Reconceptualizing Feeding and Feeding Disorders in Interpersonal Context: The Case for a Relational Disorder

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The feeding of young children is fundamentally a relational and multisystemic process. Successful treatment of clinically significant feeding problems involves careful assessment of the full range of influences on the feeding relationship and integrated treatment approaches. However, current diagnostic approaches to feeding disorders tend to be reductionistic, exclusively focused on the child as an individual, and overly concerned with exclusionary criteria. Criteria are proposed for “Feeding Disorder Between Parent and Child” that address these limitations and embrace the complexity of feeding problems. A multiaxial diagnosis that describes the child (including medical, developmental, and behavioral characteristics); the parent; the parent–child relationship; and the social and nutritional context of feeding will more accurately speak to treatment planning in this population. The proposed diagnostic criteria were developed and refined on the basis of the available literature and many years of treatment experience across the authors of this article. The proposed diagnosis will support the development and evaluation of treatment packages with components specifically targeted to issues of the child, parent, parent–child interaction, and the broader environment.

Keywords: feeding, feeding disorder, diagnosis, parent–child relations

At best, diagnostic systems address the full range of common presentations and describe the nature of problems with sufficient accuracy and detail to provide the basis for effective treatment planning and intervention. From a family systems point of view, such classification systems also support the development and testing of systematic and integrated therapies. Feeding disorders represent a particular case in point.

Current nosologies fail to address the full range of established and/or entrenched feeding problems. Concerns about feeding are among the most common behavioral issues brought to primary health care professionals by parents of preschool-age children, with estimated incidence rates of 25%–45% of typically developing children and up to 80% of developmentally disabled children (Linscheid, Budd, & Rasnake, 2003). These problems include food refusal, disruptive mealtime behavior, rigid food preferences, less than optimal growth, and failure to master self-feeding skills in line with developmental level. The incidence of feeding disorders established or entrenched enough to require clinical intervention is much smaller, although accurate figures are not available. Attempts to understand the epidemiology of these phenomena are complicated, in part, by the range of diagnostic labels applied to these disorders by professionals from medicine, psychology, speech-language pathology, nutrition, and other specialties (Casey, 1999; Chatoor, 2002).

Current diagnostic approaches fail to capture the relational and multisystemic processes whereby young children
are fed. Classification systems tend to define feeding problems as existing solely within the child as an individual. The child’s context (e.g., emotional, developmental, social, medical and nutritional) is at most implied but left undefined or, if defined, contextual factors tend to be ruled out as exclusionary criteria.

Such reductionistic approaches overlook the fact that disturbances in feeding for the most part grow from impairment of the child’s physical and psychosocial development secondary to characteristics of the parent and/family system. There are numerous examples of these interactions:

1. Parents who are overly rigid and have agendas for the child’s eating and growth, and therefore tend to undermine the child’s ability to regulate food intake as well as impair the child’s psychosocial development (Fisher, Birch, Smiciklas-Wright, & Picciano, 2000; Patrick, Nicklas, & Hughes, 2005);

2. Parents who are chaotic and therefore fail to provide the child with appropriate food or appropriate support, structure, and opportunities for learning to like a variety of food as well as master social patterns around eating (Black, Hutcheson, Dubowitz, & Berenson-Howard, 1994; Gillman et al., 2000; Pelchat & Pliner, 1986);

3. Extremes in parental behavior, which may grow from parents’ psychosocial limitations, including diagnosable conditions in the Diagnostic and Statistical Manual of Mental Disorders (4th ed.; DSM–IV; American Psychiatric Association [APA], 1994) as well as numerous psychosocial stressors (Duke, Bryson, & Hammer, 2004);

4. Food offered is inadequate in energy, nutritionally improper, or offers textures unsuitable for the child’s neuromuscular or psychosocial development (Byard et al., 1996);

5. The social context for feeding is inappropriate: too controlling or lacking in adequate support (Ainsworth & Bell, 1969; Stanek, Abbott, & Cramer, 1990);

6. Parents’ limitations in cognitive abilities, eating attitudes, and/or behavior (Galloway, Fiorito, Lee, & Birch, 2005; Robinson, Drotar, & Boutry, 2001), which contribute to errors in management of food selection or food availability or overcontrolling or undersupporting the child’s intrinsic food regulation capabilities.

Within the context of the family system, the child can also bring characteristics that precipitate or exacerbate parents’ limitations with feeding and thereby contribute to feeding problems:

1. Medical, neuropsychiatric, or neuromuscular issues that heighten parental concern, increase the difficulty of feeding the child, and likely distort feeding dynamics (Franklin & Rodger, 2003; Mullen, Coll, Vohr, Muriel, & Oh, 1988; Powers et al., 2005);

2. Temperamental characteristics that complicate feeding and overwhelm parents’ ability to cope (Ainsworth & Bell, 1969; Pliner & Loewen, 1997).

Current diagnostic approaches, for the most part, fail to provide practical guidance in distinguishing between common problems that can be addressed and resolved in a primary-care setting and those that are established or entrenched enough to warrant referral to feeding specialists.

The need for a diagnostic system that accurately reflects the complexity of clinical presentations of feeding problems becomes clearer when considered in the context of the venues staffed by diverse professionals and paraprofessionals who provide education and intervention in feeding: health supervision by the physician’s office or public health setting; the Special Supplemental Nutrition Program for Women, Infants, and Children; Head Start; the Child Care Food Program; Food Stamp Education Program; and Early Intervention Programs.

Over the last 20 years, the empirical research relevant to the feeding relationship has been steadily increasing in quantity and quality. This research has offered testable hypotheses relative to the complexity of feeding interactions but has suffered from methodological limitations common during the early phases of empirical research on a phenomenon. Those limitations include inadequate statistical power, shifting definitions of constructs, samples with limited generalizability, and failure to specify whether identified processes apply to clinical or nonclinical populations or both. A thorough review of these issues is beyond the scope of this article. It is clear, however, that there are a sufficient number of positive findings in support of a systemic model of feeding to warrant consideration of how our diagnostic systems might better capture these processes. This systemic model in turn will help to focus the research agenda over time.

Current Diagnostic Systems

Existing nosologies only partially address the relational and multisystemic nature of feeding disorders. Table 1 summarizes currently available psychiatric and behavioral diagnostic criteria for feeding disorders, beginning with the current edition of the Diagnostic and Statistical Manual of Mental Disorders (4th ed., text rev.; DSM–IV–TR; APA, 2000). The DSM–IV–TR diagnostic system features a five-axis system (Clinical Disorders, Personality Disorders and Mental Retardation, General Medical Conditions, Psychosocial and Environmental Problems, and the Global Assessment of Functioning, respectively). Diagnostic criteria for feeding disorder from DSM–IV–TR focus on failure to eat in conjunction with negative impact on weight gain. Exclusionary criteria include other child- or parent-centered or environment causes (such as gastroenterologic or other medical conditions), psychiatric dysfunction of parent or child, or lack of appropriate food.

Using the same five-axis system as DSM–IV, the Diagnostic and Statistical Manual for Primary Care (DSM–PC; American Academy of Pediatrics [AAP], 1996) is intended to reflect the spectrum of child functioning that presents in pediatricians’ offices. DSM–PC elaborates on each of the DSM–IV disorders that are commonly seen in children and
### Table 1
**Current Diagnostic Criteria for Feeding Disorders**

<table>
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<th>Resource</th>
<th>Type of disorder</th>
<th>Diagnostic criteria</th>
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| **DSM–IV–TR**     | Feeding disorder of infancy or early childhood | A. Feeding disturbance as manifested by persistent failure to eat adequately with significant failure to gain weight or significant loss of weight over at least 1 month.  
B. The disturbance is not due to an associated gastrointestinal or other general medical condition (e.g., esophageal reflux).  
C. The disturbance is not better accounted for by another mental disorder (e.g., rumination disorder) or by lack of available food.  
D. The onset is before age 6 years. |
| **DSM-PC**        | Feeding disorder of infancy or early childhood | Same criteria as above, but Criterion A changed to read, “Feeding disturbance between parent and child [italics added] as manifested by . . .” (p. 240).  
Inadequate nutrition intake problem | Individual fails to grow in a normal fashion and fails to maintain growth velocity. Growth is at or below 3% for height and weight for more than 6 months.  
Excessive nutrition intake problem | The individual has a caloric intake greater than the number of calories necessary to allow for normal growth. (When tricep skinfold thickness is in excess of 85%, it constitutes obesity.)  
Inadequate nutrition variation | The individual appears to eat a great deal but has a normal growth rate. |
| Chatoor’s (2002) subtypes | **Feeding disorder of state regulation** |  
A. Infant has difficulty reaching and maintaining a state of calm alertness for feeding; is either too sleepy or too agitated or distressed to feed.  
B. Infant’s feeding difficulties start in the newborn period.  
C. Infant fails to gain weight or shows loss of weight.  
Feeding disorder of reciprocity (neglect) | A. Infant shows lack of developmentally appropriate signs of social responsivity (e.g., visual engagement, smiling, babbling) during feeding with primary caregiver.  
B. Infant shows significant growth deficiency.  
C. The growth deficiency and lack of relatedness are not solely caused by a physical disorder or a pervasive developmental disorder.  
Infantile anorexia | A. Child refuses to eat adequate amounts of food for at least 1 month.  
B. Onset of food refusal often occurs during the transition to spoon and self-feeding, typically between 6 months and 3 years of age.  
C. Child does not communicate hunger and lacks interest in food but shows strong interest in exploration and interaction across caregiver contacts.  
D. Child shows significant growth deficiency.  
E. The food refusal did not follow a traumatic event.  
F. The food refusal is not caused by an underlying medical illness.  
Sensory food aversions | A. Child refuses to eat specific foods with specific tastes, textures, smells, or appearances.  
B. Onset of the food refusal occurs during the introduction of a different type of food.  
C. Child eats better when offered preferred foods.  
D. Child must have specific nutritional deficiencies or oral motor delay or both.  
Feeding disorder associated with concurrent medical condition | A. Child readily initiates feeding but over the course of feeding shows distress and refuses to continue feeding.  
B. Child has a concurrent medical condition that is believed to cause the distress.  
C. Medical management improves but does not fully alleviate the feeding problems.  
D. Child fails to gain adequate weight or may even lose weight.  
Posttraumatic feeding disorder | A. Food refusal follows a traumatic event or repeated traumatic insults to the oropharynx or gastrointestinal tract that trigger intense distress in the infant.  
B. Consistent refusal to eat manifests in refusal of the bottle and/or refusal of solid foods.  
C. Reminders of the traumatic events cause distress.  
D. Food refusal poses an acute or long-term threat to nutrition.  

*Note.* With only minor changes as described in the text, the diagnostic subtypes proposed by Chatoor (2002) have also been adopted by the revised *Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood* (Zero to Three, 2005). *DSM–IV–TR* = *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; American Psychiatric Association, 2000); *DSM-PC* = *Diagnostic and Statistical Manual for Primary Care* (American Academy of Pediatrics, 1996).
proposes criteria for less-severe stages that are labeled “problems” and “developmental variations.” Those problems “reflect behavioral manifestations that are serious enough to disrupt the child’s functioning with peers, in school, and/or in the family but do not involve a sufficient level of severity/impairment to warrant the diagnosis of a mental disorder” (AAP, 1996, p. 11). By contrast, developmental variations “reflect behaviors that parents may raise as a concern with their primary care clinician, but that are within the range of expected behaviors for the age of the child” (AAP, 1996, p. 11). For each disorder, problem, and developmental variation described, there is information about “common developmental presentations” for infancy, early childhood, middle childhood, and adolescence. DSM–PC also offers a comprehensive and developmentally informed list of psychosocial stressors on Axis IV.

DSM–PC begins with the DSM–IV criteria for diagnosis at the “disorder” level. However, for “feeding disorder of infancy or early childhood,” the authors of DSM–PC included the stipulation that the “... disorder involves a feeding disturbance between parent and child [italics added]...” (AAP, 1996, p. 240). In the background information supplied, DSM–PC indicates the multidimensional nature of feeding disorders:

Nonorganic risk factors for feeding disorder of infancy and childhood include difficult temperament, disturbed interactions with caregiver [italics added], aversive feeding behavior in the child, and familial psychosocial stressors [italics added]. Infants who are developmentally and physically immature, withdrawn, or lethargic are at increased risk for feeding problems. Additional risk factors include problems of attachment, autonomy, self-regulation, and separation [italics added]. (AAP, 1996, p. 240)

Exclusionary conditions are listed as alternative possibilities to consider in the differential diagnoses. These include a range of medical conditions, psychiatric diagnoses, and licit and illicit drugs.

The diagnostic system proposed by Chatoor (2002), and endorsed by the Task Force on Research Diagnostic Criteria: Infancy and Preschool (2003), uses a single axis describing each of several types of distorted childhood eating behaviors. Each diagnosis incorporates elements of the axes used by the other systems. Five of the six diagnostic subcategories of feeding disorders emphasize developmental and medical issues: Feeding Disorder of State Regulation, Infantile Anorexia, Sensory Food Aversion, Feeding Disorder Associated With Concurrent Medical Condition, and Posttraumatic Feeding Disorder. The sixth subcategory, Feeding Disorder of Reciprocity, is explicitly relational. Subtypes fall within the DSM–IV diagnosis of feeding disorder, and the first three diagnoses deal more explicitly with developmental issues than the other systems. Exclusions are embedded in Chatoor’s diagnostic system. For instance, in the criteria for infantile anorexia, “food refusal is not caused by an underlying medical illness” (Chatoor, 2002, p. 172), and the parent–child interaction is inherent in the diagnosis. Chatoor’s empirical work on infantile anorexia supports a transactional model “in that infant and parent characteristics are associated with high conflict during feeding interactions and that conflict during feeding is associated with the infant’s growth and development” (Chatoor, 2002, p. 171).

The recently revised Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC0–3R; Zero to Three, 2005) uses a multiaxial system similar to DSM–IV and DSM–PC but rearranges some axes to allow consideration of multiple issues that impinge on the functioning of the child and family. Axes I through V, respectively, address clinical disorders, relationship classification, medical and developmental disorders and conditions, psychosocial stressors, and emotional and social functioning. DC0–3R has also adopted the criteria proposed by Chatoor (2002) outlined above, with only minor changes to the diagnostic criteria. Two of the diagnostic categories have been renamed, with “Feeding Disorder of Reciprocity” here termed “Feeding Disorder of Caregiver–Infant Reciprocity” and “Posttraumatic Feeding Disorder” here termed “Feeding Disorder Associated With Insults to the Gastrointestinal Tract.”

Systems Considerations in Current Nosologies

Two of the recently introduced diagnostic systems nicely illustrate the competing crosscurrents around including systemic understanding in our nosologies. The new DC0–3R includes the following as a foundation of the diagnostic process:

All infants and young children are participants in relationships. Children’s most significant relationships are usually those within the family. Families, in turn, participate in relationships within their larger communities and cultures. Any interventions or treatment program should be based on an understanding of the child and the child’s relationships as it is possible to achieve. (Zero to Three, 2005, p. 7).

In contrast, one of the guiding principles of the Task Force on Research Diagnostic Criteria: Infancy and Preschool (2003) standards is “do not include parental behaviors that cause symptoms in children,” including the comments that, “The caregiving context is tremendously important in children and adolescents, and it may be uniquely salient in infants and young children. However, identifying parental behaviors as etiological factors in operationalized diagnostic criteria is an enormously complex task” (p. 1508). Their discussion of these issues includes the provision that parental behaviors should be included in the future “if empirical data emerge that provide a clear and convincing case for including parental behaviors in a classification scheme” (p. 1508).

The existing diagnostic approaches suggest a consensus that a feeding disorder is defined by the characteristics of the individual child. Systemic influences, at best, are reflected on different axes after the diagnosis has been made. In contrast, in this article, on the basis of clinical experience and the available literature, we argue that a diagnostic approach that recognizes the systemic and multidetermined nature of the feeding relationship will better describe the nature of feeding problems, provide the basis for effective treatment planning, and support the development and testing of systematic and integrated therapies.
Addressing Limitations in Current Diagnostic Systems

Current approaches to diagnosis tend to emphasize exclusionary criteria, especially for identified medical, structural, and psychiatric disorders. In contrast, a diagnostic approach that encourages documentation of comorbid contributions across multiple diagnostic axes will reflect the clinical realities of feeding and feeding disorders more precisely.

It has been demonstrated that the presence of structural, neurological, cardiorespiratory, and/or metabolic features of a feeding disorder does not rule out the contribution of significant behavioral features (Burklow, Phelps, Schultz, McConnell, & Rudolph, 1998). They found that 85% of the cases referred to a multidisciplinary feeding team had contributions from more than one of these five areas, and across the whole sample, 80% of children had a significant behavioral component to the feeding disorder.

Current diagnostic approaches tend to be reductionistic, seeking to apply single diagnostic labels to the child (e.g., in DSM–IV, not using a feeding disorder diagnosis when the child meets criteria for oppositional defiant disorder) and, in the case of Chatoor’s (2002) system, identifying mutually exclusive subtypes within the population of children with feeding disorders. Presumably these reductionistic efforts reflect, in large part, explicit goals of DSM–IV in this regard and an assumption that each subdivision and clarification will lead to better treatment. However, this approach is antithetical to a systemic understanding of the phenoma that surround feeding.

Successful treatment of feeding disorders (i.e., with generalization beyond the inpatient or day-treatment setting) necessarily involves attention to parental functioning, the parent–child relationship, other family relationships, and the broader social context of the family. These do not merely reflect barriers to the treatment of the feeding disorder. Rather, intervention with these subsystems are core components of the treatment of the feeding disorder. This point is empirically supported by Burklow et al.’s (1998) finding that the multiple systemic influences on feeding are not mutually exclusive.

Before proposing diagnostic criteria for feeding and feeding interactions that address these shortcomings, context—in the form of a systemic model that organizes all currently available knowledge—must first be considered. Consistent with the core assumptions of developmental psychopathology (Davies & Cicchetti, 2004), this model predicts and synthesizes information about feeding in both normal and clinical populations and provides a framework for explaining movement between clinical and nonclinical functioning.

The model is seen as applicable across the range of physically healthy to acutely and chronically ill as well as across the range of developmental functioning.

The Feeding Relationship

Satter (1986b) proposed the term feeding relationship to describe “the complex of interactions that takes place between parent (or primary caregiver) and child as they engage in food selection, ingestion, and regulation” (p. 353). Both child and parent come to the feeding environment with predispositions and abilities that are further shaped over time as the history of interactions builds. Communication and control between parent and child are continually balanced by an ongoing dynamic that sets the stage for interactions at meals. Ideally, parents are responsive and attuned to the child’s hunger and satisfaction cues and eating capability as well as able to adjust care as the child’s developmental needs evolve. In a healthy feeding relationship, the child’s physical growth proceeds in a predictable fashion in concert with genetic potential (Satter, 2005).

Disruptions in the feeding relationship can arise from attributes of either person, from a negative history of past interactions, or simply from a lack of goodness-of-fit between the two people. Parents may be overcontrolling or insufficiently organized on behalf of the child because of their own psychopathology or life demands. They may have knowledge deficits about food selection or feeding dynamics, or they may have difficulty accepting the child’s bids for autonomy with food acceptance or regulation of food intake. The child may be temperamentally challenging, may have medical or developmental issues that impair her/his ability to ingest food, or may resist eating the amount or type of food the parents expect. Parents may have agendas for the child’s food intake or size and shape that lead them to be controlling with feeding.

Satter (1986b, 2005) outlined a division of responsibility between parent and child as characterizing the interactions of optimum feeding. Until infants are about 6 months of age, parents are responsible for what infants are offered to eat; infants are responsible for how much they eat and everything else about eating. Optimally, the parent feeds in a way that supports the child’s developmental tasks of homeostasis and attachment. The parent helps the infant stay calm and organized by feeding in a smooth and continuous fashion, responding to information coming from the child with respect to timing, tempo, level of skill, frequency, and amounts (Satter, 1990). Ideally, involved professionals support parents in facilitating the child’s regulation of state by helping them learn to read the infant’s sleeping and eating cues.

When the child is about 6 months of age and continuing until early in the 2nd year, parents support the child’s beginning tasks of separation-individuation by observing and understanding the child’s individual sequence of emotional and oral sensorimotor development and making the transition from spoon feeding semisolid food to including the child at the family table. This transition is both social and behavioral as the parent–child relationship evolves from the one on one of infancy to the toddler’s inclusion in the social network of the family. After the child arrives at the family table and the meals-plus-snacks routine of feeding is established, parents become responsible for the “what, when, and where” of feeding; children remain responsible for the “how much and whether” of eating. This pattern is appropriately maintained throughout the child’s growing-up years (Satter, 1990).
Embedded in the framework of the division of responsibility in feeding are the parental tasks of choosing and preparing food, providing regularly scheduled meals and snacks, making eating times pleasant, providing mastery expectations for the child, and accepting the child’s genetically determined size and shape. Parents must give children appropriate autonomy within the structure and limits that they establish (Satter, 1999).

Assumptions about children’s capabilities with eating are essential to the completeness of the feeding dynamics model. Children are compelled by their resilient and powerful drive for survival and developmental processes to eat to the best of their ability. Given appropriate feeding, they will eat the amount they need to grow predictably and learn to eat the food their parents eat (Satter, 1999).

Thus, the feeding dynamics approach sees the feeding problems as multidimensional. Problems are made up of parents’ feeding attitudes and behaviors, the child’s eating capabilities and characteristics, and feeding interactions in the care provider–child dyad (Satter, 1990). Assessment of feeding from the perspective of parents’ tasks and children’s prerogatives identifies sources of disruption in feeding and provides a framework for prevention, diagnosis, and intervention (Satter, 1986a). The fundamental assumption in Satter’s (1990) feeding dynamics model is that children bring an intrinsic drive to grow and master the demands of their environment. The task of parents and other care providers is to support the child in that endeavor. Thus, the key assessment task becomes identification of environmental influences that interfere with or fail to support the child’s capability with eating and growth.

Feeding dynamics interventions are based on trust in the child’s intrinsic drive to eat. This conviction contrasts sharply with strictly defined behavioral approaches, which are built on the assumption that motivation to eat must come from outside the child through systems of rewards and/or punishments (i.e., operant conditioning). Then, if the child eats, it is the adults’ idea (Babbitt et al., 1994). Recent biobehavioral approaches to feeding (e.g., Keddesy & Budd, 1998) have included recognition of systemic influences and posit that changes in the external environment can be used in the service of restoring internal regulation for the child. The biobehavioral approach is still predominantly a child-focused approach, in that the child alone is targeted in the intervention rather than the feeding environment.

This distinction about targets for assessment and intervention should not be misconstrued as a debate about whether feeding is responsive to internal versus external stimuli. Feeding (like all self-regulatory behaviors) is responsive to both types of stimuli. The question is whether the external stimuli (provided primarily by the parents) facilitate or interfere with internal control. The division of responsibility guides parents in establishing an environment that preserves the child’s self-regulation, supports the child’s development of mastery, and minimizes external factors interfering with the child’s eating.

These principles about the feeding relationship apply to all parent–child dyads, including those of children who have medical and/or developmental problems. The challenges faced by parents in striving to feed the ill child or the one with neuromuscular limitations may be significant. Such children may require intensive nutritional interventions (e.g., supplemental or tube feedings) to maintain growth, but the principles for parent–child feeding interactions remain the same, and the child will develop to the fullest extent possible when the principles are applied.

Feeding problems generally reflect a child’s history. For instance, a toddler with poor eating patterns and poor growth may have been a medically fragile infant. He or she may have been treated successfully for the medical condition. However, the perception of the child’s fragility remains, along with distortions in feeding that care providers developed to compensate for the perceived fragility of the child.

Although any group of parents and children is vulnerable to disruptions in feeding, families of children who are physically ill or developmentally delayed are particularly at risk. For example, parents of the chronically ill child may be more anxious because they perceive the child as vulnerable and worry that the child will be poorly nourished. Growing from their anxiety, they are likely to pressure the child to eat. This pressure, in turn, is likely to decrease food intake (Wright, Fawcett, & Crow, 1980) and increase learned food aversions (Pelchat & Pliner, 1986). Struggles around feeding, in turn, increase the parents’ day-to-day distress, which is likely to lead to more vigorous attempts to get food into the child, creating further disruptions in the feeding relationship.

Proposed Diagnostic Criteria

To integrate the conceptualization and diagnosis and therefore the realities of multidisciplinary treatment of feeding disorders, criteria are proposed for “Feeding Disorder Between Parent and Child.” The proposed diagnostic criteria (a) acknowledge contributions from both the parent and the child, (b) reflect the relational nature of the feeding relationship, (c) manage the diversity of feeding disorders and avoid subtyping with multiple eating eccentricities by setting up a single diagnosis and then differentiating through a multiaxial diagnosis, (d) make explicit use of multiaxial diagnosis to reflect the multidetermined nature of feeding disorders, and (e) attempt to distinguish between a feeding problem that may be amenable to education and early problem solving and the established or entrenched feeding disorder that requires systematic diagnosis and treatment.

The existing clinical and developmental research supports the use of these diagnostic criteria for children whose developmental level ranges from infancy into the school-age years. Their applicability for adolescents deserves further study.

The proposed diagnostic criteria for the Axis I disorder “Feeding Disorder Between Parent and Child” are outlined in Table 2. Criterion A recognizes that a feeding disorder exists fundamentally between child and caregiver and represents deviation from developmentally expected behavior.

Criterion B outlines the potential diversity of presenting...
complaints. It reflects the DSM–IV expectation that the child will present with documented medical, nutritional, or growth issues. These issues are considered to be the outgrowth of the multidetermined nature of the feeding problem. These criteria also recognize that in cases in which negative health and growth consequences have been prevented by medical nutritional therapy, tube feeding, or other means of maintaining nutritional status, there may still be a feeding disorder. However, Criterion B rules out conditions in which parents and child have established a harmonious and effective feeding relationship despite the child’s oral sensorimotor, medical, developmental, or growth limitations.

The interactions described for Criterion C reflect distortions in caregivers’ approaches to feeding seen among the families of children with the presenting complaints outlined in Criterion B. These span the range of interactions, attitudes, and expectations and are not meant to be mutually exclusive or hierarchical.

Consistent with DSM–IV–TR, Criteria D and E specify that to qualify for a diagnosis of feeding disorder between parent and child, established or entrenched problems must have emerged before a developmental age of 6 years and lasted for at least 1 month.

There are no exclusionary criteria. Medical, psychosocial, developmental, economic, and other systemic problems are acknowledged as having an impact on the feeding relationship in either positive or negative ways. The goal of the proposed diagnostic system is to assess the multilayered milieu that surrounds a clinical presentation and set the stage for multidisciplinary treatment planning and intervention. Comorbid conditions considered to be part of that

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<th>Criteria</th>
<th>Characteristics</th>
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<td>A. Feeding disturbance between parent (or caregiver) and child as manifested by the child’s persistent failure to eat in keeping with developmental expectations and cultural and subcultural norms.</td>
<td>1. Abrupt or significant growth faltering or acceleration. 2. Clinically significant nutritional deficits. 3. Growth and nutrition parameters maintained but only through tube feeding or other medical nutritional therapy that is not otherwise medically necessary. 4. Growth and nutrition parameters maintained but only through ongoing struggles between parent and child around feeding. 5. Extreme food or texture selectivity. 6. Despite appropriate development, failure of child to achieve developmental expectations with respect to food acceptance, eating style, food regulation, or growth. 7. Child responds in a markedly different fashion to caregivers other than parents.</td>
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<tr>
<td>B. Child’s eating and growth is characterized by one (or more) of the following characteristics.</td>
<td>1. Significant level of interactional difficulties at feedings, such as child displaying high levels of aggressive, disruptive, or noncompliant behavior; parental withdrawal or loss of self-control; or escalating negativity/hostility in parent–child interactions. 2. Caregivers consistently fail to provide appropriate structure and support for the child’s eating: lack of regular and predictable meal and snack times with developmentally and nutritionally appropriate food. 3. Caregivers consistently intrude on the child’s prerogatives with food acceptance or food regulation, pressuring the child to eat certain foods and/or certain amounts. 4. Level of caregiver concern about the child’s eating; growth and/or health is disproportionate to the situation at hand. 5. Caregivers show clinically significant idiosyncratic or inflexible beliefs related to feeding, health and/or weight (e.g., expecting consistent intake at every meal, believing that a single poor meal will harm child’s health, insisting that the child achieve a particular size or shape). 6. Marked inability or unwillingness of caregiver to attend to or interpret child hunger and satiety clues, or to respond in a reciprocal fashion. 7. Onset of feeding disturbance following a traumatic event for child and/or caregiver.</td>
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<tr>
<td>C. The feeding relationship is characterized by one (or more) of the following characteristics.</td>
<td>1. Onset of problems before child has reached a developmental age of 6 years. 2. Duration of symptoms for at least 1 month.</td>
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milieu can be diagnosed on Axes I, II, and III as described below, but unlike in current diagnostic systems, they do not rule out the diagnosis of a feeding disorder.

### Multiaxial Diagnosis

The multisystemic and multilayered nature of feeding disorders suggests that the targeted use of DSM–IV–TR’s multiaxial approach is a highly utilitarian approach to develop diagnoses that are clinically precise and guide treatment planning. The proposed structure in Table 3 is patterned after the axis designations of the DSM–IV–TR. It also borrows from descriptive components of existing diagnostic systems, for instance, the Parent–Infant Relationship Global Assessment Scale (PIR-GAS) was adapted from Zero to Three (2005).

The fundamental and critically important distinction between this proposed multiaxial approach and DSM–IV is that the factors identified across axes are inclusive rather than exclusive. All information across axes is retained and plays a role in multisystemic diagnosis and treatment. Nothing is discarded, nothing is used to rule out the feeding disorder diagnosis, and nothing is labeled as interfering with treatment. Thus, diagnostic criteria for feeding disorder reflect the multisystemic assessment accomplished by a multidisciplinary team in the service of successful treatment of families with a multidetermined disorder.

Axis I includes “feeding disorder of infancy or childhood” as well as any other DSM–IV–TR Axis I psychiatric diagnoses appropriate for the child and/or parents. Axis II designates personality disorders of parents and developmental disorders of the child and/or parents. Axis III reflects current medical conditions of the child and/or parents. Axis IV identifies psychosocial and environmental problems, expanded by using the comprehensive and developmentally informed list of stressors from DSM-PC. Axis V is the current Global Assessment of Functioning Scale of both the child and parent considered separately. Axis VI, characteristics of the parent–child relationship, is described with Zero to Three’s (2005) PIR-GAS. The system is sufficiently flexible to apply to parents and children through age 6 years. Structured similarly to the Global Assessment of Functioning Scale on Axis V, this scale offers a comprehensive, family–systems and developmentally informed approach to classifying the quality of the parent–child relationship. When the PIR-GAS rating is 40 or below, the nature of the dysfunction is described with the relationship disorder classifications offered on Axis II of DC0-3R (see Table 3).

### Summary

As stated in the recent Task Force on Research Diagnostic Criteria: Infancy and Preschool (2003) report, specifying the systemic influences on problematic behavior is “an enormously complex task” (p. 1508), but it is time for the diagnosis of feeding disorder to embrace this clinical complexity. Theoretical and empirical work clearly indicate that feeding is a relational and multisystemic process, and that attention to multiple influences is essential to diagnose and treat feeding disorders successfully. To support the goal that diagnostic efforts will meaningfully inform treatment planning, a diagnostic system must reflect (and indeed embrace) this complexity.

The proposed diagnostic criteria for “Feeding Disorder Between Parent and Child” were developed and refined on the basis of the available literature and many years of treatment experience. This practical system is proving to be clinically superior to the DSM editions through its use in developing and evaluating treatment packages with components specifically targeted to child, family, and broader characteristics.

These criteria are now being offered for systematic testing and refinement, particularly with respect to the incremental clinical value of this system in comparison with DSM–IV and DSM–IV–TR. The reliability of specific components of the diagnosis needs to be investigated, and more items may need to be added to Criteria B and C. Given the multidimensional nature of the diagnosis, it is likely that the individual elements of each criterion can be mapped onto specific treatment modules or components. For example, under Criterion C.6., parents’ inability to attend to or interpret hunger and satiety cues can be specifically addressed in the treatment plan. The empirical questions raised by addition of specific treatment components can then be addressed through systematic research.

### Table 3

#### Multiaxial Diagnosis of Feeding Disorder

<table>
<thead>
<tr>
<th>Axis</th>
<th>Feeding disorder diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Feeding disorder between parent and child; comorbid Axis I disorder(s); Rate impact on feeding relationship (none, mild, moderate, severe)</td>
</tr>
<tr>
<td>II</td>
<td>Character disorders of parent; developmental disorders and conditions of parent and/or child</td>
</tr>
<tr>
<td>III</td>
<td>Medical disorders and conditions of parent and/or child</td>
</tr>
<tr>
<td>IV</td>
<td>Psychosocial stressors (DSM-PC or DC0-3R)</td>
</tr>
<tr>
<td>V</td>
<td>Global Assessment of Functioning of parent(s) and child considered separately; 0–100 rating</td>
</tr>
<tr>
<td>VI</td>
<td>Parent–Infant Relationship Global Assessment Scale (PIR-GAS; DC0-3R); 0–100 rating; When PIR-GAS is less than or equal to 40, also rate Relationship Disorder Classification (DC0-3R); overinvolved, underinvolved, anxious/tense, angry/hostile, mixed, verbally abusive, physically abusive, sexually abusive</td>
</tr>
</tbody>
</table>

*Note. DSM-PC = Diagnostic and Statistical Manual for Primary Care (American Academy of Pediatrics, 1996); DC0-3R = Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (Zero to Three, 2005).*

### References


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