attitude as suggested above, may be explicit and self-conscious, i.e., the individual is aware of "reasons" for the food behavior. On the other hand, a less-explicit variant of the therapeutic mode often involves what respondents retrospectively call "unconscious reasons:" They say they use food as psychic medication -- as a balm to wounded feelings or a sedative for diffuse anxiety.

PA: "Overeating was my way of dulling pain, like a drug or alcohol. I couldn't just let my feelings

hurt; I had to take something for it ... and usually that would be (food). It's just an escape." Of course at the time I wouldn't think of it that way; I just knew I wanted and needed to eat. I was trying to take care of myself but going about it the wrong way."

The therapeutic feeling-state has been associated with all three patterns of compulsive intake. The binge may represent a response to acute emotional crisis, whereas the graze may be understood as therapy for chronic unease. In many of the accounts of night-eating, as noted, eating is believed to relieve insomnia.

(3) "Opportunistic." A history of frequent dieting often transforms non-diet periods into eating opportunities for fat people. Many speak of a kind of "last supper" approach in which the day before a diet becomes a day of feasting-before-the-fast. Vows to give up specific foods tend to imbue such foods with the quality of scarcity, rendering them all the more desirable on the (now rare) occasions when they become available. Some respondents have indicated that the mere presence of such foods has set off binge behavior response for them.

TL: "I had sworn I would never eat another banana split. And I had stuck to it for over a year. Then we went to this party where they had it all laid out, the bananas, the sauces and ice cream ... all flavors. I couldn't stand it ... I must have gained back half of the weight I'd lost just that one night."

(4) "Obligatory." A number of respondents have noted that they often feel a sense of obligation toward food that is offered to them, or food that has been "already paid for." Often this is referred to as the "clean-your-plate-because-children-are-starving-elsewhere" syndrome, and is attributed to the instructions of mothers to children who become fat adults. The obligatory consciousness is associated with

a feeling of responsibility toward food: The very presence of food constitutes a moral imperative.

PE: "We took the whole family on vacation and stayed at this hotel where meals were included in the rates. I hate to admit it but I kept telling my kids to eat more, reminding them how much this was costing us."

OG: "The day of the company barbecue, I had car trouble and never made it to the party. Later I heard that there were mountains of food that nobody ate, that they had to throw away most of it. I was sorry I missed it but the strange thing was I realized I felt guilty - like I hadn't done my part. Of course we weren't required to attend; it wasn't that. I felt guilty that I had not been there to help eat the food. I know it sounds crazy."

(5) "Ceremonial" Cultural events like birthdays and weddings often require specific food behavior on the part of participants. Refusing to partake of ceremonial foods may incur -- at the least -- negative attention, and -- in some situations -- direct censure. Those for whom food behavior has never been problematic may find it relatively easy to resist the ceremonial pressures to eat. But fat people, for whom the moral meanings of food have become inordinately complex, find special difficulty in such situations. Many respondents tell stories of how happy events have become the ruinations of diets, the beginnings of binge -- of the tension and struggle they experience in the ceremonial confrontation with food.

TF: "A few weeks after that night came my birthday. I know birthdays are supposed to be happy occasions ... but I was only seventeen years old. I felt deprived without that traditional birthday cake with candles. It just wasn't fair that I had to give up an old birthday tradition for a new way of life that was not yet comfortable."

OG: "I was determined to stay off the sugar. So even on my daughter's birthday party I refused to have it around. She was six years old and instead of cake and ice cream, we served hamburgers and fruit. I thought no one would miss it. I was wrong. The kids didn't seem to notice, but every parent there wanted to know: where's the cake and ice cream?"

The cultural consummation of special occasions in the sharing of food, then, takes on a peculiarly problematic aspect in the consciousness of fat people. It creates a painful moral dissonance: One may refuse the ceremonial cake -- may do so politely and as inconspicuously as possible. But to decline is to disaffiliate, to stand outside the happy circle and to signify oneself as different. The cake embodies the public spirit of the gathering; to eat is to "belong." But for the fat person the cake contains a private moral poison -- a special consequence of guilt and terror which does not exist for the others. The dilemma is whether to pay a private penance for a moment of public belonging or to resist the temptation and foreswear the belonging -- all in the hope of eventual conformity itself.

Dieting

All reducing diets involve the following principle or purpose: to deprive the body of the energy needed to maintain current weight stability. By definition, dieting is physiologically deviant; it imposes an externally-created imbalance on the energy system of the body.

But what kind of social act is dieting? To what extent can it be characterized as sociologically deviant?

Clearly, dieting represents a departure from "normal" eating

patterns, i.e., those which -- within the limits of the relevant culture -- tend to maintain a more or less stable body weight for individuals. Furthermore, to diet is to become intensely focused on one's food intake and to make more or less drastic changes in eating behavior. This calls attention to the dieter and may negatively impinge upon others in his or her milieu. Also, since dieting is both a physical and a social strain, common sense suggests that there may be aspects of the dieter's behavior, other than eating behavior, that will be affected by dieting. Lastly, but perhaps primarily, the decision to diet is a self-labeling act, that is, it signifies the judgment that one is too fat.

Dieting, then, involves departures from normality, disruptions in routine, disturbance to expectations and negative self-labeling. Yet, despite these deviantizing factors, it would be a mistake to regard it, a priori, as a deviant process. Dieting is a highly rationalized form of conduct -- both in the sense of pursuing mastery over nature and in the organization of action within a means-ends scheme. As such, it is behavior that "makes sense," in a modern, Protestantized, work-oriented world. From a motivational point of view, when considered within the framework of a means-end project by which an individual attempts to bring his body into compliance with weight norms of the society, dieting must be understood as a normative act. Its basic intent is conformity.

But from all that we have learned in this investigation it appears that the process of dieting is empirically illogical -- that is, has been shown in most cases not to produce the end-in-view. That dieting doesn't work -- does not bring the reversal of fatness -- is

clearly suggested in reports of both clinical and individual experience. Yet dieting behavior, and the beliefs which sustain it, continue to persist" (Dwyer and Mayer, 1910).

That a rational, normatively-motivated action may fail to produce its intended result is not, in itself, remarkable. But our study suggests that, ironically, the process of dieting may bring precisely the opposite consequence from that intended by its authors: A solidification of deviant identity. For those who diet are engaged in active deviance avowal. No longer is being fat merely a matter of body weight exceeding socially accepted standards. In the act of dieting, dieters affirm the belief that they have been bad, have eaten too much -- and that their behavior requires correction.

Dieting is a significant step in the career of a fat person. It marks self-labeling, affiliates one with others of one's ilk, sets the stage for a moral bedevilment with food behavior, and provides an enterprise whose success or failure becomes a matter of lasting symbolic significance in the biographical record. Below we describe aspects of dieting which may be relevant to its sociological appreciation; we explore "going on" a diet, "being on" a diet and "going off" a diet.

To diet is to enter a world of complex technical, motivational and moral meanings. Although almost all of our respondents have entertained the possibility of dieting and most have embarked on one of another type of reducing program, not all fat people decide to diet. Dieting, like any enterprise, requires certain personal affinities, a "willingness" (Becker, 1963). The behavior must come to be conceived of as a possibility for the individual.

The technical requisites of dieting are considerable. Aside from the acquisition of detailed knowledge (see previous discussions) and certain skills and equipment, there must be access to food choices; one must be in a position of autonomy with respect to food. (One must not be, for example, a child, a prisoner or an inpatient.) Moreover, dieting requires resources of time, money and physical mobility. A certain propensity for asceticism, a belief in science and rational mastery, and the ability to defer gratification seem also to be prerequisite. No doubt, as we have already suggested, a full panoply of cultural items -- those acquired in early socialization -- might come into play in the mobilization of behavior toward dieting, or any social act.

"Going on" a diet often involves some decisive moment or experience in which motivation is galvanized.

CL: "It was what my doctor said that really scared me. He said my blood pressure was way up and it could cause all kinds of trouble. So that was it. And I really decided then and there that I had to go on a diet."

PW: "I had been skinny all my life until my divorce. Then I started gaining and gaining. But I didn't do anything about it until my daughter got engaged. I just couldn't see myself being fat for the wedding, have to shop for a gown in the size I would wear. So that's when I decided to join Weight Watchers and lost 45 pounds. Of course I gained it back eventually."

Typically, a diet is initiated and carried out in connection with some program, of which there are three common types: (1) "Doctors' Orders." (2) Commercial diet club programs. (3) Programs in media publications.

According to respondent reports, dieters under doctors orders

usually receive an office examination, a reprimand for presumed over-eating, a mimeographed diet sheet and instructions to return in four to six weeks. Some overweight patients receive prescriptions for diet pills. Among our respondents, those who used such pills found them almost universally intolerable -- ("They drove me up the wall." "I couldn't sleep for days." "I was wired on those things.").

A number of our respondents said that their doctors warned them, in very dramatic language, against the health hazards of overweight:

SB: "He told me I could end up as a vegetable. He said he was surprised I even survived the heat wave we were having that summer."

KE: "He said the weight was going to probably kill me anyway, so the (risk of the) operation wasn't that bad."

Dieting in connection with commercial diet club programs involves, to various degrees, highly structured social interactions. Most such organizations require the dieter to meet with others on a regular basis, for group discussion and to be weighed on the official group scale. Typically, the discussion involves exchange of recipe knowledge, mutual encouragement and reinforcement for the goals of weight reduction. Usually a member's weight record is individually charted; however, the dieter is assured that this record will be kept confidential.

The majority of our respondents had tried the group dieting experience. Many report remarkable weight losses on such programs; yet all of these losses were reversed over time. A few respondents said they would never try group dieting, even though they express belief in

the efficacy of its principles. They felt either that the diet formulas were too rigid or too unappealing or they recoiled from the prospect of sharing their weight problems with others. Some said they feared the prospect of being the fattest in the group. Others simply rejected commercial programs on the basis of their financial cost.*

Almost all of our respondents have tried one or another of the programs publicized in popular media. The "water diet" (Stillman, 1968) and the "carbohydrate diet," (Atkins, 1972) were most prominently mentioned. A few respondents said they had "tried every diet ever printed;" of these, most said results were either insignificant or of little duration.

Being "on" a diet presents a number of experiential themes in the conversations of fat people. Most respondents say that dieting is difficult and laden with tension; they often describe what they call symptoms of depression in dieting. At the same time, many report that while losing weight on a diet they experience feelings of euphoria:

DB: "I was on a natural high as soon as the weight started to drop. I wasn't even hungry. I had so much more energy. And it was very exciting, believe me, to feel my clothes getting to big for me."

OG: "I can remember when I got down to a certain weight, I felt so skinny, sort of light-headed and very happy. Well I lost even more weight. Then I started to gain. I got back to that same weight and I felt heavy and sluggish. Of course I gained it all back, and then some."

Optimism is the benchmark of the dieting experience. Whatever the

*Weight Watchers Inc. charges \$15.00 initial fee plus \$5.00 per week, at this writing.

current program, the dieter affirms the faith -- expresses the belief that this program will succeed; will be the final solution. Even a long history of repeated diet failures, does not diminish the spring of hope.

CL: "It's going very slow right now but I'm losing and I'm sure I'll continue to lose. It's just a matter of staying with the program. This is it for me."

FB: "All my life, I floundered about, nearly drowning, in the shipwreck of compulsive over-eating. ... but today (the program) gives me a sturdy lifeboat and two strong oars: One of them is abstinence and the other is the OA fellowship. I am confident that as long as I use these oars, I cannot fail."

Dieting devalues the present in favor of fantasized (thin) future. Life may become dichotomized into before-and-after categories, postponing all enjoyment to a future time. Since many social interactions involve food and thus, for the dieter, problems of temptation, some dieters decide to avoid temptation by avoiding social interaction.

COA: "This guy came in town today and he wanted to take me out to lunch. He's kind of like an old boyfriend but not exactly Anyway, he's never seen me this overweight before. Besides I didn't think I could face the lunch and stay with the program. So I told him to call me next time. I hope by then I'll be skinny."

A diet is understood as a temporally-limited endeavor. It comes to a close, either when goals have been met or when progress halts or -- for whatever reason -- the dieter "goes off" or breaks the diet. According to all reports, most successful diets -- those which achieve the desired weight loss -- are followed by a period of weight gain, with the final result (often) being a net increase in body weight.

Whatever the ultimate weight outcome of a given diet, the most

lasting consequence of dieting seems to be its moral estate. The dieter has created a morally-charged universe in which ordinary activities and objects are invested with special powers of signification. After a diet is over, the meaning structures endure: Certain foods, having been banned by the diet, are now "evil," and dieters continue to feel a sense of moral struggle when confronting such foods. Often there may be a persistence of before-and-after partitioning of life; being fat comes to require a continuing contraction of social relations. Often, when dieting fails, dieters may retain faith and optimism in its efficacy -- at some cost to self esteem:

EC: "I feel guilty for all the diets I've tried that didn't work. Usually because I'd go off them. I just don't have any willpower."

The concept of willpower is perhaps the chief moral legacy of dieting. Almost all those respondents who had dieted -- even those who achieved large, albeit not permanent, weight losses -- have expressed the conviction of their own moral failing in the absence of willpower.

The meaning of willpower and its attachment to individual character arise from certain moral significations in the dieting process. In the first place, dieting is often conceived as a punishment for past sins. It is an act of self-deprivation in the Calvinist tradition of mortification of the flesh. The asceticism of the diet, and the forsaking of the pleasures of food, seek as their object a purification and a salvation: Dieters seek a transformation from evil (fat) to good (lean).

Losing weight is the sign of grace, the empirical evidence of election. Failure to lose weight, falling off one's diet, ("cheating") or regaining weight lost on a diet are interpreted as the working of the

underlying flaw of character, the lack of willpower.

FOA: "One thing's for sure. I don't have willpower. If I did I wouldn't be this fat. I've tried to cut down, but it doesn't seem to do any good. About every diet I ever tried I couldn't stay on. I don't know what's wrong with me."

In summary, then, dieting appears to be an organizing principle in the interpretation of fat practice: It signifies motivational orientation, influences some interactional contingencies, and solidifies social identity. The decision to diet declares a compliant heart; it acknowledges past sins and seeks redemption in the spirit of correction. But while the act is conceived in conformity, it is often carried out in a developmental context of deviance: In dieting, one's differentness is enlarged and made manifest. In consequence, the dieter engenders a deviant identity.

When dieting fails (which appears to be the usual case) the dieter inherits a new mantle of social identity -- an elaboration of deviant character. To the pariah status of fat, failure adds the fatal flaw of the absence of "willpower." Fat is now more than mere "body abomination" -- it constitutes a bad moral record. Thus the stigma of fat -- that is, the meaning of the sign itself -- has been amplified in the dieting process.

Group Settings

That the problems of being fat have become widespread in our society is evidenced by the rise of several nationally-coordinated formal organizations devoted to the strategic and ideological concern with fat. We have observed and participated in local settings of two such

organizations: Overeaters Anonymous (OA) and Take Off Pounds Sensibly (TOPS). The methodological basis of our observation has been reviewed in Chapter III.

Both OA and TOPS are distinguished from other such organizations by their non-profit tax status.* OA is supported by voluntary contributions from members; TOPS collects nominal dues from members but proceeds are said to be donated to medical research on obesity. Both group settings provide their members with (1) a format for the discussion of shared problems and reflections about fat and (2) a fully-developed ideological structure for the interpretation of fat issues. While neither group prescribes a technically-specific fat therapy (i.e., diet),** each advocates a comprehensive overall approach of attitudes and activities.

In the following sections, we describe the ideological structures of the two groups -- their official philosophies and policies -- and the ways in which members interpret and implement these in social action. Our discussion derives from review of the organizational literatures as well as from observation of the settings and participation in conversation with members.

It may be noted that while both groups are open to men and women, the memberships are disproportionately female; the TOPS club (during the

*For example, Weight Watchers International, a corporate enterprise of reputedly huge dimensions, provides both a diet and a philosophy of fat. Also there are weekly lectures with some group discussion. But membership in Weight Watchers is viewed as temporally limited, and does not appear to involve the degree of social belonging that is significant in OA and TOPS.

**Detailed rules of food intake are not given; although some patterns of consumption may be recommended -- such as avoiding between-meal snacks, etc.

period of participation) was exclusively so.

Overeaters Anonymous (OA). The OA organization began in 1960 with a program derived from and closely modeled on the principles of Alcoholics Anonymous. The program is characterized as a "spiritual" approach to recovery from compulsive overeating, which is conceived of as a disease of organic, psychological, and spiritual origin. The disease (sometimes portrayed as an allergy or an addiction) is understood to be incurable but capable of being "arrested" through the application of the program tenets and activities.

OA requires no membership dues* and distributes no specific reducing diet** but advocates a regimen of "abstinence," which is to be defined by each individual member. The suggested program of recovery requires that in addition to maintaining abstinence, members follow "The Twelve Steps," -- a set of prescribed attitudes and specific actions to be taken. The Twelve Steps originated with the AA program in the thirties. They include an admission of "powerlessness over food," a belief in "a Power greater than ourselves" who can "restore us to sanity," and a concept of "God as we understand Him."

OA literature is careful to distinguish its spiritual program from a requirement of religious belief. The organization is said to be "open to people of all faiths as well as to atheists and agnostics." Any member who "has a problem with OA's concept of God," is asked to

*Instead of dues, there is a "passing of the basket" at each meeting to cover incidental expenses. The church basement or public library room is the usual meeting place.

**A diet called "The Grey Sheet" has been associated by with the OA program in some sections of the country, but its official status is in dispute.

"keep an open mind ... and continue coming to meetings" -- to concentrate on the action components of the program and hold spiritual judgments in abeyance. It is suggested that meanwhile, the program will work for the spiritual doubter if such a member "acts as if" a believer -- while bracketing belief itself. A member who participates on this basis is called a "Zif."

AW: "My Higher Power began evolving the day I heard someone suggest that nonbelievers make 'a zif.' I was an atheist; not an agnostic. An agnostic has doubts. I had never doubted anything. I knew there was no God. When I learned that a zif meant 'acting as if,' I (knew) I didn't have to believe in anything. All I had to do was say, 'God, I don't believe you're there, but anyway, I'd like such and such.'"

"... So I started to develop a Higher Power that was sort of a spirit of the universe ... It got so I was praying for parking places and getting them."

The OA program offers both beliefs and practices -- in effect, a whole way of life -- for its members. It is not insisted that belief components be accepted immediately; but OA literature suggests that if a member faithfully "works the program" in its prescribed actions -- suspending philosophical disbelief, the program will work. Ultimately, it is expected that with practice, belief (spiritual renewal) will "come around." Many members report that, for them, this has indeed been the case.

PO: "I was not impressed at first and was not comfortable with the talk of God and Higher Power, but I had tried everything I knew to try, so I decided to go along with it. And it worked. It was like a miracle for me."

Action components of the program include going to meetings, selecting a "sponsor," becoming a "sponsor," and writing a "searching

and fearless moral inventory of ourselves." A sponsor is a member who has achieved abstinence and with whom one communicates daily, usually about food choices but also about emotional problems or events relevant to maintaining abstinence. A moral inventory is a written confession of one's failures, regrets and character defects -- a kind of emotional biography. Once written, it is to be presented orally to another person -- often a clergyman or a designated individual in the community who regularly receives such reports and who has achieved long-standing abstinence.

CL: "When I started to write my inventory, I thought of myself as a placid type of person ... that nothing really gets to me. But the fact of writing things down made me realize that many things do bother me. Still, the writing part didn't upset me. It was when I went to my priest and gave my inventory ... which is when I broke down and really started to cry."

The OA approach emphasizes the inner territories of the mind over the outside bodily boundaries. Discussion of body weight -- even weight losses-- is discouraged; there are no weigh-ins, no progress charts and no reporting of numbers of pounds lost or gained. Mention of specific foods or recipes or diets is taboo. Aside from ritual readings from the extensive OA literature and occasional group business, conversation of the meetings is usually confined to issues of the program. Personal commentary or testimony-- called "sharing"-- is encouraged. Such participation tends to follow the format of the readings -- i.e., provides illustration or elaboration of OA principles. The larger philosophical questions of life (e.g., happiness, peace of mind, moral struggle) are favored over the mundane matters of pragmatic

consequence (such as how to lose weight, how to define abstinence, how to obtain nutrition from food).

Among OA membership, body weight is not taken to be an indicator of success or failure in the program. It is said that some members suffer from compulsive eating without the condition of obesity. Moreover, it is understood that even those who reverse former fatness still carry the compulsive illness --arrested but never cured.

The theoretical key to the OA philosophy turns on the concepts of control, power, will and willpower, and the relation of these to compulsiveness. The first three of The Twelve Steps focus on these concepts, requiring (1) admission of powerlessness over food (2) belief in a power greater than ourselves and (3) the turning over of one's will to God. For the newcomer to OA these instructions often seem confusing: Compulsiveness, viewed as lack of self control, seems to require for its correction an assertion of self-will. But the OA tenets require surrender of will and personal power, an admission of hopelessness and self-defeat.

How are such apparent contradictions interpreted by members? Newcomers are told that those who would fight the compulsive disease with willpower inevitably fail, because the illness always overpowers the will. It is said that sometimes a compulsive individual must "hit bottom" before realizing the inadequacy of unaided will and the need for a force outside the self. At that point, one is willing to surrender self control and place faith in the program:

CL: "You have to let go just long enough to throw the ball so He (God or Higher Power) can catch it."

Some long-term members of OA have come to understand that compulsiveness pervades their entire lives and is not restricted to food behavior. Participants cited examples of their own compulsiveness in such areas as spending, reading, use of alcohol and sex; even dieting was characterized as a compulsive pattern. One woman said that, through OA, she is learning to control her compulsive tendencies and that each morning she makes "a list of things to turn over to God."

Another woman illustrated the use of OA principles in solving a petty, but recurrent problem of her everyday life.

SA: "My husband is a good person and a good husband. We get along just fine, most of the time, for 11 years now. But there is one thing about him that just infuriates me and it's been a big problem for years. He won't take out the garbage. Just won't do it."

"So this week, I sat down and wrote out all the possible ways I could handle this situation, to control it once and for all. I listed divorce, murder, everything I could think of. Then I decided the only reasonable thing to do was to just put up with it. I had to just let it go."

Thus, the meaning of control and will are highly elaborated in the OA meetings. It is stressed that one must not assume control (and thus responsibility and credit) for events and problems in life for which one has no real jurisdiction. Such things -- including the illness of compulsive overeating -- must be "turned over." On the other hand, by "working the program" one stays in control of that which is controllable: living one day at a time, going to meetings, calling one's sponsor, etc.

The demeanor of OA meetings* is that appropriate to a fellowship of sufferers -- sincere, serious, compassionate, and confessional, yet tinged with elements of pragmatism. The meetings open with a prayer called "Serenity" which beseeches courage (to change) and acceptance (of things that cannot be changed). This is usually followed with selected readings of OA literature and sometimes from the principal Alcoholics Anonymous publication, known as "the big book."

Members introduce themselves in a ritualized fashion: "Hello I'm _____, a compulsive overeater." Only first names are used; and the principle of anonymity is emphasized and preserved. Members give their telephone numbers if they wish to be called between meetings.

One evening a newcomer, a man, came to the OA meeting and attempted to alter the general tone of the discussion. He declined to introduce himself in the customary manner, as a compulsive overeater. He addressed the group, saying:

"What's all this suffering I'm hearing about here?
I'm not so sure we're suffering all that much. I
mean we overdo it, we indulge. Okay. What needs
to happen is just to shape up."

These remarks brought an immediate silence. Then one woman responded by saying:

"If you weren't suffering you wouldn't be here.
What would be the point?"

Another woman said:

"There is physical suffering with high blood
pressure and back trouble, tight-fitting clothes

* In some sections of the country, OA groups are sufficiently numerous as to be divided up subculturally. One member said that in New York City there were special OA groups for homosexuals, for housewives, and for handicapped. This report is limited to settings observed.

and such, but the main suffering is emotional.
Lots of people who compulsively overeat are
lonely or frustrated."

OA membership thus appears to confer the status of victim and sufferer. The source of the compulsive illness is located within the individual, and its solution is seen to require a radical renewal of spirituality and a whole new way of life.

Those who fully embrace the OA way, often come to devalue the importance of overweight or fat. They say that for them, losing weight on the program is "merely a side effect - just gravy;" what matters most is their new way of living.

PW: "The miracle for me is that now I have peace
and serenity and I'm finally free of the compulsion.
In coming to the meetings, it feels like I'm coming
home."

Take Off Pounds Sensibly (TOPS). If OA is a fellowship of suffering, TOPS may be viewed as a fellowship of fun. TOPS meetings are filled with games, gifts, prizes, contests and songs. What is more, even food is sometimes shared at TOPS events. Outside of meetings, TOPS provides "Baggy Pants Parades," Weekend Rally Days, Retreat Camps and Charm-and-Beauty Competitions. Kings and Queens are crowned in TOPS ceremonies; comedy skits are performed at rallies, and TOPS members receive a monthly magazine filled with news, ideas and many before-and after pictures of "Big Losers" from chapters throughout the nation and Canada.

The verse below is from the TOPS song-sheet (and is sung to the tune of "I'm Looking Over a Four Leaf Clover"):

"I'm looking over a pile of blubber
that I overlooked before.
Each little pound that has clung to my frame

Adds up to pounds that I carry with shame.

No use complaining, I'll start campaigning:
I'll diet forever more
Cause I'm looking over a pile of blubber
That I overlooked before!

Aside from the fun theme ("Dieting can be fun"), there is a serious side to TOPS -- the business side. TOPS members are expected to work hard for success -- both at losing weight and in the organization and execution of their incentive programs. Weekly records of weight changes are kept by an official weight recorder. Both individual and group totals are calculated. Local records are sent to state and national bureaus for purposes of competition between chapters. Prizes and awards await those who win by losing the greatest numbers of pounds: Big losers are winners. Groups as well as individuals compete.

At each meeting of TOPS, after the opening pledge and song, the leader calls the roll. Each member answers roll call with the number of pounds lost or gained for the week. Those who lose weight are congratulated with applause. Those who gain are reprimanded mildly ("Let's make up for it next week, okay?") and encouraged for future effort. The member who loses the most weight for the week is the Big Loser and is entitled to receive a small gift from the previous week's Big Gainer. All members who gain weight are fined twenty-five cents for each pound gained.

After the roll call the weight recorder announces the final net loss statement for the group. Good weight losses are said to put the group "in the black" and net gains mean the chapter is "in the red." The weight recorder keeps an official financial balance sheet which is marked appropriately with black and red ink pens.

TOPS then is very businesslike about dieting and losing weight. The businesslike spirit is expressed in its activism, in the uses of competition, in the stress on goal-setting and planning, in the detail of record-keeping and in the intense focus upon money and goods. Success is always quantifiable in terms of numbers of pounds lost; thus the cash value of incentives often correlates dollars and pounds. The parity of gift awards to money equivalents may become an issue, as was the case in one meeting of a local TOPS Chapter.

VR: "Personally, for me, it would be more meaningful to receive a gift than to just get cash (for being Biggest Loser of the month). But I know in the past, some people have complained one winner's gift was more expensive than some else's. Maybe we could get some outside person to buy the gift and just say it's going to be a certain amount."

The TOPS program issues no specific diet as such, but recommends "sensible" dieting -- calorie restriction and attention to nutritional principles. The use of diet drugs, formula drinks, fasting or meal skipping, and "fad" diets are specifically prohibited. Such methods are considered hazardous to health; perhaps more importantly, such methods constitute unfair practice in TOPS weight loss competition.*

Within the TOPS approach, then, the business of losing weight is understood to be hard work pursued in a competitive spirit according to strict rules. Motivation is spurred by the positive reinforcement of recognition and tangible rewards of money and goods. Negative

*In a telephone conversation with a local TOPS leader, we were told that any member who loses weight by such illegitimate means is ineligible for TOPS awards. It was said that one statewide Queen who had lost 150 pounds was found to have used diet pills and was stripped of her crown. In another conversation we were told that persons who had undergone obesity surgery would not be welcomed as TOPS members.

reinforcement is also employed -- as in the small fines for each pound gained and, for example, in the suggestion offered by one member to "keep your tightest clothes at the front of the closet so you can't forget how much you've gained." Members are exhorted to learn about calories (at one meeting there was a "pop quiz" on food calorie equivalents), to stay busy ("get a hobby"), to make meals appetizing, and to monitor all body states (Don't let yourself get tense; get plenty of sleep.).

Willpower, in the TOPS philosophy, is conceived of as "a skill to be trained" and developed. It is believed that willpower is innate but must be strengthened through rewards and punishments and constant reminders. In contrast to OA teachings, TOPS advises members to seize control of the events of their lives, to plan not just one day at a time but devise long-term strategies that envision future rewards. Body weight is taken to be the single, valid indicator of success or failure.

In contrast to the anonymity of OA members, TOPS membership involves extensive sociability and full disclosure of personal identity. A roster of names, addresses and phone numbers is distributed to each member. Anniversaries and birthdays of members are also included in the roster and are observed with gifts and cards. Club By-Laws provide \$6.50 to \$7.50 for gifts to hospitalized members.

In the local setting observed for the study, evening meetings were traditionally followed by a restaurant meal. The meetings begin with weigh-ins from 6:30 to 7:00 p.m. Most members refuse to eat or drink before weigh-in; many have skipped all meals during the day of the meeting -- for the purpose of minimizing the scale reading. There

tends to be much unofficial discussion of food and hunger prior to the opening pledge at 7:00 p.m. The meetings rarely last over an hour. Within minutes after the close of meetings, all members have left for the restaurant.

For the post-meeting dinners, the group splits into two factions, each choosing a separate restaurant. In one group, conversation seems to center on the activities of the group, its future plans, the status of goal achievements, and the rules of the organization. Dieting methodologies are also discussed. In the other group, conversation tends to be confined to food -- particularly the quality of the meal being consumed, comparing restaurants and menus and prices. There is much sharing of food and trading from plate to plate. In both groups there is some gossip about the members of the other group.

There are several very long-term members of the local group (seven to ten years membership). Of these, most seem to be in the higher weight categories. Two veteran members said they had lost over 100 pounds on first joining TOPS. One has regained all the weight lost; the other, almost all.

BT: "It took me a year to lose the first 100 pounds. Then I guess almost another year to lose 35 pounds more. Then I quit work and started gaining. But I can't use that for an excuse. I just overate. No other reason."

This member had once been crowned TOPS Queen at a regional rally of the organization. She said her self-esteem and motivation had been badly hurt in the regaining of weight lost, but that "the hardest thing of all" was facing the others in the local club. For a while, she dropped out.

The motivation to lose weight in TOPS can be distorted by the incentive structure of the program. This possibility was illustrated by one long-term member who admitted that "Frankly, I have no intention of getting down to goal." She explained that she had seen too many members achieve weight goals only to regain and thus "lose their KOPS."* She explained that when this happens "it's bad for the club."

Thus, it can be seen that with the institution of a competitive process, the always-threatening possibility of relapse presents potential for humiliation. The perceived need of the group for constant reinforcement of the success model intensifies the pressure for the member who has fallen from grace. Moreover, the process of losing weight is more exciting than that of maintaining the goal -- although the latter is acknowledged to be equal if not greater in difficulty. While KOPS members receive periodic honors, they do not participate in many of the TOPS competitions.

The sociability and pragmatism of the TOPS approach stands in marked contrast to OA's principles of anonymity and introspection. OA speaks to the inner despair of the psyche, calls for an enhancement of spirituality in the release from suffering, and devalues the importance of tangible body dimensions. TOPS, on the other hand, is a program of active success-seeking, in which measurable goals of body weight are pursued in a spirit of fun and competition.

Summary:

In summarizing the two groups, we suggest that both OA and TOPS provide for their members a fully-articulated system of beliefs and

* KOPS is the special status accorded to members who achieve and maintain their weight goal within two pounds; it stands for "Keep Off Pounds Sensibly."

practices with respect to fat. Not only the empirical interpretation of fat and the instrumental orientation to its reversal, but a moral -- in some respects even religious -- ethos is shared by the collectivity.

For example, in the spirit of piety and self-abnegation, OA explains that fat constitutes a disease not only of the body but of the mind and soul as well. Compulsiveness, as understood in the OA program, represents a wrongful attempt to deny or usurp God's power to control earthly events. The spirituality which OA recommends as remedy for compulsiveness consists of (a) a personified conception of God -- "as we understand Him" and (b) an attitude of supplication and contemplation (combining prayer and meditation) directed toward that personalized conception as a decision-making entity. Thus, the God who "knows and cares" is beseeched through appropriate human action. Religious elements of this ideology are reminiscent of early Christianity.

By contrast, but in a similar moral vein, the TOPS ideology reflects features of a Protestantized ethic and its affinity for capitalist enterprise as described by Weber. TOPS glorifies the spirit of competition and sanctifies earthly achievement as a sign of grace. In the TOPS program, fat is explained as a flaw of character correctible through active human effort. Willpower is understood as a God-given capacity which must be trained and developed in the active pursuit of worldly goals. It is a force to be harnessed and applied toward individual human ends. As put forward in the TOPS manual, the process of "training" willpower recalls Parson's characterization of magical ritual -- by which supernatural forces, conceived as operating according to orderly laws, are manipulated toward empirical ends (Parsons, 1951).

Surgery for Obesity

Fat people often say that they have "tried everything" to become thin. This usually means that they have sampled from the dazzling array of diet schemes which range from the merely monotonous to the risky and bizarre. But the more determined seekers of leanness have gone beyond diets. Some have used anorectant drugs or thyroid medications. Many have purchased creams, lotions and various devices sold by mail. Others have submitted to hypnosis, electric shocks, or injections of human pregnancy hormone --have had their ears stapled, their jaws wired shut or their bodies wrapped in plastic.

That such unorthodox remedies may be widely criticized as dangerous or costly (and in some cases fraudulent or outright illegal) has not seriously discouraged their use; it is primarily their believed inefficacy which seems to be the limiting factor in their appeal; most people don't believe such methods work.

IW: "I was going to get that staple put in my ear, because a friend of mine did and started to lose pretty good. But then she gained back her weight so I figured it probably wouldn't work for me either."

Of all therapies against fat, perhaps the most radical is surgery. For this study, we interviewed 15 women and one man who had elected to undergo obesity surgery; also, we attended two sessions of a hospital-sponsored support group for patients and prospective patients of obesity surgery in a Southwest city area. In addition, other respondents of the study were asked their opinions and feelings about such surgery.

In this section, we report what has been learned from respondents

about motivational orientations toward obesity surgery, the experience of the surgery itself and its consequences for weight status, food behavior, interactional patterns, and self-concept.

The first surgical treatments for weight reduction in humans were reported in 1954 (Buckwalter, 1979). In 1963, the term "morbid obesity" was coined by two surgeons to persuade health insurance administrators that obesity surgery could be justified on health grounds (Van Itallie, 1980). By convention, morbid obesity has come to be defined as 100 pounds overweight or twice the "normal" weight of the individual, and the concept serves as the chief criterion of patient candidacy for gastric bypass.*

A full description of obesity surgery and a summary of professional literature on its history, its technological refinements and current status is given in Appendix D. For the present discussion, the knowledge conveyed is common knowledge -- that which is known by most individuals in the study. Where this knowledge differs substantially from professional knowledge, it will be so indicated.

Most respondents of our study are familiar with two obesity operations: (1) The intestinal bypass, and (2) the gastric bypass. In the intestinal bypass, the small bowel is cut, its total length shortened by disconnecting some portion and reconnecting shunted ends.

*The gastric bypass, initially a more difficult and time-consuming procedure than intestinal bypass, was advanced by the advent, in 1971, of a "stapling gun" which reduced operation time over 50 percent. The introduction of a polytract retractor made it feasible to perform gastric bypass with one assistant (Buckwalter, 1979).

Weight loss is supposed to be produced by malabsorption of food intake, regardless of intake quantities. In the gastric bypass, the stomach is partitioned by a stapling procedure to create a smaller functional pouch which is greatly reduced in gastric capacity. Weight loss is produced via reduction of calorie intake; i.e., intake exceeding the now-reduced gastric capacity results in vomiting.

Among our respondents it was commonly understood that the intestinal bypass, known to predate the gastric bypass in chronology of development, had proved to be dangerous and fatal in some cases. According to their understanding, the intestinal procedure has been abandoned in favor of the later procedure-- which is believed to be both safe and effective.* In the southwest city area in which this study was conducted, gastric stapling is believed to be the medically-preferred surgery. One surgeon in the area, according to a local news account, has performed over 200 such operations in a period of two and a half years. Another surgeon has done 650 operations in three years. Gastric bypass patients of this study say that the operation has been available for two to three years in the area. None of our respondents had received the intestinal bypass.

Electing Surgery. How does one author the act of seeking obesity surgery? Given the inherent risk of any surgery, the pain, expense

* Professional literature indicates that while there has been a trend away from intestinal procedures, they are still being performed. Many of the complications and side effects of the earlier operation were discovered only after years of follow-up experience. Postoperative experience with the newer bypass is, of course, less extensive. Operative mortality rates have not been conclusively different for the two procedures. Apparently some surgeons prefer to contend with the better known risks of the older operation.

and drastic life changes anticipated, how is the decision approached?
What consequences are weighed?

Most respondents, when asked these questions, did not reply in terms of thought processes or the weighing of costs and benefits. Instead, they usually told the circumstances under which they first learned of the availability of the operation. They said they knew or had spoken to others who had had the operation, and this fact made the procedure a possibility for them.

BL: "I had some friends at work who knew someone who had had the operation and one day she came into the office. A few days later I called the doctor for an appointment. I didn't tell my parents. It was the first time I had ever done anything major without telling them first.

"I have had many operations in my life... but this was the only one that I was not the least bit afraid."

SO: "My best friend who was less overweight than I was decided to have the operation. She called me and we went out to lunch one day and that's when she told me she was going to have it. She said she had had all she could stand of being overweight. That's when I began to wonder if I had had all I could stand, too. But I was afraid for her. I had mine about six months after she had hers."

Most respondents decided fairly quickly to have the operation-- within weeks of hearing about it from others in their milieu. ("I decided then and there; you only live once..."). Some said their first concern was the possibility of being "turned down" for the operation. One woman said that since she didn't have high blood pressure, she feared she might be considered "too healthy" to have the operation. She said she was prepared to "give that doctor any bullshit I can think of -- even cry right in front of him," to get the operation. Another

woman visited a psychiatrist before seeing the surgeon about the operation. She asked the psychiatrist for a "mental report" indicating the need for the operation.

A few bypass patients reported that they investigated the merits of the operation before making their decision. Most such investigations involved merely talking to people who had been or knew of former patients, but often negative information was discounted.

BC: "I wanted to know all the possible complications ... had heard of some court cases of doctors being sued... but you have to take that with a grain of salt. I heard of diarrhea problems, of people not losing, of having to have it done twice. But you hear all kinds of bad things from tacky people."

BL: "I heard of a man who weighed 450 pounds who died of the operation. But I don't blame him for wanting it. I would have taken that risk. It would be worth anything. Before I saw the doctor the first time, I already had the insurance information and knew when I could take off work."

However, some respondents were less eager to act. One woman had learned about the operation in caring for bypass patients through her work as a hospital employee. She was particularly aware of the pain involved and said that as her knowledge of the surgery increased, she began to actively resist the prospect for herself -- renewing her efforts at dieting. She lost and regained 60 pounds before deciding to have the operation.

One respondent claimed that she never wanted to have the operation, had only done so because it was recommended to her by a medical attendant at a hospital emergency room where she had been treated for a sprained ankle.

HB: "She (the attendant) started talking about it ... just brought it up... and said that some people in her family had had the operation. So I thought, well it might work. But I really didn't want to have it done. But I thought well, it wouldn't hurt. So I made an appointment and went down there.

"The doctor thought it would do me some good and said he didn't do the operation on very many people unless he thought it would help their health. He told me just go home and think about it.

"I didn't really want to ...even when I went into the hospital. [Then, why did you?] Well, I thought it would be for my health. I did have high blood pressure.

"No, I wasn't afraid, it just wasn't something that I wanted to have done. And I don't know if it was just that I was fat all my life and I was afraid of being skinny, or what it was. But I really didn't want to."

This woman at 5 foot 3 inches height, weighed 300 pounds. She said that although she had always been fat, she never "felt that bad" about it. She said her parents "never emphasized it -- they just let me ride," and that "no one else ever said anything about it." She does not remember being singled out on account of her weight or "feeling any different."

The expression of such motivational ambiguity was much the exception not the rule among our respondents. Most represented themselves as decisively positive about wanting the operation --even while reporting certain psychological trepidations associated with being thin.

The chief source of concern -- and for some the single consideration -- was the possibility of "dying on the table." The second most-frequent worry was that weight losses would not meet expectations. Such complications and side effects as nausea, diarrhea, gastritis, metabolic abnormalities and nutritional deficiencies --for most

respondents-- scarcely gave pause. Except for those who had themselves experienced untoward effects, no respondents said they had either understood or considered any of a host of possible negative results which have been mentioned in professional literature (see Appendix D).

Only rarely did these respondents voluntarily mention the cost of their operations. For many, it seems, the majority of the expense was covered through insurance offered at the work place; a few of the operations were paid for by government welfare benefits. Estimates of total expense ranged from \$2,800 to \$3,500; surprisingly, many respondents were uncertain of exact amounts --even those who personally paid full costs.

Many, but not all, respondents cited their physical health as the main reason for electing the surgery. One woman, whose preoperative weight was 350 pounds (height 5 feet 4 inches) said she believed that at age 36 she would "probably not live much longer," that she had "felt so bad sometimes that I thought, why bother? It's not worth it." Another woman, age 44 said:

SB: "The thing I was most worried about was not having it (the operation) and having a stroke this summer and becoming a vegetable... I couldn't face being on my parents' hands... and what it would do to my son. So I said to the doctor, Where and when did you want to cut?"

Other respondents scarcely mentioned health benefits in connection with deciding to have the operation. They emphasized the social disabilities of being fat. Some spoke of specific social goals sought --such as career advancement ("I wanted to get out of manufacturing and

get into sales; and you have to look nicer to get into that"), or advancement in sexual mate competition ("Now that I'm divorced I just want to have a good time; and you can get a lot more men if you're thin") or having children ("I thought I'd never be able to have children; but who knows... maybe it's not too late.").

The most common of all motivational themes sounded by respondents was that of desperation and hopelessness. Many felt that --as one woman put it-- "this operation was a last resort for me ... a miracle."

The Experience of Obesity Surgery and Its Consequences For Food Behavior and Body Weight. A major surgery, the gastric bypass requires three to seven days of hospitalization and is performed under general anaesthesia. The operation is said to take about two hours. Intravenous feeding is instituted for a variable period after the operation. Most patients recall very few details of their hospital stay in terms of specific procedures; in interviews the chief surgically-related topics dealt with the pain of the operation, the tubes and the length and shape of the incision. One woman compared the pain of the operation to the experience of childbirth:

"When I had my twins I thought that was pain.
I didn't know what pain was. This was pain."

Another patient said that of all aspects of the operation, for her the most dreaded was "having all those tubes in my face." She said, "If I was going to back out, that would be the reason. But it wasn't all that bad the way it turned out."

Several respondents described their incision scars as "going from stem to stern." (It is a line approximately two inches wide that

travels from just below the breast bone to the pelvis.) But none felt particularly troubled by this mark, which was expected to grow lighter but remain permanently visible on the skin.

Only one respondent expressed dissatisfaction with the performance of the surgeon. This woman described a severe episode nine days following her surgery:

SJ: "It was Christmas day, December 25. I had only been out (of the hospital) about a week. And I was at home alone. My stitches were red and I felt ill. I went into the bathroom and then all of a sudden my stomach broke open ... it was like an explosion ... and all this liquid and stuff gushed out ... It was like an oil well. I couldn't hold the gushing down it came out so hard. It looked like solid grease coming out. And the smell was awful. Like bad meat. No, there wasn't that much pain, but I felt faint."

She phoned for an ambulance and insisted on being taken to a hospital other than the one where the bypass had been performed. ("I just didn't like the treatment I had got there and wasn't about to go back.")

This woman has undergone several procedures to repair the damage associated with the episode of rupture and gushing, but has not been satisfied with the outcomes. In a second interview she stated that she would like to sue the surgeon who performed the gastric bypass; but she believed that a legal suit was beyond her financial resources.

Most respondents, by contrast, expressed feelings of gratitude and admiration toward their gastric bypass surgeon. In many cases they ascribe to their doctors special qualities of benevolence and competence:

EC: "He really does care about the patient.
He explains everything and he's very understanding."

BL: "I don't know what I would have done if it

hadn't been for Dr. _____. He's very understanding and he knows what he's doing."

Most bypass recipients said they were expected to return for follow-up visits to the doctor's office --usually on a monthly basis-- after the operation. They said these follow-up visits usually consist of being weighed and having blood pressure taken. For the first few months, many were seen by the surgeon; after that the weight and blood pressure readings were often taken by the nurse or assistant. After one year, visits reduce to two to four times yearly.

Aside from keeping follow-up appointments, most bypass respondents did not seem to think of themselves as patients. Many say that they know they are "supposed" to monitor their food intakes and nutritional status, but they tended to regard these obligations as optional.

SB: "I don't feel like I have to act like a sick person. I know I'm supposed to have so much protein and so much this and so much that. But I feel like that as long as I'm losing weight and I feel all right, that's what matters. And if I eat too much, my stomach will let me know.

"I just try to find stuff I like that will stay down."

Because of the extremely reduced capacity of the stomach ("You can only eat about three or four ounces of anything and you'll get that feeling that if you eat one more bite you'll throw up."), respondents say that for the most part, quantity of intake is self-regulating. However, many note that because foods vary in volume and chemical content, their effects on the the stomach have to be learned from experience.

BL: "I learned that I could eat chips and sometimes cheese, but ice cream, there was no way. Too much concentrated sugar causes the dumping

syndrome, which means trouble ... and if you don't throw up you end up wishing you could."

Almost all respondents mentioned a fact they take to be particularly significant -- that "you can eat your way past the bypass." Eating past the bypass means eating small quantities of calorie-rich foods and eating more or less continuously, with the result that weight is gained and the stomach is "stretched back" almost to original size.

Those with the longest postoperative experience said that quantities are most limited during the first five or six months after the surgery; after that time, they suggested, intakes may gradually increase until they approach those of "normal people."

MK: "In the first six months you learn what you can eat and can't eat. You throw up a lot. Then you gradually get to where you can eat more and maybe some different things. That's when you have to start really working harder to keep on losing. After a long time, maybe a year or so, you find you'll gain weight if you don't watch it pretty carefully."

Thus, the surgery seems to act as a sort of somatic enforcer of calorie restriction --an effect which apparently lessens with time. Many respondents said they believe their appetites as well as their food habits had been fundamentally altered by the surgery. But when appetite errs, the new, smaller pouch ensures a correction: the patient will vomit. Often this effect is referred to by respondents as "the physical part."

BL: "The operation doesn't change the basic problems that caused me to overeat in the first place. I still have lots of psychological problems, and sometimes I still have to fight those urges, or I might backslide a bit. But this (the operation) is an answer to the physical part. If I can get that out of the way, I can handle the others."

SB: "Before... nothing ever said I'm full. Now if I eat too much I throw up. I'm learning that when I'm full, I'm full. Of course it's still a constant fight, but I've got a help on my side. At least the physical part is taken care of."

Some respondents said that after the surgery, food had to be largely forsaken as a central source of pleasure. ("Going out to a restaurant got to be pretty much a waste of time.") Others said that after a few months postoperatively, they were able to enjoy food even more than before.

BL: "Mealtime was never a big thing before --just something to shovel in between doing other things. Now it's a social thing. We take more time with it, time to prepare and enjoy a meal."

Almost all respondents felt that the operation had normalized their food behavior --including those whose daily intake was extremely restricted after surgery (300 to 900 calories estimated). With few exceptions, they defined the surgery as successful. Even those whose current weight status was far in excess of their personal goal weight --so long as they had already gone down in weight-- tended to view the operation as the solution to their fat problems.

What are the body weight changes that follow obesity surgery? Information was available for 13 of the interviewed respondents who had undergone gastric bypass. This information and relevant remarks about its collection are given in Chapter III (see especially, Table 1).

It can be seen that the highest rates of weight loss are achieved in the earliest postoperative months --up to 20 pounds per month. These rates decrease postoperatively with time. After 29 months, one respondent's monthly rate averaged 4.3 pounds --a little over one pound per week. This rate approximates that recommended and expected

on most programs of dietary restriction.

All patients reported significant amounts of weight loss, but only two had attained their desired weight at the time of interview. Of six who had undergone the surgery more than a year prior to the interview, one had attained goal weight and they rest were within 10 to 30 pounds of goal weights.

Thus, from the experience of this group, surgery may viewed as comparing favorably with other fat therapies in producing weight losses -- in terms of both magnitudes and rates (at least initial rates) of weight loss.

What may be said about the permanence of weight loss after surgery? Almost all respondents expressed the belief that the surgery was, for them, the final fat solution. However, as we have seen, optimism and faith in the individual's current program tends to accompany all therapeutic attacks on fat --at least as long as compliance with programs is maintained. For bypass patients, compliance has been, to a high degree, physiologically guaranteed. From one point of view, patients are "on" a more or less permanent diet. But somatic enforcement of low food intakes appears to lessen with time; i.e., respondents indicated greater intake capacities after about a year postoperatively. Thus, the late occurrence of relapse and weight regaining --so common to most diets-- looms at least as a logical possibility. In the absence of long-term clinical experience with gastric bypass, the professional literature remains mostly mute on this question. Individuals of this patient group --being limited to their own experience or that of others in the area-- have even less empirical

foundation for predicting future maintenance of weight loss. Thus, the hopeful bias remains unchallenged.*

Yet some others interviewed for the study --persons who had considered gastric bypass for themselves and decided against it-- were much less sanguine about the surgical solution. One woman, whose weight qualified her for candidacy for the operation, said she had "had the exam" for the gastric bypass. She said she was told by the doctor that "even though I didn't have any particular health problems he would give me the operation because the weight was going to kill me."

FCA: "He said to see if my insurance would cover it. I knew it would; but I didn't want the operation. I couldn't see going through the pain. He said I'd have to walk two miles a day and not eat between meals. Hell, if I could do that I wouldn't have this problem in the first place."

This woman went on to tell several histories of bypass patients she had known or known of --individuals who "had a lot of trouble," who "didn't lose as much as they wanted to and got depressed," or who "had to have more surgery to remove all that extra skin." This respondent concluded that the bypass operation

"...can make you thinner but it can't make you thin. It STILL depends on what you eat. These people think it's the Magical Knife ... But I wouldn't let them mess around with my body."

From Fat to Thin: Themes of Transformation. So dramatic is the surgical solution to fat --so immediately seen and felt are its effects

*We have been careful not to generalize from the small group of bypass patients interviewed to any larger universe of patients. As noted in Chapter III on the method of selection of interviewees, our respondents would probably be importantly different from bypass patients not selected --would be, for example, less likely to have suffered serious complication or to have failed to lose weight.

-- that bypass patients often do express a sense of magical transformation. Without exception, each respondent recalls the day and the hour of the surgical event. They tend to speak of Then (before the operation - "back when I was fat") and Now (since that date), as wholly discrepant biographical regions. The demarcation does not seem to depend on weight status as such, but arises from profound discontinuity of self-concept.

WA: "My personality has changed. I hated my life and myself. I was rude and snapped at people. I was so depressed. Suicidal actually. I wouldn't be here today if it wasn't for the operation."

BL: "I'm a different person now. I'm not always as agreeable as I used to be ...I'm not a bitch; but I'm not a doormat either."

Almost all the bypass recipients felt that the surgery had brought welcome release from a long, arduous and bitter struggle: The internal war of the will against the body. With surgical intervention, the will to be thin now prevails over all physiological protest; the "physical part" is at last "taken care of." The surgery empowers a new regime of dietary restriction --often more severe and usually of greater duration than any heretofore tolerated by the body. Moreover, the surgery co-opts agents of the body's own automatic systems in service to that regime. Thus, the authority of the will, having commandeered a potent technological tool, presides over the final subjugation of the rebel, gluttonous body. One learns what one can and cannot eat; that is, what the new regime will or will not allow.

But the end of struggle does not bring a clear moral victory. Many respondents expressed an implicit sense of guilt and regret over

the use of surgical means for the achievement of their goal. The flush of success or its imminent probability is ever-haunted by the disquieting suspicion that one "should" have been able to achieve the goal without resort to the impressive technology -- that is, should have had "more willpower."

EC: "Every time I see these diet programs on TV, it makes me feel guilty that I couldn't lose on my own. I tried a lot of times. But nothing ever really worked for me. I guess I don't have the willpower."

ML: "It used to bother me that people might ask ... why I had to have the surgery to lose weight. But I finally decided, hell, it's nobody else's business. I don't have to answer to anybody but myself. And this is what I chose to do; it worked and I'm happy about it and that's all I care about."

MB: "People might think we took the easy way out. But they ought to try it sometime. It isn't so damn easy."

What often disturbs bypass respondents is the notion that having the surgery admits to a lack of maturity and character. This sentiment was expressed by a hospital official associated with the support group for bypass patients, who said:

"Not to be demeaning to people who are fat, but it's like a small child ...when there is no choice, there is no temptation."

Some bypass respondents are eager to correct the conclusion that no willpower is required by bypass patients after surgery. They emphasize the fact that "you can eat through the bypass," with a continuous pattern of eating. All surgery recipients stress the degree to which a proper "attitude" and postoperative dietary management are important to ultimate success.

Yet those who suspect that others may be passing negative moral judgments on their choice of fat therapy are at least partially sustained by our investigation. Among our respondents who rejected a surgical solution, several did express moral sanctions against it. One woman, who admitted that her excess weight was her "biggest problem in life" (and who believed she would "probably" qualify for surgical candidacy) said this about the operation:

WJ: "I don't know. In a way it seems too soft, too easy. I have a theory that God gives everyone certain problems in life and with His help you try to overcome. With the operation it would be like having someone else do it for you. You couldn't take any credit ...

"I'd rather ask God for help than another person or a doctor."

Troubling moral dilemmas do not, of course, end with justifications of the choice of the surgery itself. As significant amounts of weight are shed, respondents begin to find themselves in new situations of action or --more likely-- to redefine their situations in view of the meaning they assign to their changed physical appearance. Women respondents often focused on certain new dimensions in their relations with men. Fear of promiscuity was a common theme.

EC: "You can see the features of my face now where you never could before ...and it almost feels like I don't have any clothes on. And the clothes I buy, I keep getting new ones, as sexy as I can find ...Men keep coming on to me and I like it. But I'm a little worried about myself."

BP: "I'm a very outgoing friendly type person. And I've always been a toucher. Always, before, no one said a thing about it. But now it seems like, I don't know ...it's different. Maybe it's me. But it seems like men are just reacting to me. I have the feeling they're getting the

wrong idea. Or maybe it's the right idea.

"My husband has been very good to me and I love him very much. He's not jealous and has no reason to be. I don't know, maybe he does; maybe that's what I'm worried about. I just can't be my normal self."

Another common theme is the transformation of long-term relationships.

MS: "I have this friend and we've been together and known each other longer than we've known our husbands. In fact, she's been my best friend through two husbands. We were both overweight but I was always the heaviest. Now that I'm losing I can tell she's getting jealous. She swore she wouldn't feel that way about it, because we talked about it before. But she does. I'm sure she does even though she won't admit it. I've been bending over backwards to be nice to her ...but I don't know. The thing is she wants to keep on doing the things we always used to do. And I've got other things I want to do that she's not interested in."

KR: "My ex-husband when he comes by to pick up my little girl now, he just takes one look at me and starts to get angry. He can't stand to look at me. The minute I come to the door he starts to act terrible. On the phone, we get along just fine. But as soon as he sees me, that's it."

K.R. says she is sure her former husband is reacting to her appearance; even though the man has given her another explanation of his anger. Similarly, MS attributes the developing estrangement between herself and her friend to fat-related jealousy. Thus --just as being fat was an important mediator of interaction for respondents in the past-- their weight status now continues to influence their interpretation of events. The transformation of that status appears to add to its imputational significance.

A less common but recurrent theme attending the transformation

of fat is the issue of "revenge." Several respondents suggested that one special reward of getting thin was a moral entitlement to retribution against those who had caused them previous hurts. According to this formulation, being fat had somehow precluded such retribution; that is, being thin -- in itself -- constitutes retribution: It "turns the tables."

EC: "I've got a lot of people to pay back. People that hurt me before, even if they didn't know it at the time. Hell hath no fury like a woman that's lost weight."

BP: "There are certain people that I can't wait to see me thin. People I don't like very much, who thought I was nothing because I was fat."

Revenge appears to require a face-to-face confrontation with persons in whose presence one formerly felt shamed, ridiculed or inferior. Respondents often have said that when fat they were ill-used by others but tolerated such treatment out of their own low self-esteem. Revenge does not require any particular exchange of words (although it is usually anticipated that the newly-slimmed person will be complimented on this account); it requires only the opportunity to demonstrate the visible transformation from fat to thin. The transformation carries its own message: It says, "Now aren't you sorry you mistook me for one of low social worth? Someone you once could have had for a friend -- someone of value-- is unavailable to you now."

The issue of revenge is related to questions of social identity and their management within situations of interaction. As a stigmatizing trait, fat discredits the presentation of self --prevents one from claiming and receiving the social regard to which otherwise

entitled (Goffman, 1963). Having suffered repeated blows in interaction, the social identities of fat people may become tainted.

Revenge allows a "replay" of earlier self-presentations.

But in most cases, it seems, the reversal of fatness does not repair damage to social identities. The physical transformation does not erase the constructions of the past --does not restore one to fully normal status. Transformation creates a "corrected" self. One may become a formerly fat person but not ever a "skinny person"* i.e., never a person for whom fat is altogether irrelevant to identity or self concept.

Most of our respondents indicated they value the formerly-fat status. It carries special prestige opportunities not available to the merely "normal" identity --e.g., the recognition by others for weight loss achievement.

WA: "I like getting the compliments and having people notice how I look. People at work --and even the men now -- have said things about it. And what's also nice is when you run into someone you haven't seen in a long while. They never can get over how you look."

On the other hand, there is some evidence that the rewards of a formerly-fat identity may diminish over time. Most respondents said they enjoyed being complimented on their appearance, but did not appreciate certain implications of the compliments -- i.e., the invidious comparisons of the present and former self.

MU: "They say you look so good, then they go on about it until they're actually telling you how

* In the vocabulary of fat meanings skinny persons are those who --as one respondent put it -- "have always been and always will be skinny no matter how much they eat." In goffman's language of stigmatization processes, a "skinny" is a normal.

bad you looked before. It gets to be a two-faced compliment."

BC: "There are always those so-called friends who would remind you of what a fat slob you were."

B.C. said she had heard of some bypass patients who, after losing weight, decided to dissociate themselves from their past altogether -- to seek a new life and a new identity in another area. She said she could understand the motivations back of such a move but that "for the moment" she did not share them.

That the transformation of fat raises troubling issues of social and even personal identity is indicated by respondents in a variety of ways. The experience of those with greatest weight losses is most telling in this regard. Many report that friends and acquaintances fail to recognize them on sight -- an event once gladly anticipated but now viewed with some ambivalence:

SR: "Now I don't know what to think when people don't recognize me. Someone told me I should be proud -- that it means I've lost that much weight and look that much better. But still it feels strange."

Of the group interviewed, only two bypass patients had attained their desired weight goals --one man and one woman. In both cases, the transformation of physical appearance was regarded by them as an unreservedly blessed solution to problems of social adjustment. He said:

"When you're fat people treat you like a leper. Sometimes they tell you things right to your face. Sometimes you overhear it. It's hard to maintain a social life ... uncomfortable in airline seats ... and you have to work harder to compensate. I had to try harder to make a good initial impression to offset my hugeness. "I love being thin. It's even better than I ever imagined in my wildest dreams. I always

knew that appearance was paramount in a career; but I find now that it mattered even more than I thought.

"And women are coming on to me now. At first I resented this a little ...sometimes the same women who were very rejecting before. But I don't mind being a sex object; I'm getting used to it." --XB

And she says:

"It's the most exciting thing that ever happened to me, being thin. Fat is ugly, unattractive. The image is jolly like a clown. I'm sensitive about it even now. Even if I gain one pound it makes me very self-conscious and afraid. I still see myself as large ... and the word 'heavy' ... I hate it when people use it, like, 'hey that's heavy...' and OBESE is the worst; it's so gross and morbid sounding, like a sickness." -- W.A.

W.A. says that she sometimes has felt like a person "in disguise."

She says when she meets new people who become friends, she doesn't want to tell them that she was ever fat, but

"You have to come clean. It's sort of like having a prison record. You hope they'll understand."

Summary:

Obesity surgery represents the polar extreme of all technical therapies against fat. At the same time, it is basically a methodological variant of simple diet therapy --and, as such, subject to similar caveats and limitations.

At least in the first or second year postoperatively, the surgery may be regarded as a biological or anatomical enforcement of dietary restriction. Via technology, the surgery harnesses the force of willpower through specific techniques of "training." But, while TOPS dieters perform their own rites of willpower training, bypass patients

submit to technological specialists. The "magical knife" of the surgeon becomes the mediator for willpower control.

CHAPTER V

CONCLUSIONS

Summary of Sociological Interpretations

In summary of the sociological considerations presented in this investigation, we now return to the six groups of questions which formed the basic problem statement of the dissertation.

The Meaning of Being Fat

(1) What is the meaning of being fat in contemporary society? What are the elements of a fat self-image, and the processes of its construction. What kinds of accounts are given by individuals to explain the phenomenon of fat -- in themselves, in others? Are there some behavior patterns or typified social actions which are especially associated with being fat? What, if any, special qualities attach to social relations among fat people or between fat people and others.

In both theory and practice, being fat means departing from normative expectations -- possessing a negative, personally discrediting differentness which stands in need of "correction." In everyday language, the terms "overweight" and "obese" confer a deviant, stigmatized identity which is both morally and aesthetically reprehensible. The signification of fat people as deviant representatives is accomplished by imputing causal behavior to explain the bodily stigma of fat: -- In the presumption of overeating, fat identity is united with fat "deeds," erecting a conceptual separation between normals and violators and thus delimiting the sphere of "badness." Those who are not fat thus can maintain the quality of virtue and hold (as with the following social

worker-author) that

"It never occurs to fat people that thin people stay thin for a reason. They don't notice that thin people work at staying thin. It doesn't just happen" (Klingman, 1981).

The ideology of fat, when internalized by fat people, provides the basic elements of a fat self image. These include the presumptions of overeating as well as the negative qualities of character, particularly weakness of will or lack of "willpower." Although the stereotypes of fat are given in socialization, their attachment to persons is negotiated in social interaction. We have seen that the process of dieting serves to enhance, elaborate and solidify a deviant identity. Dieting, in Matza's terms, "bedevils" the human subject: without recourse to Leviathan powers, the activity of diet itself facilitates the processes of signification-- "criminalizes" food behavior via ban, apprehension and transparency. The dieter casts the self as fat -- registers (by scale weight), derrogates and labels self (by the charts designating overweight). To the extent that eating behavior dominates interactive activity, the dieting process contracts and thus deviantizes the dieter's social interaction.

Although dieting appears to be the main organizing principle of negotiating fat identity, other situations of action may become important. In the case of one respondent, the impact of medical agencies proved decisive when (during treatment for an ankle injury) an emergency room attendant recommended an operation for obesity. This respondent indicated that --prior to that event-- she had not internalized a fat identity, had never dieted and never worried about my weight."

Accounts. Our investigation indicates that for the most part fat people accept the popular theory of fat, i.e., the causal presumption of overeating and the imputation of moral failing in the lack of "willpower." These beliefs are affirmed even by those whose personal experience provides disconfirming evidence -- i.e., those who report failure to lose weight on low-calorie diets, those who observe high-calorie intakes among persons who are not fat, and those who have endured long periods of food deprivation and achieved large weight losses in their own careers. Moreover, the majority of respondents in the study believe in the reversibility of fatness by effort of the will -- usually through dietary restriction. We did not find evidence of "excuses" or "justifications" among our respondents, no attempts to "blame it on their glands." Indeed, most respondents specifically repudiated this position, volunteering such statements as "There's no chemistry in my body, I did this to myself."

The self-damnation implied in such statements indicates the bedeviling work of ban and the apprehension of self in the act of violating rules of diet. Almost all respondents displayed extensive knowledge of calorie theory and dieting experience. Often they spoke of moral struggles with specific foods. In the histories of long dieting careers, one finds cycles of euphoria, optimism and triumph alternating with depression and self condemnation. Those who are currently "on" a diet may express the zeal and confidence of religious conversion. They believe they have found final salvation from fat. Those not on a current diet express feelings of remorse and recrimination; but most expect to "get back on" some program. They continue to

maintain the efficacy of the program at the expense, often, of self-esteem.

Social Relations: The Stigma of Fat. From the point of view of many fat people, the pivotal consequence of stigma is the introduction of shame. As Goffman has said, the stigmatized individual is one whose identity claims are invalidated by the possession of some discrediting (or discreditable) trait. Goffman points out that such claims are not based on universal entitlements but rather on entitlements of social statuses, roles and categories (1963: 7). Thus, we may expect that the possibility of shame may loom larger for those in the higher status categories. Our study, of course, was not designed to elucidate class differences, but some of the observations were suggestive in this regard. It often seemed that subjective sufferings due to fat-tainted identity was greater among respondents with higher educational or occupational statuses. Particularly in the case of male respondents, feelings of shame were linked to status aspirations; whereas among women, the stigma of fat was more generally perceived as affecting all social relationships. Perhaps future research may discover significant differences in this regard.

The salience of fat as a stigmatizing condition is largely dependent upon the degree of fatness. In the lower categories of overweight, fat may constitute what Goffman terms "a picayune differentness, of which the shamed person is ashamed to be ashamed." (Ibid, 1963: 130).

Two Types of Norms. In consideration of fat as a normative departure, there seem to be two separate types of operative standards, which might be termed "target" norms and "limit" norms. Among those who

define themselves as fat (that is, participate in self-defining activities), two groups can be differentiated and two corresponding standards of reference identified: (1) Those whose degree of fatness represents departures from some "ideal" of leanness as presented in the symbolic system of culture, and (2) those whose degree of fatness violates the limits of acceptability of "normality." Goffman may have intended such a typology in his reference to "uncommon deviations from the ordinary ... (and) ... ordinary deviations from the common" (Ibid: 127).

Where ideal or "target" norms of leanness are pursued, we observe individuals whose degree of overweight is "objectively" debatable. Nevertheless, such persons may, at least at times, experience themselves as inferior or confront problems of acceptance in certain reference groups. In respect to "limit" norms, very fat people find themselves continually confronted with objective measures of normative violation. They worry, for example, whether chairs will support them, whether clothes can be purchased to fit and even (as mentioned in a meeting of the TOPS group) whether coffins can provide sufficient space for a final resting.

The Social Knowledge of Fat

(2) What is the character and current status of social knowledge about obesity/overweight --within professional therapeutic spheres and in popular imagination? How does such knowledge impinge on the lives and consciousness of fat people?

We have reviewed the legitimating function of Fat Theory in its integration of cognitive and normative orientations toward fat. Also, we noted the contradiction between popular and professional accounts of

fat, its causes, physiological properties, psychological correlates and symbolic significance in relation to norms of health.

For individuals who define themselves as fat, a primary consequence of Fat Theory is its promulgation of the notion that fat is "fixable," i.e., may be reversed by effort of will through dietary restriction. Under the premise that fat is fixable, the popular knowledge holds out hope -- promotes activism and optimism; at the same time, the professional-therapeutic knowledge fails to provide an effective means of reversing fatness by diet (or by exercise or by drugs). While obesity surgery has been advocated in cases of extreme fatness, its claims for success are limited by high rates of morbidity and mortality; the newest surgical procedures are said to hold promise, but long term results have yet to be assessed. For example, gastric bypass surgery, which limits quantity intakes by reducing the size of the stomach, provides a biologically-enforced diet restriction. However, the effects of this mechanical diet "enforcement" are said to lessen with time. Thus, (as with most diets) the surgical method of dietary restriction may also lose efficacy over time; and the tendency to relapse and consequent weight gain becomes a possible long term outcome.

The presumption of overeating as primary cause of fat is fully embedded in the popular literature --which, much more than the professional research-- carries the operative empirical ideology. By this presumption, fat is understood as motivated behavior and fat people are defined as willful (though "willpowerless") violators of norms.

Fat Remedies

(3) What kinds of factors influence individuals to seek (or not to seek) remedies for obesity/overweight? In particular, what factors operate in the choice of given therapies? What kinds of consequences follow from radical changes of body size? What are some consequences of failed programs or treatments?

The devaluation of fat and the enormous publicity promoting its fixableness through diet are undoubtedly the chief factors which influence the adoption of fat remedies. As a rationalized means-ends scheme, dieting holds a peculiarly Americanized type of appeal--achievement of mastery over natural processes by the aesceticism of self denial. Moreover, where guilt for the sin of overeating has been internalized, the fleshly punishment of dieting seems particularly appropriate.

The evidence that diets do not produce the end in view scarcely deters the inveterate dieter. Failure to achieve slimness by diet is almost always attributed to the dieter rather than the diet --is interpreted as the failure of will. One consequence is that dieters often confront significant problems of self-esteem.

We have investigated two types of group strategy against fat. The Overeaters Anonymous (OA) approach offers a religious or spiritual solution by which an individual surrenders control and seeks the help of a powerful Other ("higher power"). OA philosophy locates the source of evil (compulsiveness) within the individual; it advocates a program of recovery based on permanent adherence to principles of spiritual renewal and continued participation in a fellowship of like sufferers. For its members, OA provides a fully elaborated way of life.

The strategy of TOPS clubs (Take Off Pounds Sensibly) provides

a businesslike approach emphasizing activism, self-reliance and hard work. Members learn "willpower training," and participate in elaborate reward systems keyed to dieting efforts.

Obesity surgery, offers the promise of a powerful and prestigious technology. Its appeal does not appear to be greatly affected by its costs or risks or by the lack of information about long-term results of some newer procedures. Of those who elected obesity surgery, many felt the need for moral justification of this choice. In various ways, they expressed the sentiment that successful reversal of fatness by means of surgery somehow lacked the moral stature of success by dieting. The implicit expression of guilt by recipients of the surgery was matched by negative moral aspersions cast upon their choice by others. One respondent who decided against obesity surgery (a member of Overeaters Anonymous) felt the surgery was "too soft"-- an easy out and (she suggested) a morally bereft strategy against fat. Several members of TOPS stated that surgical patients were not welcome to their group -- that the surgery would provide them an unfair basis of competition within the TOPS system of rewards and recognition.

Perhaps certain personality traits tend to have an affinity for certain therapy choices. This question was not systematically pursued here; yet there is some evidence of its significance for future research. Certainly, the choice of a therapy --like any decision of social action -- requires in Becker's terms, a "willingness" on the part of the individual to conceive of the behavior as a possibility for oneself. The elaboration of willingness and specification of its elements would contribute greatly to sociological knowledge.

Institutional Complexes and Structural Factors

(4) What social-structural factors may be involved in the social construction of fat? What institutional complexes or social control agencies (e.g., medical and religious) mediate individual thinking and action in respect to obesity/overweight? What norms and values or rules obtain and how are these built up in social interaction.

Of the institutionalized value patterns of relevance to the social construction of fat, the primary complex is that described by Weber as the ethos of Protestantism: Activism, aesceticism, and rationality aptly characterize the enterprise of dieting, which is dignified by its identification with hard work. The devaluing societal response to fat people may also be understood in terms of this value complex insofar as fat (and the presumption of overeating) may be viewed as a violation of self-discipline and restraint of fleshly pleasure. Moreover, the private pursuit of success (in this case the symbolic success of leanness) expresses a worldly orientation and the active Desire for mastery over nature.

In the interpretation of diet successes and failures, we have taken the ethical metaphor a step farther: Success implies a message of salvation, that is, a sign of grace. Failure suggests a fatal, predestined flaw of essential character. Thus, the lack of willpower is a damnation to the worldly Hell of fat and perhaps to an other-worldly Hell that awaits those of flawed character.

The Socratic maxim that "Bad men live to eat and good men eat to live," clearly belongs to the same cultural constellation that prescribes sexual expression exclusively for purposes of procreation. Indeed, the Victorian preoccupation with sexual conduct may have been replaced with

the modern stringencies on food behavior (Millman, 1981). Clearly, the norms and rules of food behavior have been elaborated to a high degree in contemporary culture. The problems of "overweight" and fat constitute only a portion of the normative complexes associated with relations between health and food behavior. For example, the panoply of recent expressions under the rubric of a "fitness" movement appears to elevate the symbolic salience of all issues of the body in relation to norms of health. The popular literature of fat is joined with the newly burgeoning literature of "fitness;" they are found on the same bookstore shelves and share some of the same knowledge production personnel.

Medicalization of Deviance. Aside from architectural standards of chair size, corridor widths, and the like, perhaps the only codified expression of rules against fat are those provided by the insurance industry in connection with medicalized designations of deviance. The height-weight charts produced by insurance actuaries in 1959 provide what are still the most widely-used clinical tools for assessing overweight and fat. The scientific critique of these charts, their statistical basis and their use in diagnosis and treatment has been widely disseminated throughout the professional literature (see Fat Theory, Chapter IV). Yet, at the same time, consensus is apparently lacking for acceptance of alternate sets of standards or criteria. Medical practitioners, by their concerted employment of these insurance company codifications, have apparently taken the lead in defining the empirical instances of human fatness. In effect, this fact seems to represent an important step in the medicalization of fat as deviance.

Medical structures have also seemed to be significantly involved in the public pronouncement of fat as a health risk --despite the inconclusiveness of clinical evidence for this position (see Chapter IV).

Our conversations with many respondents of the study indicated that medical practitioners are warning fat patients against dire health consequences of overweight -- often in dramatic language. Also, it seems clear that most fat people rely heavily on the pronouncements of the physician for their own assessments of degrees of fatness, as well as for motivations toward dieting or other fat therapies.

Thus, in various respects, the medical industry contains the incipient formations of a movement toward medicalization of fat as deviance. The potential for further development in this direction, as pointed out by Conrad and Schneider (1980), depends upon political contingencies. Thus, our investigation of clinical constructions of fat are only tangentially related to this question -- one which may well be pursued in further research.

Fat Social Roles

(5) To what extent, if any, does being fat fit the model of a social role, in terms of felt "rights" and "obligations" of fat people, e.g., the sick role (Parsons) or the role of the "in-group deviant" (Goffman).

Our study has located some situations in which being fat is felt to suggest certain rights and corresponding obligations which resemble role constellations. For example, a recurrent theme among fat women is the notion of a special exemption from sexual competition -- perceived as a "right" -- with a corresponding duty to perform nurturant types of tasks for both sexes, i.e., be a female confidante of both men

and women in gender relations. One respondent compared the situation to that of a nun or a priest -- that is fat was perceived as a protective "cloak" which facilitated asexual relationships. Millman reports a similar observation among her male respondents for whom being fat represented an exemption from competition with other men. In return for this exemption, the incumbent is granted a level of acceptance and tolerance within the group of relevance. (Millman, 1981). In the feminist critique of fat by Orbach (1978), the right of exemption for women implies an escape from "being a sexual object" and being "treated frivolously by their male colleagues." (Orbach, 1978: 13).

Each of these renditions of fat roles incorporates some aspects of Goffman's discussion of "in-group deviants" (see Chapter II). With respect to small groups, Goffman describes such roles as "mascot" roles.

The Parsonian conception of the sick role is incompletely realized when fat persons are viewed as incumbents. They may take on its obligations (seeking competent help and cooperating with helpers, defining their condition as undesirable), but are not accorded its rights (the exemption from normal duties and exemption from blame for the condition). In these respects, the incumbency of the sick role by fat people resembles the case for chronically ill or aging persons -- and for the general case where conditions defined as "sick" have not proved to be amenable to medical ministrations. For all its inequities, the sick role may be preferred by fat people to other deviant statuses. That is, they may prefer the motivational imputations of "sick" (one is trying to get well) to the imputation of "badness" (fat is a result of deliberate intention). Sickness, at least, may be conceived as a

temporary state; it offers the hope of recovery. Moreover, its temporality forestalls the assignment of permanent deviant identity.

The Social Facts of Fat

(6) How does the experience of being fat vary with age, sex or social class?

Social distributions of obesity and overweight suggest that, like most objects of cultural significance, fat bears uneven statistical relationships to the social facts of age, sex and class. Although our study was not designed to explain these relations, we observe some aspects of their impact on fat experience.

Age and Fat. According to clinical literature, the proportion of fat to other body elements increases with age in all human populations, irrespective of weight status (Bray, 1979). Since, of all body elements, fat is least by scale weight (i.e., weighs lighter per volume than muscle, bone or water) increasing proportions of fat would logically predict a decrease in scale weight with age.* Yet clinical observations find the reverse to be the case: Average weights tend to increase with age (see Table 3, page 84) from early adulthood (ages 18-24) to middle age (35-54). The same general pattern is found in the incidence of overweight (see Appendix B), which increases with age for both men and women from the second through the fifth decade of life.** This means that aging --at least through middle and late-middle age-- brings increases of fat both proportionally and absolutely.

*That is, barring increases in bone, muscle or body fluids (which in fact have been observed to decrease with age), weights of individuals should decrease with increasing age, ceteris paribus.

**Both average weight and incidence of overweight show some decrease in the later ages, i.e., sixth and seventh decades.

Combinations of social and physiological factors have been advanced to account for this trend. For example, conventional wisdom holds that while metabolic processes slow with age and food requirements decrease, eating habits learned in younger ages persist. At the same time, activity levels of youth are said to be reduced by life style changes associated with later ages. To these factors, some researchers add the possibility that higher proportions of fat in the body may promote higher rates of lipogenesis (fat generation).

Whatever explanations may be advanced, statistical and clinical reports converge with everyday observation toward the same conclusion: Getting older generally means getting fatter. In a culture that devalues both the old and the fat, it is perhaps inevitable that the two statuses might become symbolically intertwined. The association of leanness with youth is fully entrenched in the popular literature of fat: A "more youthful" appearance is a major if not primary aesthetic rationale for reducing body weight by diet. Thus, while youth once lost is never regainable, many fat people believe that in leanness they may attain the attributes of youth.

Many of our respondents said that being fat made them feel and look "older." Some said that losing weight enabled them to participate in activities they felt were otherwise inappropriate to their age. Certain activities were appealing because of their association with youth. For example, one woman respondent said that although she did not favor the style of blue jeans, she was happy to have lost enough weight to wear them -- as emblems of a youthful status.

Millman reports that her male respondents were particularly

sensitive to the symbolic association of fatness with aging. She says some fat men told her that in their younger days, their weight signified heft and strength-- highly valued qualities for masculine identity. But with middle age, these men experienced greater feelings of inferiority and problems of self-esteem related to being fat.

While "old" and "fat" are commonly confounded in symbolic systems, our investigation discovered certain situations in which the two statuses may be differentiated in terms of relative devaluation. In losing large amounts of weight, some respondents spoke of problems associated with excess skin folds, which resemble the wrinkles of old age. One respondent, having lost more than 100 pounds of body weight following obesity surgery, had undergone cosmetic surgery to eliminate redundant skin flaps on arms, thighs and abdomen. Although the plastic surgery had itself left highly visible scars, she felt satisfied that the net effect on her appearance was positive, i.e., that scars were aesthetically preferable to wrinkles. Another respondent had reduced to meet a goal weight only to decide that her appearance was compromised by facial wrinkles; this woman said she decided to regain weight to fill in the wrinkles.

Norms regarding physical appearance constitute a general area for future research. Certainly the relative values placed on fat and aging might be appropriately investigated under this heading.

Sex and Fat. In women, fat proportions are greater than in men, and this difference begins at birth. Female babies, though lighter in weight, are fatter than male babies (Bray, 1979). At puberty, girls gain

fat while boys gain greater muscle and bone development (Beller, 1977). A minimum reserve of fat tissue, according to several researchers, is required for menarch and menstruation (Beller, 1977, Bray, 1979). Pregnancy has been described in the literature as a "lipogenic (that is, fattening) state" (Beller, 1977).

All of these facts, in the context of a fat-devaluing culture, constitute what Beller has called "a biological injustice" (1977: 89). The caloric economy of human females, with its lipogenic hormonal influences, is described by Beller in terms of a "Capitalistic metaphor." Women's bodies, Beller says, produce "unearned adiposity."

It is often suggested that although men do get fat, fat is a "woman's problem." Certainly it is clear that of the population of persons who seek counsel or therapy for fat, women comprise by far the majority. Moreover, the social consequences of being fat may be different for men and women. These differences, which have been discussed at length by Millman (1981), Orbach (1978) and others, arise from the special links between women's bodies and their social roles and social worth. Women, much more than men, are evaluated in terms of their appearance. The sexual and reproductive potential of the female body is more salient than the male's as a social object in everyday interaction.

Yet, aside from these general considerations, most conclusions about the differences between men's and women's experience of being fat are limited by the circumstances of investigation. What is known is that (1) women are more likely to define themselves as fat, in terms of entering fat-related activities, groups, therapies, etc. and that

therefore (2) women comprise the majority of subjects in the studies on fat/obesity/overweight and (3) that women may be more verbal or introspective concerning issues of appearance and its personal importance.

For these reasons, information that differentiates between men's and women's experience is relatively scarce. From our reading of the personal documents on fat, we believe that extreme fatness is deeply discrediting to social identity for both men and women. At the same time, our investigation indicates that moderate, even small degrees of fatness have a greater impact on women than on men.

One male respondent of this study (age 24), expressed strong disagreement with the notion that being fat is a greater social handicap for women than for men. He suggested that "it's easier for a woman. If she stays home ... she doesn't have the competition, doesn't have to face the world." He stated that women "can bond together with other women in fatness and can find an acceptable station in life."

The young man's statements suggest that women have an option not available to men --that of retreating from participation in society's major reward systems. There is the additional implication that the institution of competitiveness does not extend to relations between women. In this view, fat women can escape the social opprobrium that fat men suffer because women are not fully fledged members of the society. Thus, to the extent that the society is demanding, difficult, unforgiving --to that extent-- one's exclusion is to one's advantage.

At several points in the clinical literature relationships are noted between extreme levels of obesity and androgynous hormonal changes in both men and women. Secondary sex characteristics of the opposite

sex may develop --e.g., very fat women may exhibit facial hair and cease menstruation at high levels of obesity, and men may display breast-like fatty deposits. Millman reports that such biological correlates of obesity constitute the "most sensitive concerns" of fat people.

Among our own respondents, although no such androgynous developments were observed, we did note, among women specific expressions of anxiety about looking "large, like a man." Correspondingly, on the male frame, fatness might carry the defaming feminine symbols of roundness, fertility, softness, etc. Moreover, since the female body is proportionately fatter than the male's, fat would presumably have a feminizing effect on appearance.

Fat and Social Class. The work on obesity distributions has established only a few clear relationships between fat and social class and these appear to be limited to women. In connection with the Midtown Manhattan Study (Goldblatt, et al. 1965) it was established that both upward mobility and high socio-economic status are independently predictive of thinness among women. The authors suggest two possible interpretations of these findings: 1. That thin women may be preferentially selected for promotion or marriage to high status males, or 2. Women in higher status positions make greater efforts to maintain slimness.

Many of our respondents confirm the first of these interpretations. That is, many fat women believe that fat is a liability in social competition for good jobs, desirable mates, etc. Further, they do believe that discrimination against fat women is common, and cite instances of it from their own experience.

As noted earlier, the sense of shame associated with being fat seemed to be more frequently expressed by respondents of higher occupational or educational backgrounds. Goffman's conception of the differential basis of identity claims (1963: 7), noted earlier, is also relevant here. Thus, while all respondents expressed problems of self-esteem, the particular quality of shame seemed to be more salient among those in higher status groups. Further research in this area might produce some refinement and elaboration of the concepts of shame and self-esteem with respect to problems of social identity and social class.

The Social Importance of Fat

As can be seen from our presentations, fat is the focus of considerable energy in modern society. It has inspired a vast production of knowledge --occupying the attention of scientific specialists and out-selling even sex as a non-fiction topic on the literary market. The dread of fat has launched a thousand diets, sold countless pills, notions and devices and prompted nationwide group formation. In perhaps the ultimate technological response, fat has been fought by surgical rearrangements of the human anatomy.

What accounts for this cultural fervor?

Our discussion of Fat Theory and Fat Practice points to some cognitive and experiential aspects of the phenomenon. We have investigated the character of social knowledge and some specific lines of social action, raising certain issues with respect to their relationship. Some sociological problems have been suggested for further study. But these efforts scarcely penetrate the underlying structure of fat sentiment and

its origin in symbolic systems.

The social construction of fat expresses the contemporary culture of lean, which itself awaits fuller interpretation.

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APPENDIX A

MEASUREMENTS AND OPERATIONALIZATIONS OF FAT

The following indicators of fatness have been mentioned in the professional literature of obesity and overweight:

"Rule of Thumb" Tests

Arithmetic Rule. By this rule, overweight in women is indicated if scale weight (in pounds) exceeds 100 pounds for 60 inches of height, allowing five pounds per inch for each inch over 60 inches. Overweight in men is indicated by scale weight exceeding 106 pounds for 60 inches of height and allowing six pounds per inch for each inch over 60 inches. (Bray, 1976).

Broca Index. By this measure, overweight is indicated when the number of kilograms of body weight is greater than the number of centimeters in height, less 100 centimeters. (Bray, 1976).

"Magic 36." When the numerical difference between height (measured in inches) and waist size (measured in inches) is less than 36, the subject is categorized as "probably obese." (Bray, 1976).

Ruler Test. When a ruler is placed lengthwise along a line from breastbone to pubic bone of a supine subject and the ruler does not touch the abdomen, the subject is judged not obese. (Bray, 1976).

Anthropometric Measures

Measurements of Skinfold thickness. The doubled thickness of pinched or folded skin is measured by use of a caliper tool, usually at one or more

of three body sites -- triceps (underside of upper arm), subscapular (side of upper back) and abdomen. The qualification of obesity is "reserved for those individuals in whom triceps skin-fold is greater by more than one standard deviation than the mean. (Seltzer, 1965).

Measures of Relative Weight. Determination of obesity is made with respect to weight-height ratios, according to standardized tables of weight-height measures. Two variations of this calculation of ratio are (1) the body mass index, a ratio of weight in pounds divided by the square of height in inches [W/H^2] and (2) The "ponderal index, a ratio of height divided by the cube root of weight [$H/\sqrt[3]{W}$]. These measures have been found to correlate with independent measures of body fat, such as skinfold tests, at $r = 0.7$ and $r = 0.8$. (Garrow, 1974).

Indirect Chemical Measures

A minor category of fat measures have attempted to utilize theoretical relationships between chemical components of fat, water and various types of gasses. These have not proved reliable, are technically demanding and have not been widely used. The methods include injections or inhalation of fat-soluble gasses such as cyclopropene or radioactive krypton, water submersion and electromagnetic techniques. (Bray, 1976).

APPENDIX B

THE PREVALENCE OF OVERWEIGHT

PERCENTAGE OF PERSONS DEVIATING FROM BEST WEIGHT*

AGE (years)	MEN		WOMEN	
	10-19% above best weight	20% or more above best weight	10-19% above best weight	20% or more above best weight
20-29	19	12	11	12
30-39	28	25	16	25
40-49	28	32	19	40
50-59	29	34	21	46
60-69	28	29	23	45

* Adapted from Metropolitan Life Insurance Co., New York.
Frequency of overweight and underweight, Statistical
Bulletin 41:4, Jan. 1960.

APPENDIX C

FIVE GENETIC DISEASES ASSOCIATED WITH OBESITY

1. Laurence-Moon-Bardet Biedle (LMBB) Syndrome

Symptoms are retinal degeneration, obesity, mental deficiency, polydactylism and hypogenitalism. Body weight over three standard deviations above normal.

2. The Alstrom Syndrome

Obesity, childhood blindness, nerve deafness and diabetes mellitus. Baldness sometimes is present.

3. The Prader-Willi Syndrome

Hypotonia, mental retardation, obesity, short stature and hypogenitalism. Obesity appears in third year of life; relative underweight in first year of life.

4. Morgagni-Stewart-Morel Syndrome

(Rare). Virilism, obesity, hyperostosis of frontal bones. Occurs almost exclusively in older women, third to sixth decade.

5. Triglyceride Storage Disease

Defect or abnormalities of adipose tissue which hinder mobilization of triglyceride, producing excess triglyceride storage in fat cells. Accumulation of fat on dorsum of hands of infant.

APPENDIX D

OBESITY SURGERY

Major Procedures

Two major types of procedures can be differentiated in the surgical approach to obesity treatment: (1) Jejunioleal (small intestine) bypass, in which 90 percent of the small bowel is excluded from the functioning alimentary tract by disconnecting some portion and reconnecting shunted ends. Weight loss is believed to be produced by malabsorption ("iatrogenic Kwashiorkor*") of fat and carbohydrates and of protein, bile, electrolytes. [However, recent evidence indicates that reduced food intakes--in addition to, and in some cases instead of malabsorption--may account for weight losses following intestinal bypass surgery.]

(2) Gastric Bypass, in which the stomach is partitioned by transsection, creating a 15 to 50 percent proximal gastric pouch and establishing a 12 to 15 mm retrocolic gastroenterostomy* (Buckwalter, 1979). Weight loss is produced via reduction of calorie intake: Intake in excess of the now-reduced gastric capacity results in vomiting.

History:

The first descriptions of obesity surgery appeared in the literature in the early fifties, based on experimental work performed on dogs at the U.S. Veterans Administration Hospital, Minneapolis, Minnesota. A 34-year old woman, weighing 275 pounds became the first reported human patient to receive obesity surgery on April 9, 1954 (Linner, 1980).

* See Glossary of Technical Terms, Appendix E.

The earliest obesity surgery involved various means of effecting discontinuity of the small bowel in order to interrupt or short circuit absorption of foods ingested. Some of these techniques were abandoned because of "uncontrollable diarrhea and electrolyte and metabolic deficits incompatible with satisfactory living or life itself" (Buckwalter, 1979). However, with modifications introduced since early and middle 1960's, the intestinal bypass continues to be used in obesity surgery and, according to Buckwalter, "may be the operation most often done to treat morbid obesity" (Ibid, 1979).

The gastric bypass, as first suggested by Mason in 1966 at the University of Iowa, constituted a new approach to obesity surgery -- involving the stomach rather than the intestines. This operation, according to Buckwalter, was originally more difficult and time-consuming than intestinal bypass, "because of the difficulty in obtaining satisfactory exposure of the proximal stomach" (Ibid, 1979). But in 1971, with the development of an important technical breakthrough (the TA-90 stapling device to create the proximal gastric pouch), operating time for gastric bypass could be reduced by about 50 percent (Ibid, 1979). A second important technical advance for gastric bypass (the polytract retractor) helped to solve the exposure problem and facilitated gallbladder removal when necessary during the operation. With the retractor, the gastric bypass could be performed with one assistant (Ibid, 1980).

According to one estimate, some 620,000 patients had undergone obesity surgery by 1980 and approximately 31,000 between 1978 and 1980 (Yates, 1980, American Journal of Clinical Nutrition).

Patient Selection

The literature reflects a preference for individualized rather than standardized criteria of patient selection--i.e., leaving the judgment to the discretion of the surgeon on a case-by-case basis. However, two standards--age and weight status--are widely supported. By general agreement, "morbid obesity," defined as two to three times "normal" (weight) or more than 100 pounds "overweight" has been accepted as an indication for obesity surgery. (As stated in the text, however, the precise operationalization of overweight or normal weight has been incompletely codified.) With respect to age, persons over 50 and pre-pubertal teens are usually excluded from candidacy.

Wills (1980) suggests the following as ideal criteria for obesity surgery candidacy: (1) Repeated failure to control weight by diet (2) Under age 50 and over age 12. (3) Emotionally stable (4) Weight is or has been 75 pounds over normal weight values (5) Economic status sufficient to accommodate the bypass state. Wills advocates eliminating extremes of age, and cases of alcoholism to improve mortality rates. He believes that all physicians who have done investigative work in this field have concluded that the operation does have a place in treating the morbidly obese -- "in spite of high mortality, high morbidity and uncertain long term effects."

In respect to health status as a criterion of candidacy, Buckwalter has noted that while organic disease and older age "are regarded by some as contra-indications, the operation may offer the only chance for survival." He believes that the operation "should not be 'sold' to the patient" but that where the risk is under 20 percent "the operation should

be performed," (1979).

Almost all the practitioners writing in the literature agree that an appropriate attitude on the part of the patient is a critical factor both in patient selection and in affecting final outcomes. Other than the attitude of the patient, though, few factors have been viewed as predictive for ultimate success.

Mortality and Morbidity

No single and comprehensive repository of mortality and morbidity information exists in the current literature of obesity surgery. Nor do there seem to be any standardized operations for reporting such information. Due to variations in postoperative follow-up periods among surgeons and also because of patient mobility, late onset complications or mortalities may be under-reported or without a comparative basis for generalization.

Buckwalter has estimated operative mortality for obesity surgery at one to two percent, for either gastric or intestinal bypass (Buckwalter, 1980). He lists pulmonary embolism as the most common cause of death, followed by fatal liver failure (2.6 percent of intestinal bypass patients). Wound infection and incisional hernia are said to be frequent complications of both operations. For the intestinal bypass, the following are the most common and/or severe side effects: Diarrhea, liver failure from bacterial overgrowth or hypotrotenemia, flatulence and belching, abdominal distension (at least 10 percent according to Buckwalter), nausea, vomiting, polyarthritus, arthralgia,* and metabolic bone disease (osteopenia) due to malabsorption of vitamins.

* See Glossary of Technical Terms, Appendix E.

Complaints following the gastric bypass include: Hiatus Hernias, variable difficulties of food tolerance and anastomotic* leak (a complication unique to gastric bypass and considered the most serious).

Assessing Outcomes

The professional literature shows a wide variability in assessment of obesity surgery outcomes. This is partly a function of the variations in follow-up procedures, but also--and more fundamentally--it stems from the lack of consensus on appropriate measures of success. Some studies report gross numbers of pounds lost after surgery. Others report percentages of "excess weight" lost after surgery. Postoperative examination dates vary among investigators and sometimes from case to case within a given report. Some researchers have reported levels of satisfaction as expressed by patients themselves.

It can be seen, then, that a basis for generalizing obesity surgery outcomes does not currently exist in the literature. However, some writers have attempted to summarize certain aspects of the surgical experience. Halverson, for example, concludes that the assessment of intestinal bypass surgery points to a "fundamental paradox:" Patients with the greatest weight loss, he says, are most likely to experience serious complications. He identifies two groups of patients among those who lose weight after intestinal bypass -- (1) those whose loss is primarily from fat stores and (2) those whose lean body mass is depleted in addition to fat stores. Patients in the latter group, says Halverson, will have a higher incidence of complication and a less satisfactory result overall.

* See Glossary of Technical Terms, Appendix E.

With respect to the gastric procedures, Halverson states that although early evidence indicates them to be physiologically sounder than intestinal bypass, "no long-term studies of these operations demonstrating prolonged maintenance of weight loss or absence of late metabolic sequelae are available" (Halverson, 1980).

APPENDIX E

GLOSSARY OF TECHNICAL TERMS

Anastomosis A communication between two vessels by collateral channels; an opening created by surgical, traumatic, or pathological means between two normally distinct spaces or organs.

Anastomotic leak A seepage of fluid from anastomosis.

Aphagia Loss of the ability to swallow; an inability to feed, or abstention from eating.

Athralgia Pain in a joint.

Cholelithiasis Formation or presence of gallstones.

Enteropathy Pathology of the intestines.

Gastroenterostomy Surgical establishment of a communication between stomach and small intestine.

Glomerulitis Inflammation of kidney blood vessels or fibers.

Hyperphagia Abnormally increased desire for food, frequently resulting from injury to the hypothalamus.

Hyperplasia The abnormal multiplication in the number of normal cells in tissue.

Hypertrophy Overgrowth due to increase in size of constituent cells.

Hypothalamus A basal part of the brain that lies beneath the thalamus on each side, forms the floor of the third ventricle and is usually considered to include vital autonomic regulatory centers and sometimes the posterior pituitary lobe.

Kwashiorkor Severe malnutrition characterized by failure to grow and develop, changes in the pigmentation of the skin and hair, edema, fatty degeneration of liver, anemia and apathy and is caused by diet excessively high in fiber and extremely low in protein.

Osteopenia Reduced or decreased bone mass below normal levels.

Pneumatosis The presence of air or gas in abnormal parts of the body.

Polyarthritus Artiritis involving two or more joints.

Vagotomy Surgical division of the tenth crainial nerve.