Childhood Feeding Difficulties

Abbott Roundtable November 6, 2010

Preventing and addressing childhood feeding difficulties:
Raising children to be Eating Competent

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Annotated References

Anderson SE, Whitaker RC. Household Routines and Obesity in US Preschool-Aged Children. *Pediatrics.* 2010;125(3):420-428.

8550 four-year-old US children assessed in 2005 in the Early Childhood Longitudinal Study. Assesses incidence of childhood obesity(BMI >95th percentile) relative to 3 household routines: regularly eating the evening meal as a family >5 nights per week; obtaining adequate nighttime sleep on weekdays (>10.5 hours per night); and having limited screen-viewing (television, video, digital video disk) time on weekdays (<2 hours/day).Analyses were adjusted for the child's race/ethnicity, maternal obesity, maternal education, household income, and living in a single-parent household.14.5% were exposed to all 3 routines, and 12.4% were exposed to none of the routines. Children exposed to the 3 household routines had an 40% lower prevalence of obesity than those exposed to none of these routines. Having routine family dinner lowered risk by about 25%. ES notes: The parameters examined in this study could exist as a proxy for good parenting. It would be interesting to see in what percentage of cases *interference* was part of the family-meals feeding dynamic. This was, of course, not examined.

Barlow SE, and the Expert C. Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report. *Pediatrics.* 2007;120(Supplement_4):S164-192.

Overweight is characterized as BMI between the 85th to 94th percentile, obesity as BMI ≥95th percentile, and extreme obesity as BMI ≥99th percentile. To prevent overweight, it is recommended that parents of all children, starting at birth, limit television and other screen time as well as follow certain "eating behaviors [actually, food selection and management patterns]": 1) limit consumption of sugar-sweetened beverages, 2) encourage fruits and vegetables, 3) limit portion size, 4) eat breakfast daily, 5) limit eating out at restaurants—particularly fast food restaurants, and 6) encourage family meals in which parents and children eat together. Additional recommendations include limiting foods low in energy density, encouraging foods high in calcium and fiber, and breastfeeding to age 12 months. At increasing levels of intervention--Prevention Plus through Structured Weight Management to Comprehensive Multidisciplinary Intervention--greater specificity relative to food selection, dietary patterns, and activity is recommended to achieve negative energy balance. Tertiary Care Intervention for extremely obese children (≥99th percentile) from age 6 years and for obese and extremely obese children from age 12 years is defined as medication, very low calorie diets and/or weight-control surgery.

Baumrind D. Current patterns of parental authority. *Developmental Psychology Monograph.* 1971;4(1 pt.2):1-103.

Authoritarian: The parents' word is law, not to be questioned, and misconduct is punished. Authoritarian parents seem aloof from their children, showing little affection or nurturance. Maturity demands are high, and parent-child communication is rather low. Permissive The parents make few demands on their children, hiding any impatience they feel. Discipline is lax. Parents are nurturant, accepting and communicate well with offspring. They make few maturity demands because they view themselves as available to help their children but not as responsible for how their children turn out Authoritative The parents in this category are similar in some ways to authoritarian parents, in that they set limits and enforce rules, but they are also willing to listen receptively to the child's requests and questions. Family rule is more democratic than dictatorial. Parents make high maturity demands on offspring, communicate well with them and are nurturant. The following generalizations tend to be true. The sons of authoritarian parents tend to be distrustful, unhappy and hostile, and neither the sons nor daughters of such parents are high achievers. The children of permissive parents are the least self-reliant , the least self-controlled and the most unhappy. The boys are low-achievers, although the girls do quite well in school. The children of authoritative parents are the most self-reliant, self-controlled and content and are friendly cooperative and high achievers.

Birch LL, Fisher JO, Davison KK. Learning to overeat: maternal use of restrictive feeding practices promotes girls' eating in the absence of hunger. *Am J Clin Nutr.* 2003;78(2):215-220.

Maternal use of restrictive feeding practices promotes girls' eating in the absence of hunger. This longitudinal study of 182 families assessed whether restrictive feeding practices foster girls' eating in the absence of hunger (EAH). Factors tested were 1) Maternal high versus low restriction, 2) Girls' non-overweight versus overweight and 3) 5, 7, and 9 years of age. Mean EAH increased from 5 to 9 y of age. Higher levels of restriction at 5 y of age predicted higher EAH at 7 y of age and at 9 y of age. Girls who were already overweight at 5 y of age and who received higher levels of restriction had the highest EAH scores at 9 y of age and the greatest increases in EAH from 5 to 9 y of age. ES notes: This study clearly indicates that parents need guidance in the use of "forbidden" food.

Black MM, Hutcheson JJ, Dubowitz HH, Berenson-Howard J. Parenting style and developmental status among children with nonorganic failure to thrive. *Journal of Pediatric Psychology.* 1994;19 (6):689-707.

Low income, single parents of mean-age 13.3 month old children with nonorganic failure to thrive, compared with controls, were either less nurturant and more neglecting or more authoritarian with their children.

Briefel R, Reidy K, Karwe V, Jankowski L, Hendricks K. Toddlers' transition to table foods: impact on nutrient intakes and food patterns. *J Am Diet Assoc.* 2004;104:S38-S44.

The mean percentage of energy from table foods increased from 25% at 9 to 11 months to 63% at 19 to 24 months. Mean intakes of energy, macronutrients, sodium, folate, iron, and fiber were significantly higher for children in the highest table food

energy quartiles compared to the lowest (ages 9 to 11, 12 to 14, and 15 to 18 months). Nutritional status is better for the high-table-food consuming children despite the fact that high-table-foods-consuming children also consume more pizza, carbonated sodas, French fries, candy and other sweets.

Chatoor I. Feeding disorders in infants and toddlers: diagnosis and treatment. *Child and Adolescent Psychiatric Clinics of North America.* 2002;11(2):163-183.

The Mother-Infant Toddler Feeding Scale is an observational scale that assesses the behavior of infants/toddlers and mothers during feeding. It has been tested for reliability and validity. Subscales are: Dyadic reciprocity; Maternal non-contingency; Dyadic conflict; Bargaining about food; Struggle for control. Feeding disorders are: 1) Feeding disorder of state regulation, 2) Feeding disorder of reciprocity 3) Infantile anorexia 4) Sensory food aversions 5) Feeding disorder associated with concurrent medical condition 6) Posttraumatic feeding disorder. The scale and the videotape illustrating its use is available from Infant and Toddler Mental Health Center, Department of Psychiatry, Children's National Medical Center, George Washington University, 111 Michigan Avenue, Washington, DC 20010, USA

Crow RA, Fawcett JN, Wright P. Maternal behavior during breast- and bottle-feeding. *J. Beha Med.* 1980;3(3):259-277.

Observational study. Bottle-feeding parents of small babies were more active in feeding and their babies grew less well than breast feeding mothers of small babies, who were not overactive. Average-sized breast- and bottle-fed babies were fed similarly and grew equally well.

Davies WH, Satter E, Berlin KS, et al. Reconceptualizing feeding and feeding disorders in interpersonal context: The case for a relational disorder. *Journal of Family Psychology.* 2006;20:409-417.

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 for Feeding Disorder Between Parent and Child were developed and refined based on the available literature and many years of treatment experience across the authors of this article. We believe this practical system is clinically superior to DSM through its utility in developing and evaluating treatment packages with components specifically targeted to issues of the child, parent, parent-child interaction and the broader environment. A research plan is outlined for assessing the reliability, validity, clinical utility, and further development of the proposed criteria.

Faith MS, Scanlon KS, Birch LL, Francis LA, Sherry B. Parent-child feeding strategies and their relationships to child eating and weight status. *Obes Res.* 2004;12:1711-1722.

Of 22 studies isolated from a comprehensive literature review, parental food restriction, but no other feeding domain, was associated with increased child food intake and body weight.

Farrow C, Blissett J. Does Maternal Control During Feeding Moderate Early Infant Weight Gain? *Pediatrics.* 2006;118(2):e293-298.

When maternal control was low to moderate, trends in infants' weight gain moderated between birth to age 12 months, with initially slow-growing infants growing faster and initially fast-growing infants growing more slowly. In contrast, when maternal control was high, the initial infant weight-gain patterns persisted.

Fisher JO, Mitchell DC, Smiciklas-Wright H, Birch LL. Parental influences on young girls' fruit and vegetable, micronutrient, and fat intakes. *J Am Diet Assoc.* 2002;102:58-64.

Parents who consumed more fruits and vegetables had daughters who consumed more fruits and vegetables. Parents with lower fruit and vegetable intakes tended to report using greater pressure in child feeding. Girls' total number of combined fruit and vegetable servings were highest among parents who consumed high amounts of fruits and vegetables and used low pressure in child feeding. Girls who received more pressure to eat tended to have lower fruit and vegetable and micronutrient intakes.

Galloway AT, Fiorito LM, Francis LA, Birch LL. 'Finish your soup': counterproductive effects of pressuring children to eat on intake and affect. *Appetite.* 2006;46:318-323.

Children consumed significantly more food when they were not pressured to eat and they made overwhelmingly fewer negative comments. Children who were pressured to eat ate less food and were smaller.

Hood MY, Moore LL, Sundarajan-Ramamurti A, Singer M, Cupples LA, Ellison RC. Parental eating attitudes and the development of obesity in children. The Framingham Children's Study. *Int J Obes (Lond).* 2000;24:1319-1325.

Parents who displayed high levels of disinhibited eating, especially when coupled with high dietary restraint, appeared to foster the development of excess body fat in their children. Children whose parents had particularly high scores on both restraint and disinhibition had particularly high increases in BMI. Children of parents who "successfully" restrained, ie, had no disinhibition, had no increases in BMI. This 6-year longitudinal study of ninety-two 3-5 year old children and their parents was of subjects enrolled in 1987 in the Framingham Children's Study. Self-reported levels of parental dietary restraint, disinhibition and perceived hunger were estimated using Stunkard and Messick's Three Factor Eating Questionnaire. Parental scores on the perceived hunger scale (one of the three factors on the questionnaire) had no clear effect on body fat change of children.

Jacobi C, Schmitz G, Agras WS. Interactions between disturbed eating and weight in children and their mothers. *J Dev Behav Pediatr.* Oct 2008;29(5):360-366.

Four hundred twenty-six 8- to 12-year-old children and their primary caretakers (91% mothers). Older girls with higher BMI endorsed more problems with eating and weight, and more body dissatisfaction than boys and younger children. Daughters of overweight mothers restrained their own eating behavior more than daughters of normal weight mothers and sons regardless of mothers' weight. Older daughters of overweight mothers were more dissatisfied with their own bodies than younger daughters and children of normal weight mothers. Children of mothers with elevated disinhibition showed more body dissatisfaction than children of mothers with lower disinhibition.

Lee Y, Mitchell DC, Smiciklas-Wright H, Birch LL. Diet quality, nutrient intake, weight status, and feeding environments of girls meeting or exceeding recommendations for total dietary fat of the American Academy of Pediatrics. *Pediatrics (serial online).* 2001;107.

Mothers who eat high fat diets tend to use more controlling feeding practices. Daughters have lower Healthy Eating Index scores and greater increases in BMI from 5 to 7 years. ES note: While authors interpreted this research to mean that high fat was the culprit, the high-fat diets were offered in the context of controlling feeding practices. It is more likely that mothers compensate for what they see as less-than-optimal food selection by trying to restrict girls' food intake.

Lohse B, Psota T, Estruch R, et al. Eating competence of elderly Spanish adults is associated with a healthy diet and a favorable cardiovascular disease risk profile. *J Nutr.* Jul 2010;140(7):1322-1327.

PREDIMED is a Spanish 5-y controlled clinical trial evaluating Mediterranean diet efficacy on the primary prevention of cardiovascular diseases (CVD). In a cross-sectional study, 638 PREDIMED participants (62% women, mean age 67 y) well phenotyped for cardiovascular risk factors were assessed for food intake and EC using validated questionnaires. 45.6% were eating-competent. EC was associated with being male and higher energy intake ($P < 0.01$). After gender and energy adjustment, participants with EC compared with those without showed higher fruit intake and greater adherence to the Mediterranean diet ($P < 0.05$) and tended to consume more fish ($P = 0.076$) and fewer dairy products ($P = 0.054$). EC participants tended to have a lower BMI ($P = 0.057$) and had a lower fasting blood glucose concentration and serum LDL-:HDL-cholesterol ratio ($P < 0.05$) and a higher HDL-cholesterol concentration ($P = 0.025$) after gender adjustment. EC participants had lower odds ratios (OR) of having a blood glucose concentration >5.6 mmol/L (0.71; 95% CI 0.51-0.98) and HDL-cholesterol <1.0 mmol/L (0.70; 95% CI 0.68-1.00). The OR of actively smoking, being obese, or having a serum LDL-cholesterol concentration > or =3.4 mmol/L were <1.0, but the 95% CI included the 1.0 ($P > 0.1$). Findings support further examination of EC as a strategy for enhancing diet quality and CVD prevention.

Lohse B, Satter E, Horacek T, Gebreselassie T, Oakland MJ. Measuring Eating Competence: psychometric properties and validity of the ecSatter Inventory. *J Nutr Educ Behav.* 2007;39 (suppl):S154-S166.

ecSatter Inventory (ecSI) responses from a convenience sample of 863 adults compared to outcomes from 5 validated instruments and pre-tested food preparation questions affirmed ecSI construct validity. ecSI tertile differences were clear and concise as well as compatible with hypothesized relationships. Tertile (for total and subscale scores) increases were related to decreases in restrained eating, disinhibition, hunger, weight dissatisfaction, food dislikes, drive for thinness and other indicators of eating disorders. Tertile increases were related to increases in physical activity, stage of change for fruit and vegetable intake, and food preparation. The instruments and questions were Stunkard's Three Factor Eating Questionnaire, Garner's Eating Disorders Inventory (EDI), Drewnoski's food preference survey, fruit and vegetable stage of change algorithm, Expanded Food and Nutrition Education Program questions, and demographic, health and food-preparation items generated for the battery of tests. Based on the EDI 2, competent eaters are emotionally and socially healthier than people with low levels of eating competence. They feel more effective, are more self-aware, and are more trusting and comfortable, both with themselves and with other people. They also have decreased levels of body dissatisfaction and decreased drive for thinness.

Maccoby EE, Martin JA. Socialization in the context of the family: parent-child interaction. In: Mussen PHe, ed. *Handbook of Child Psychology*. New York, NY: Wiley; 1983:1-101.

Operationalized parenting style by defining it in two dimensions: 1) Maturity expectations 2) Sensitivity (receptivity) and emotional involvement. Authoritative parenting associated with higher academic achievement, increased self-regulatory ability, frequent use of adaptive strategies, fewer depressive symptoms, and fewer risk-taking behaviors.

Musher-Eizenman DR, Holub SC, Hauser JC, Young KM. The relationship between parents' anti-fat attitudes and restrictive feeding. *Obesity (Silver Spring).* 2007;15:2095-2102.

Parental concern about child overweight was related to higher restrictive feeding practices for both mothers and fathers of 4 to 6 year-old children. Parents' anti-fat attitudes predicted restrictive feeding above and beyond the effects of parent and child BMI and parental concern about overweight.

Olson DH. Circumplex model of marital and family systems. *Journal of Family Therapy.* 2000;22:144-167.

The Circumplex Model focuses on the 3 central dimensions of marital and family systems: cohesion, flexibility and communication. The major hypothesis of the Circumplex Model is that balanced couple and family systems tend to be more functional compared to unbalanced systems. A balanced level of both cohesion (closeness) and adaptability (change) is most functional to marital and family development. Too much closeness can lead to enmeshment systems and too little can lead to disengagement. Too much change can produce chaos and too little can produce rigidity. In over 250 studies using the Family Adaptability and Cohesion Scales (FACES), a linear self-report measure, strong support has been found for this hypothesis. In several studies using the

Clinical Rating Scale (CRS), a curvilinear observational measure, the hypothesis was also supported. These two assessment tools, the FACES and the CRS, are designed for research, clinical assessment and treatment planning with couples and families.

Orrell-Valente JK, Hill LG, Brechwald WA, Dodge KA, Pettit GS, Bates JE. "Just three more bites": an observational analysis of parents' socialization of children's eating at mealtime. *Appetite.* 2007;48:37-45.

85% of parents of kindergartners prompted children to eat more. 83% of children ate more, than they might otherwise have, with 38% eating moderately to substantially more. Boys were prompted to eat as often as girls and children were prompted to eat as many times in single- as in two-parent households. Children were very rarely restricted in their mealtime intake. High-SES parents used reasoning, praise, and food rewards significantly more often than low-SES families. Mothers used different strategies than fathers: fathers used pressure tactics with boys and mothers praised girls for eating.

Psota T, Lohse B, West S. Associations between eating competence and cardiovascular disease biomarkers. *J Nutr Educ Behav.* 2007;39 (suppl):S171-S178.

Eating competence (EC) as measured by the ecSatter Inventory is related to measures of cardiovascular disease risk. EC is significantly and positively related to HDL-cholesterol and inversely associated with systolic and diastolic blood pressure. Trends were noted between EC and triglycerides, interleukin-1 and interleukin-6 (both indicators of inflammation) and soluble vascular cell adhesion molecule -1 (sticky molecule reputed to play a role in atherogenesis).

Rhee KE, Lumeng JC, Appugliese DP, Kaciroti N, Bradley RH. Parenting styles and overweight status in first grade. *Pediatrics.* 2006;117:2047-2054.

872 first-grade students, mean age 54 months, overweight incidence (BMI >95th %tile) 11.1%. Correlations were identified between 4 parenting styles (authoritative, authoritarian, permissive, and neglectful) and overweight status. Data from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development were analyzed for parenting styles using two scales: 1) maternal sensitivity and 2) maternal expectations for child self-control. Authoritative parenting correlates with lower incidence of child overweight in first-grade children, with only 3.9% of authoritative parents having overweight children compared to 9.8% of permissive parents, 9.9% of neglectful parents, and 17.1% of authoritarian parents. ES note: Feeding is parenting. The Satter Feeding Dynamics Model, including the Division of Responsibility for Feeding, is an authoritative approach to parenting--and feeding.

Satter E. The Satter Feeding Dynamics Model of child overweight definition, prevention and intervention. In: O'Donahue W, Moore BA, Scott B, eds. *Pediatric and Adolescent Obesity Treatment: A Comprehensive Handbook*. New York: Taylor and Francis; 2007:287-314.

From the Feeding Dynamics perspective, to prevent child overweight from birth, feed optimally, support normal growth and development, and avoid disruptive influences. For the infant and young child, and to a lesser extent for older children, nourishing is synonymous with nurturing. Symbolically, in terms of actual time spent, and in terms of

consequences to normal growth and development, feeding is of primary importance during a child's early life. Appropriate feeding supports the child in achieving developmental tasks at every stage as well as instills positive eating attitudes and behaviors. Problems with feeding can impair normal growth and development, but on a more profound level, they can reflect distortions in parent-child interaction that interfere with the child's positive psychosocial development.

Feeding is parenting, and appropriate feeding allows children to achieve developmental tasks at every stage.Health care professionals who understand the principles and practices of optimal, stage-related feeding can concretely teach good parenting within the feeding context. Good parenting with feeding is observing a division of responsibility in feeding, guiding the feeding process based on information coming from the child with respect to inclinations for eating and physical abilities, feeding in a developmentally appropriate fashion, and accepting the child's constitutionally endowed growth (even when that growth exceeds standard cutoff points).

Feeding with Love and Good Sense II: Video Series by Ellyn Satter. Madison, WI Ellyn Satter Associates;2011.

Four 15 to 20 minute video segments (infant, transitional child, toddler, preschooler) feature live-action real-situation videotapes to help parents and child care workers do well with feeding.

Satter EM. The feeding relationship. *J Am Diet Assoc.* 1986;86:352-356.

The feeding relationship is the complex of interactions that takes place between parent and child as they engage in food selection, ingestion and regulation behaviors. The parent is responsible for what is presented to the child to eat, as well as for the physical and emotional setting. The child is responsible for how much is eaten or even whether anything is eaten. Successful feeding demands a caretaker who trusts and depends on information coming from the child about timing, amount, preference, pacing and eating capability. An appropriate feeding relationship supports the child's developmental tasks and helps the child develop positive attitudes about self and the world. It helps him/her learn to discriminate feeding cues and respond appropriately to them. It enhances the child's ability to consume a nutritionally adequate diet and to regulate appropriately the quantity eaten. The feeding relationship is characteristic of the overall parent/child relationship. Distortions that show up in feeding are likely to appear in other aspects of the interaction. Health professionals who intervene with feeding must be aware of the implications for the relationship. A primary objective with any feeding intervention is to increase or protect the parents' sensitivity to the child's feeding cues. If the feeding relationship is disrupted, the health professional should consider a referral for psychosocial evaluation.

Satter EM. The feeding relationship: problems and interventions. *J Pediatrics.* 1990;117:S181-S189.

Feeding of the newborn infant is most successful when parents allow the infant to determine timing, amount, preference, pacing and eating capability. During the attachment phase, such infant-controlled behaviors allow parents to engage affectively with the child. Successful regulation of state and attachment provides the groundwork for

the separation-individuation phase. In feeding, effective parenting provides opportunities to explore but also provides structure and limits. Feeding and growth problems often stem from distorted dynamics around feeding, which can be indicative of distorted parent-child interactions. Incidence estimate range from 1% to 2% for severe and prolonged problems to 25% to 35% for common difficulties such as food refusal and "overeating." An evaluation of feeding dynamics should always be made as part of the diagnostic study of a child who is eating or growing inappropriately. To prevent problems in feeding, practitioners may teach and support positive feeding dynamics as part of primary care, refer parents for instruction in positive approaches to feeding, and detect and refer attitudinal and behavioral problems early.

Satter EM. Feeding dynamics: Helping children to eat well. *Journal of Pediatric Health Care.* 1995;9:178-184.

An appropriate feeding relationship supports children's developmental tasks at every age. Positive parent/child dynamics around feeding allows children to be well-nourished and to achieve optimum, genetically determined growth. Specific characteristics of either parent or child, or both, can put the feeding relationship at risk. Children prone to developing feeding problems include: Children who are temperamentally negative or slow to warm up; Children defined as being “at risk” or “at nutritional risk;” Exceptionally large or small children, or those who eat exceptionally large or small amounts; Children who have been ill, especially seriously; Children who were prematurely born; Children with neuromuscular and/or cognitive limitations. Children on modified diets, for example, children with diabetes

Parents prone to precipitating feeding problems include: Parents with negative reproductive history; Parents who are overactive and too stimulating; Parents who are underactive or not engaging; Parents who are unusually rigid or controlling; Parents who are unusually chaotic or disorganized; Parents who are excessively concerned about their child's diet and weight; Parents who are excessively concerned about their own diet and weight; Parents who have a particular agenda with growth.

Satter EM. Eating Competence: definition and evidence for the Satter Eating Competence Model. *J Nutr Educ Behav.* 2007;39 (suppl):S142-S153.

Eating competence as defined by the Satter Eating Competence Model (ecSatter) is being positive, comfortable and flexible with eating as well as matter-of-fact and reliable about getting enough to eat of enjoyable and nourishing food. ecSatter is predicated on the utility and effectiveness of fundamental biopsychosocial processes: hunger and the drive to survive, appetite and the need for pleasure, the social reward of sharing food, and the biological propensity to maintain preferred and stable body weight. ecSatter trusts the powerful and reliable tendency to eat satisfying amounts of rewarding food and to maintain stable body weight that is unique for the individual. The evidence- and practice-based ecSatter outlines an inclusive definition of the interrelated spectrum of eating attitudes and behaviors. According to ecSatter, competent eaters, 1) have positive attitudes about eating and about food, 2) have food acceptance skills that support eating an ever-increasing variety of the available food, 3) have internal regulation skills that allow intuitively consuming enough food to give energy and stamina and to support stable body weight, and 4) have skills and resources for managing the food context and

orchestrating family meals. ecSatter operationalizes and achieves the Dietary Guidelines. Food management approaches that stipulate portion sizes, certain foods, or certain amounts of foods are contradictory to ecSatter. Attempting to combine the two destroys the utility of ecSatter.

Sherry B, McDivitt J, Birch L, et al. Attitudes, practices, and concerns about child feeding and child weight status among socioeconomically diverse white, Hispanic, and African-American mothers. *J Am Diet Assoc.* 2004;104:215-221.

Parents endorse good nutrition, but bribe, pressure and cater. >90% of parents of 2- to 4-year-old children prepared foods their children liked, accommodated specific requests, and bribed, rewarded and pacified children with sweets. The same percentage also didn't believe their children when they said they were full and encouraged them to eat more.

Stein A, Woolley H, Cooper SD, Fairburn CG. An observational study of mothers with eating disorders and their infants. *Journal of Child Psychology and Psychiatry and Allied Disciplines.* 1994;35:733-748.

Mothers who had experienced an eating disorder during the postnatal year compared with a control group were more intrusive with their infants during both mealtimes and play. They also expressed more negative emotion toward their infants during mealtimes. The emotional tone of infants of eating disordered mothers was generally more negative and their mealtimes more conflictual compared with controls.

Wardle J, Carnell S, Cooke L. Parental control over feeding and children's fruit and vegetable intake: How are they related? *Journal of the American Dietetic Association.* 2005;105(2):227-232.

The strongest predictor of 2- to 6-year-old children's fruit and vegetable intakes was consumption by the parents. The next strongest was food neophobia of the child (measured by The Child Neophobia Scale). The next strongest was parental control: More parental control was associated with lower frequency of children's fruit and vegetable consumption. Control was measured by the Parental Control Index, which consider the extent to which parents use restriction and pressure to control their child's eating.