

TABLE TALK

Impact of Intergenerational food transmission on the nutritional environment and strategies for
the prevention of eating disorders

by

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Executive Summary

The literature review on intergenerational food transmission explores how family practices and attitudes that surround both body image and nourishment impact future generations. Food messages during childhood play a crucial role in shaping an individual's relationship with regulation, emotional eating, body image, and has lasting impact for generations. The research, based mainly on maternal eating practices and body talk, highlights the impact of how an individual was raised and how the food and body messages in the home shape the approach to feeding and speaking to their own children. The patterns of weight focus and restriction directly impact disordered eating and future risk of body dissatisfaction for generations. A parent's own experience and memories of eating, including pressure from their parents, restriction, the moralization of food, such as "good vs. bad," and parental modeling, all impact how parents feed their families. Many studies describe a correlation between restriction of food from parents and disordered eating habits, specifically binge eating disorder, into adulthood.

With early intervention, parental modeling and nutrition education, there seems to be a positive impact towards change and the breaking of generational patterns. This paper explores the impact of intergenerational food transmission and the role it plays in the lifelong relationship between food and self-esteem. Utilizing Satter's Division of Responsibility, parental modeling, and responsive feeding practices, there can be protective measures taken to prevent future disordered eating and develop a healthy relationship with food. Parental modeling through consistent family meals and homes that curate body-positive talk can help to cultivate resilience and self-acceptance while illustrating the protective measures of the home food environment in either disrupting or continuing the cycles of diet culture. This research and paper advocate for

evidence-based strategies and prevention tactics that can be utilized to create emotionally safe food environments across generations and break the cycle of disordered eating practices.

There remain several limitations to this research, including specific individual recall of parental influence on eating behavior and the reliance on self-reported data, which could affect the accuracy of the findings. Additionally, how upbringing affects current modeling behavior in the home and influence on “fat talk” or any criticism of weight on the future nutritional and eating behaviors of future generations in the prevention of any disordered eating and impact on long-term health needs to be explored in more long-term studies. The literature focuses on maternal influence and mainly white, middle-class families while excluding racially and socioeconomically diverse families whose family practices, cultures, and communication styles may differ considerably. The research primarily focuses on maternal impact on generational food transmission, but there is a growing need to also examine fathers, same-sex parents, non-binary or traditional parental roles, with a broader family sample more reflective of society in the shaping of food values and practices in the home.

Few studies provide insight into the reflective experiences of parents who are actively attempting to break cycles of negative food transmission. There is also a need to track how food beliefs evolve across generations and how socioeconomic stress and food scarcity play a role generationally and contribute to feeding behaviors.

The development of eating habits and behaviors is complex and strongly impacted by the caregiver’s own nutritional behavior, encompassing their family and cultural background, and emotional response to food. Addressing these limitations of diversity and longevity for future research will only enhance the validity and inclusivity across a broader range of populations to

explore the intergenerational impact on eating disorder prevention and provide strategies for a positive food environment across cultures and generations.

In conclusion, intergenerational food transmission plays a crucial role in shaping children's food habits and body image perceptions into adulthood. But the research is clear that patterns of behavior and generational food transmission of positive or negative parental modeling can be reversed once parents are made aware of the gaps in education and cycles that involve negative beliefs in food and harmful body talk. With more research, education, and internal work as a family, there is hope that the home can be the first positive food environment and place to be fed both physically and emotionally in a healthy and nurturing environment. Every meal is an opportunity to connect, share stories, and develop memories as a family unit. An individual's family history plays a critical role, but parents can rewrite the story to approach the next generation and impact self-esteem, food education, and self-regulation in a positive and safe environment. Ultimately, change begins at the table, and parents can pull up a seat for the next generation while guiding towards a legacy of nourishment, encouraging a positive relationship with their body and a healthy journey with food.

Keywords:

parental modeling, intergenerational food transmission, restrictive feeding practices, fat talk, food messages, family meals, Division of Responsibility, disordered eating

Abstract

This report examines the role of intergenerational food transmission in the prevention of eating disorders, emphasizing the influence of early feeding practices and family food environments on long-term relationships with food and body image. As rates of disordered eating continue to rise, this research highlights protective strategies rooted in nutrition science and developmental psychology, including shared family meals, responsive feeding using Satter's Division of Responsibility, and parental modeling of intuitive eating.

Through a comprehensive review of current literature, this report explores how food behaviors, attitudes, and language are passed down within families, often shaping a child's internal regulation and self-perception. Particular attention is given to the impacts of weight-focused talk, food moralization, and restrictive feeding on emotional and physical health outcomes.

Findings suggest that fostering autonomy at the table, eliminating shame-based messaging, and creating emotionally supportive food environments can reduce the risk of disordered eating and promote a lifelong, positive relationship with food. The research calls for more inclusive, longitudinal studies across diverse family structures, cultures, and socioeconomic contexts to better understand and apply these findings.

This work positions food not just as sustenance, but as a vehicle for connection, identity, and emotional well-being. The research offers a framework for prevention that begins in the home and has the potential to shift generational narratives around eating and body trust.

Keywords:

Intergenerational food transmission, parental modeling, disordered eating prevention, Division of Responsibility, responsive feeding, fat talk, body image, family meals

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Review of the Literature

RAISED

Intergenerational Food Transmission and the Impact of Food Messaging on Future Generations

Children begin to develop their eating habits and food tastes in utero and as early as six months (Costa & Oliveira, 2023). Multiple studies during gestation and pregnancy support the idea that maternal diet has a significant impact on early nutritional behavioral reactions and can also play into intergenerational food transmission and cultural food exposure through a variety of foods (Spahn et al., 2019). Either from the amniotic fluid during gestation or breastmilk in infancy, these early exposures to a variety of flavors inform the development of food preferences. Infants especially show more plasticity in food acceptance, allowing them to enjoy foods available within a cultural and socioeconomic environment. This research points to the first year of life being a particularly sensitive period where children are more receptive to new food and trying a variety of flavors (Scudine et al., 2024). This provides an important window of opportunity for families across cultures and generations to establish a positive food environment even in the earliest stages of pregnancy and early childhood. For context, this paper is divided into three chapters, each representing a stage in the cycle of family food strategies for prevention. Chapter One, “Raised,” explores the food messages and habits an individual received during childhood. Chapter Two, “Raising,” examines current feeding practices within a family. Chapter Three, “Rewire,” presents the research-based strategies designed to help families implement preventative measures in the nutritional environment.

To note, for the purpose of consistency, this report will utilize “parent” to encompass all caregiver and family situations, as essentially whoever has the main contact with a child has the parental influence.

According to the American Academy of Pediatrics, early childhood is defined as birth through age eight (AAP, 2025). The transition after infancy into the early childhood years can be confusing for parents, as food intake may slow down or children may be perceived as more picky eaters. The variety of a child’s diet is important, and without exposure to a wide range of foods, it could result in a narrow flavor palate in the future. In the research conducted by, Cooke (2007), there is dissonance between the national feeding recommendations and early childhood feeding practices. According to the WHO in 2001, a set of guidelines was published to inform parents on early feeding practices beginning around six months of age. It was recommended that salt and added sugars, including honey, be avoided. The report also provided information on portion size, meal frequency, food safety standards, and resources for parents to better understand approaches to encourage food acceptance and the development of self-regulation (*Complementary Feeding*, n.d.). Around the world, these standards are greatly impacted in low-income countries with limited access to medical resources and clean water in comparison to higher-income countries. Regardless of socioeconomics, worldwide, children are not receiving enough nutrient-rich foods, lacking a variety of foods, low in iron-rich foods, while over-consuming sugary foods and drinks. In a study in South Africa that analyzed 316 children from 4 to 18 months, there was a high consumption of carbonated drinks alongside a diet lacking in variety (Spyreli et al., 2021). In the United States, the 2016 Feeding Infants and Toddler survey showed that complimentary foods were more likely to be introduced even before 4 months in infants who were formula-fed only (27%) as compared to infants who did not consume formula at (5%), this is earlier than the

six months that the WHO guidelines recommend. The survey sample also revealed a lack of protein-rich diet, including meat, fish, or eggs, insufficient iron, little to no servings of fruits and vegetables, and heightened fruit juice and sugar-sweetened beverage intake into toddlerhood (Roess et al., 2018). In the research by Luque et al. (2024), conducted in a three-year follow-up study, the idea of early childhood nutrition and intergenerational food transmission was observed in mother-child dyads. Early childhood is a window of opportunity to influence food choices and behaviors into adulthood, primarily influenced by parents, the home environment, genetics, and food scarcity. The research found that parents who use food as a reward result in more snacking and the potential of the high-desire foods being associated with achievements. This leads to the child seeking out that food for emotional purposes and self-soothing, resulting in a lack of self-regulation and increased emotional overeating. The parental diet and feeding practices have a major influence and set the foundation from childhood into adulthood. Also to note, healthier diets were found in children whose mothers were considered older and may have increased health consciousness, which in turn impacted their family. But, with additional siblings, increased snacking occurred in the home, indicating less time to prepare meals with the addition of more children (Luque et al., 2024).

These findings give insight into the worldwide need for additional nutritional resources and education, alongside the understanding of food scarcity and the lack of availability of resources around the world.

Alongside the information on nutrition inadequacies worldwide, the research implies that how a parent or caregiver experienced family meals and weight talk in childhood will significantly impact the environment in which food is discussed with their children and subsequent generations. An individual's upbringing influences a personal relationship with food,

and parents have an opportunity to influence future generational food preferences and internal dialogue through self-modeling (Fisberg et al., 2024). In a study spanning over two years and analyzing the taste preferences of four to six- year olds, it was found that children naturally have a preference for sweet-tasting foods, but younger children were more accepting of a variety of foods, concluding that repeated and frequent exposure influences food preferences (Kostecka-Jarecka, Kowal, 2021). Showing that with variety and frequency, a child's food acceptance can be influenced by parental exposure. A study by Singh et al. (2023) followed mothers at nine months postpartum through eighteen months and describes the many varying factors that can determine an individual's weight, such as genetics and hormones, the home environment, food insecurity, and the overall approach to feeding by parental modeling. This specific study sample was from low-income and primarily Latinx or African American caregivers with food insecurity as a possible influence in the non-restrictive feeding practices towards their children, as any food was considered important when not readily available (Singh et al., 2023). The ramifications of how an individual was raised can have a generational impact on childhood eating. However, research is finding that the emotional impact of food and body messaging is equally important.

Critical Weight and “Fat Talk” in Families and the Generational Repercussions

Parents and caregivers in society face anxiety and confusion in the varying philosophies of communicating nutrition and health messaging to children. In the research surrounding parental influence on food and generational impact, it's important to explore the relationship between parents' own internalized messaging regarding their body and the family's impact from body comments towards children, and how this determines future body image and self-esteem. Defined as “Fat Talk,” this describes negative self-talk about food, weight, or perceived body

flaws that occurs commonly among young girls and women in peer groups (Corning & Gondoli, 2012). Coined by Nichter and Vuckovic during research and interviews in the book *Many Mirrors*, the phrase “I’m so fat” was repeated continually by a majority of white, middle-class adolescent females in the United States. The authors developed the phrase “fat talk” to describe the conversations in peer groups (Sault, 1994). In research by Thompson (1999), there are three main influences on an individual’s body image: parents, peer groups, and mass media. The family environment can be protective or reinforce societal constructs and the “thin ideal”. This unrealistic body standard is not attainable for the vast majority of individuals, and fat talk then perpetuates the feelings of shame and angst towards an individual’s own body and appearance (Mills & Fuller-Tyszkiewicz, 2017). This research has expanded from peer groups to observe this phenomenon inside a family environment. In a study by Rogers et al. (2019), the authors addressed undergraduate collegiate females’ recall of restrictive feeding suggestions from their families regarding their food intake during childhood and adolescence. This parental criticism regarding their food and body size resulted in higher BMI as an adult and lower body acceptance overall. This was observed in direct comments regarding the child’s body, comments on food choices, parental participation in diet culture, and disparaging remarks of dissatisfaction regarding the parents’ own bodies. With the research estimating around four percent of young females develop an eating disorder, there are yet countless more who suffer from poor body image, restriction of calories, bingeing behaviors, and compulsive exercise (Hart & Chow, 2019). In this same study, researchers observed various types of family conversations about the body, specifically distinguishing weight-control talk from general body talk. In weight control conversations, the parent is focused on manipulating their child’s weight through diet, commenting on the child’s weight, and discussing their own weight loss goals or idealizing

another person's weight loss in front of their child. This type of talk is associated with unhealthy behaviors in 2/3 of households with teenagers and typically results in poor body image, heightened dieting, binge and purging behaviors, the use of diet pills, and over-exercising. Body and fat talk between the mother and daughter groups in this study resulted in higher body dissatisfaction in adolescents with an average to underweight body type. Negative body image was already elevated in adolescents who were overweight and obese, and conversations between their mothers did not change their view of themselves. Positive talk resulted in negative body image with the adolescent in the overweight and obese category, with the implication that it would be better to avoid any body talk or body evaluations entirely (Hart & Chow, 2019).

Research by Wansink et al., (2017), the parental feedback and influence regarding fat talk equate with daughters being dissatisfied with their bodies into adulthood even when considered a typical weight or average size. Specifically, recall of parental comments regarding weight then resulted in the daughters reporting that if they lost more weight, they would be happier, which resulted in more intense caloric restriction as an adult. This research shows the influence of generational transmission of diet culture begins young and impacts an individual's body image and eating habits into adulthood.

In a study from Israel regarding the intergenerational recall of maternal feeding practices and negative self-talk to subsequent generations, researchers found that children who remembered negative remarks from their mothers then utilized restrictive feeding practices or increased pressure to eat with their children. The new generation attempted to change this behavior, but the study concludes that oftentimes the way an individual was raised and recalled their own mother's childhood feeding practices and negative talk resulted in the transmission of a similar pattern of speech and eating behavior in future generations (Lev-Ari et al., 2021). In a

literature review surrounding “fat talk,” it was found that the themes of body dissatisfaction and negative self-image could be shared in friend groups, reiterating the thin ideal in Western society (Mills & Fuller-Tyszkiewicz, 2017). Even outside the home environment, the research indicates that increased risk of body dissatisfaction, body checking, and body shame exists if negative self-talk is shared between friends. This further perpetuates negative self-perception and the promotion of diet culture. Although peer influence increases as a child ages, the early home environment remains critical in the developmental years and can contribute to positive or negative self-image and body dissatisfaction (Mills, Fuller-Tyszkiewicz, 2016).

Early childhood is a critical time for body image formation, with some studies suggesting girls as young as three feel negatively about their bodies (Dohnt & Tiggemann, 2005), and by six, they desire to be thinner (Lowes & Tiggemann, 2003). Most studies have primarily focused on maternal modeling, but recent research by Siegel et al (2021), addresses the importance of paternal influence by interviewing 30 fathers with daughters between the ages of 5 and 10. It focused on the conversations between the pairs regarding self-image. The study found three main themes, including roadblocks to effective conversation, awareness of negative outside influences, and how to frame such strategies for discussing their daughter’s body image directly. The roadblocks or “barriers” to conversations included the father’s lack of confidence and fear of phrasing things incorrectly. They worried about gender differences, and feeling inadequate, knowing there was less “body-related pressure” for males. Fathers also reported not feeling they were as close to their daughters, therefore diminishing their perceived influence. Negative outside influences included a father’s own dissatisfaction of their body and voicing this out loud in front of their daughters. One father was aware of his wife’s admiration of another female and

her exclaiming how thin and amazing a neighbor looked after losing the baby weight in front of their daughter.

The last major theme was developing strategies on how to discuss body image. Some fathers encouraged self-expression to combat peer pressure, while others complimented traits other than body size, such as intelligence and more character-based praise. While paternal openness to strategies is promising, the study found many fathers had a very strong “anti-fat” bias and an ingrained desire for thinness themselves and their daughters. This is a very limited study of 30 participants, but imperative to fill a void in research and better understand the paternal influence regarding body image (Siegel et al., 2021).

The World Health Organization defines adolescence as “individuals in the 10-19 year old age group” (*Adolescent Health*, n.d.). Similar to early childhood, this is a time of significant growth and development, both physically and socially, before moving into adulthood. Although previous research has shown the harmful effects of parental encouragement to diet, not much is known regarding the lasting and long-term effects of such pro-dieting and body-checking behaviors in a family system relating to the next generation. Research indicates 40% of parents reported regularly engaging in encouragement to diet with their children (Berge et al., 2013). In a longitudinal study that was inclusive of both socioeconomic and racially diverse youth, dieting and its impact on health were explored. Surveys were administered in school to adolescents from 1998-1999, and again surveys were completed online in 2015-2016 by the now young adults. Regarding the intergenerational transmission of disordered eating or diet culture, this study explored adolescents over 15 years old and found that those individuals who grew up in an environment where they were encouraged to diet had a heightened risk of also continuing unhealthy dieting and caloric restriction, alongside lower self-esteem and emotional health. This

resulted in participating and encouraging dieting with their own children (Berge et al., 2013). This study is important to note in both the longitudinal scale and scope of years, but also how family encouragement to diet can change an individual's "values, beliefs, and weight-related practices which they then engage in and pass on to their own families". This could be through their own communication or through parental modeling of such practices. It's also important for clinicians to understand the effects of asking a child to diet or modeling restrictive behavior in the home alongside the potential long-lasting consequences that can be passed down to the next generation (Berge et al., 2018). In research by Rogers et al (2019), it was found that recall of restrictive or critical parental messages during childhood resulted in elevated anti-fat bias and negative body image generationally. In understanding the intergenerational impact of words, it's also critical to study the parental influence in the prevention or development of disordered eating and the potential development of eating disorders through the lens of modeling and diet culture in society.

RAISING

Parental Modeling and Strategies for Eating Disorder Prevention

The role and significance of family in the formation of body image and nutritional habits throughout childhood has been explored in studies (Arroyo et. al., 2017). The influence of parental modeling in the prevention of eating disorders is vital with studies examining maternal influence as the primary influence for their children in relation to their dietary habits, self-regulation, and body image. It is known that families do not specifically cause eating disorders, but studies have shown maternal influence on body image and reinforce the continued importance of studying and finding ways of prevention where possible (Handford et. al., 2018).

Understanding the impact of a parent's influence in the prevention or development of eating disorders is critical (Lev-Ari et al., 2021). As clinicians, it's important to understand the eating disorder criteria to support prevention and receive a more accurate diagnosis (see Table Appendix A) (US Preventive Services Task Force et al., 2022). This is imperative for any practitioner and/or family members. According to the US Preventative Services Task Force (US Preventive Services Task Force et al., 2022), eating disorders including anorexia nervosa (AN), binge eating disorder (BED), bulimia nervosa (BN), other specified feeding and eating disorder (OSFED), and avoidant restrictive food intake disorder (AFRID), are a "group of psychiatric conditions defined as a disturbance in eating or eating-related behaviors that impair physical or psychosocial functioning." The (*Nine Truths About Eating Disorders - Academy for Eating Disorders*, n.d.) chart, utilized by the Academy for Eating Disorders (Schaumberg et al., 2017), serves as a framework to dispel any common misconceptions surrounding eating disorders (Appendix B). This information is important for families and clinicians to understand that eating disorders can affect individuals of all genders, ages, ethnicities, socioeconomic backgrounds, and body sizes.

In the first study to explore disordered eating and nutritional habits present in three generations of women, Arroyo et al., (2017) hoped to observe the potential intergenerational transmission of eating disorders between the triad. The research found more direct transmission between a mothers' disordered eating and their daughters' developing an unhealthy relationship with food. Interestingly, this connection was not found to be the case between the grandmothers and their granddaughters' eating habits. It was hypothesized that during the 1940s-1960s, women with more curves were regularly seen and viewed as beautiful. As the generations progressed into the 1980's and 1990's, the "unattainable thin ideal" body was directly impactful towards the

mothers' generation. The study results showed the impact of weight-talk in maternal comments towards their daughter in both direct criticism regarding body size and perceived body positive talk that objectified their body, both resulted in body dissatisfaction into adulthood. This study is important to examine the generational impact of a mother's self-critical comments regarding their own body or weight and direct comments towards their daughter, and the impact this could have later in life in the intergenerational transmission of a possible eating disorder or body dysmorphia for the next generation (Arroyo et al., 2017). In continued research by, Arroyo et al., (2020), found modeling healthy behaviors to have the strongest effect to promote body appreciation. This further reiterates the maternal impact in shaping a daughters' body image and overall health and well-being. Alongside how individuals received direct or indirect feedback regarding eating habits or comments on body and weight across generations, is the research on parental modeling and preventative measures in raising children to prevent eating disorders, and encouragement of a healthy mealtime environment.

In a literature review by Vollmer & Mobley (2013), it reiterates the idea that parents and caregivers have the most influence over children in determining child weight status, oftentimes more through maternal influence. Vollmer and Mobley's (2013) literature review reiterates that parents and caregivers have the greatest influence on children's weight status, often exerting this influence most strongly through maternal involvement. It was found that the parents' weight can have a significant impact on their child's future prediction of obesity, as parents are the first observed to model eating behaviors in the home. In studying maternal modeling of eating habits and the prevention of disordered eating, Allen et al., (2014), examined 221 mother-child pairs over a three-year period. The researchers found that children of mothers who had a current or past eating disorder, exhibited heightened emotional concerns surrounding food and body image,

as well as more disordered eating behaviors. The mothers with a history of eating disorders demonstrated greater concern about their child's weight and shape in comparison to mothers who didn't struggle with food. Important to note, it was the degree of maternal concern about the child's weight, rather than the mother's own eating disorder pathology, that significantly predicted the child's disordered eating behaviors. In research by Handford et al., (2018) it was found that mothers who were more outwardly critical of their own body or made comments about their own weight or body shape in turn had daughters with more restrictive eating habits, lower self-image regarding their own body, and increased disordered eating patterns when compared to daughters whose mothers did not partake in negative self-talk or dieting behaviors. Alongside body talk is the influence of actual feeding practices and the impact this can have generationally.

Parental Feeding Practices

Parental feeding practices can be put into two categories: "controlling," which would include pressuring a child to eat and also restricting access to foods, and "non-controlling," which implies parental modeling present alongside nutrition education (Haycraft et al., 2017). This research explored the differences between mothers with average weight and those who were overweight and the implications in childhood feeding from ages 2-6 years, alongside the consequences of intergenerational food transmission. Concerning parental modeling, research has found parents to be more controlling in areas they might struggle with personally, which could impact a child whose parent struggles with weight and is more controlling around food in their home environment. The mothers who were overweight offered more autonomy to their

children but provided less balance around a variety of foods and did not model as many healthy eating options (Haycraft et al., 2017).

An earlier study by Puhl & Schwartz (2003) focused on childhood memories of food rules including the most frequently used: “clean your plate at each meal,” “you must eat your vegetables at dinner,” “you cannot have dessert until you finish your meal,” “you have to at least try or taste new food,” and last “don’t take more than you can eat”. The study found that if food was utilized as a reward for perceived good behavior, and likewise, restriction as punishment for bad behavior, both resulted in disordered or problematic eating behaviors as an adult. More specifically, binge eating and compulsive dieting that related back to the participant’s memory of the parental use of food to control their behaviors during childhood.

The above studies underscore the importance that parents play in influencing children’s self-esteem, body image, and lifelong nutritional behaviors. Addressing parents’ attitudes and beliefs surrounding not only their own body, but body acceptance of their children could be essential in developing effective strategies for the prevention of eating disorders and breaking the cycle in future generations. Understanding this intergenerational food transmission reveals the early foundation and how our eating habits and attitudes surrounding food are shaped. How caregivers model eating and self-talk informs the next generation and provides insight into how to break cycles of restriction and disordered eating. To break this generational transmission, it’s important to gain evidence-based information to promote a healthy relationship with food and self.

REWIRE

Strategies to reinforce responsive feeding techniques and prevent disordered eating utilizing The Division of Responsibility

Parental feeding practices can be influenced by a multitude of factors that are important for building the child's feeding environment and emphasizing lifelong eating habits. This author has labeled this chapter "rewire" to discuss the strategies to help impact this early eating atmosphere. Taking out the genetic component, early childhood is the time when parents have the most profound influence on childhood feeding practices and develop nutritional habits. Registered dietitian nutritionist (RDN), Ellyn Satter, and her Division of Responsibility in Feeding (sDOR), offers a specific approach that gives assigned roles for both parents and children in the feeding process. In 1986, Satter defined the complex feeding relationship between child and caregivers that occurs relationally as they engage in the selection of specific foods and the consumption and regulation of eating by the child (Estes & Anchondo, 2011). According to Satter (*Division of Responsibility* | *Ellyn Satter Institute*, n.d.), The Division of Responsibility requires the parent to be responsible for the food offered alongside the environment and the emotional tone setting for the family. The caregiver will be involved in the choosing of foods, the time food is available and trusting the child to regulate the amount of food. This empowers both parents and children by clearly defined roles surrounding mealtimes.

The goal of this style of feeding is to develop positive attitudes towards food and eating, allow the child to have independence over their own feeding patterns and habits, and encourage the child to participate and be involved in mealtimes, (Satter, 2007). Methods such as sDOR have been important in the prevention of childhood obesity and positively impact future dietary patterns (Hale et al., 2023). This looks like the parent or caregiver modeling the "what, when,

and where of feeding,” and the child has ownership in deciding if and how much to eat, (*Raise a Healthy Child Who Is a Joy to Feed*, n.d.). This model establishes trust in a child’s innate ability to regulate their food intake by providing the appropriate support while providing parental structure and fostering a positive eating experience and attitudes towards food.

This feeding methodology, according to Satter (2007), can and should be utilized from first foods through young adulthood and beyond. It is important in infancy to utilize a feeding-on-demand schedule, which allows the baby to determine the time and amount of nutrition. The delineation and transition from infancy into the early childhood years can be difficult. There is a need for parents to understand that food intake naturally slows down. The sDOR method can be helpful to provide patience and understanding to the adherence of a variety of feeding methods. The Division of Responsibility requires parents to respect a child’s possible neophobia around food and allows a child to develop in a way that is healthy and genetically predetermined for their body. By maintaining structure around when and what food is offered, parents support the child’s ability to regulate their own intake and develop a healthy, trusting relationship with food as they mature (Satter, 2011). This can oftentimes be missed in infancy when a parent feeds their baby when not hungry and is theorized to contribute to a child misunderstanding their own hunger and satiety cues. This ultimately can be a factor that contributes to the development of overweight or obesity in the future (DiSantis, et al. 2019). Over time, the Satter methodology results in building trust, encouraging a positive mealtime environment, and understanding hunger and satiety cues into adulthood (Satter, 2011).

In the study by (Hale et al., 2023) nurses received specialized training to utilize Satter’s Division of Responsibility to teach and engage with families in the promotion of positive messaging to determine dietary patterns in the early life stages. Families received support and

discussions at prenatal and postnatal visits, and nurses were trained in the intervention group to utilize materials from the Ellyn Satter Institute that focused on learning the technique of responsive feeding. The interventions included handouts and communication through text for targeted messages and a bib with the message and simple catch phrase “Trust my Tummy” which parents found most helpful to reinforce the messaging and adherence to the Division of Responsibility. This was a limited study disrupted by the Covid19 pandemic, but having a message that was easy to utilize reinforced the sDOR method to parents not to pressure or push a child to eat past their satiety or comfort and to understand the manner in which a child is fed may be equally as important as “what we feed” by utilizing the responsive feeding technique in infancy and setting up a family for nutritional success into adulthood (Hale et al., 2023). This study helped guide parents to understand how sDOR and responsive feeding can encourage positive food messaging and put in place important dietary patterns and autonomy in early childhood. A cross-sectional study examining adherence and efficacy of the sDOR method identified four themes that promote healthy feeding practices. These included positive parental feeding (avoiding food restriction), supporting children’s autonomy in food choices, eating meals as a family, and creating a happy home food environment (Lohse & Mitchell, 2021).

The research for Division of Responsibility should be expanded for differently abled children and families with more specific nutritional or sensory needs which contributes to more parental anxiety and often results in picky eating in children. It’s important to continue to provide support for parents and the Satter method is oftentimes compared or called the precursor to the more well-known eating pathology named Intuitive Eating (Tribble & Resch, 2012), which can be another strategy towards prevention for individuals and families.

Intuitive Eating and Family Mealtimes

RDN's Evelyn Tribole and Elyse Resch (Tribole & Resch, 2012), wrote the book, *Intuitive Eating: A Revolutionary Anti-Diet Approach*, that explains ten foundational concepts for this method of eating. In a study by (Tylka, 2006), the philosophy could be paired down to three main ideas that include:

- Permission to eat when hungry and enjoy the food consumed.
- Eat because one is hungry and not due to emotional reasons.
- Tuning into personal hunger and satiety cues to determine when to eat and knowledge of when satiated or full.

The use of intuitive eating in childhood has been linked to the development of autonomy and a better understanding of fullness and satiety cues (Tylka et al., 2015). The authors Brooks & Severson (2022), in *How to Raise an Intuitive Eater*, outline three essential components for fostering a healthy home food environment. They include unconditional support for a child's body, keep a consistent food schedule, and understanding one's personal food history. The principals encourage parents to create a nurturing and consistent mealtime structure that promotes self-regulation and trust. Childhood eating behaviors are shaped by early food experiences, environmental factors, and parental modeling of intuitive eating, which can influence long-term nutritional patterns. When these behaviors are supported early, children are more likely to adhere to them into adulthood.

Childhood eating is dependent on the overall food experience, environment, and parental modeling of intuitive eating in childhood typically results in adults who adhere to this eating pattern. This increases the understanding of hunger and fullness, develops an overall joy in

eating, decreases the risk of disordered eating behaviors, and improves body image, (Dowling et al., 2024).

In the ongoing study titled Project EAT (Eating and Activity over Time), researchers from The University of Minnesota School of Public Health, (“Project EAT - Research Projects and Studies - School of Public Health - University of Minnesota,” n.d.), are conducting a large population-based longitudinal study initiated in 1998. The study was designed to research nutrition behaviors, body image, and weight outcomes from adolescence into adulthood. The study includes a diverse population in the original cohort which included around 4,746 middle and high school students across 31 public schools based in Minneapolis. Project EAT has been utilized to inform multiple health disparities inclusive of the parental impact and intergenerational transmission of childhood eating behaviors one being intuitive eating. In the research by (Rodgers et al., 2022) from Project EAT IV during 2015-2016, a sample of 750, including 470 being mothers and 280 fathers; it explored the idea of intuitive eating and the relationship between the home environment and childhood eating utilizing an intuitive eating scale. It found that mothers who had a higher adherence to intuitive eating themselves were more likely to serve assorted fruits and vegetables at mealtimes, and less likely to keep salty snacks and soda in the house. Parents who scored higher in intuitive eating reported having more time and energy to meal prep and cook at home. This research suggests that intuitive eating may be linked to a positive food environment, a variety of food, and more cooking at home by both parents. This study suggests the promotion of intuitive eating and a supportive home environment with parents could result in healthier overall habits in their children.

As research on intuitive eating continues to expand, Burnette et al., (2023), drew on data from Project EAT to examine how socioeconomic privilege may shape eating behaviors. The

study examined the idea that the ability to eat according to internal hunger and fullness cues is dependent, in part, on having consistent access to food. Findings revealed that individuals experiencing food insecurity had significantly lower intuitive eating scores into adulthood. This study provides insight that intuitive eating could be less accessible to people experiencing food scarcity, highlighting the need for public health interventions that account for the inequities in eating behavior and family resources. More research would be warranted on structural privilege, food security initiatives, and policy change when considering family eating generationally in diverse environments, and implementation of intuitive eating regarding socioeconomics and accessibility.

Prevention Strategies: Family Mealtimes

Alongside parental modeling and nutrition education, family meals have been researched and shown to be protective of future disordered eating and help to establish positive dietary habits in childhood. In the study by Mahmood et al (2021), 3-5 weekly family meals were shown to be the most protective and contribute to parental modeling opportunities, as they define a critical time of parental influence and overall family interaction. Family meals are defined as “a meal being shared with family members or when one, or both, of the parents are present”. In another study by Trofholz et al., (2018), which included family meals in a diverse immigrant cohort, “investigated intergenerational transmission” of how family meals changed after moving to the United States. It found that families living in the states for longer than ten years stated they ate different foods than they did growing up and were more influenced by American culture and processed food options. Families tried to place as much importance and emphasis on eating

together as they did before moving to the United States, but busy schedules and occasional food scarcity became barriers to family mealtimes. The study is important in the understanding of intergenerational food transmission in a more racially diverse population of immigrant families and what differences individuals see after moving to the United States compared to their upbringing.

Applied Learning

Handout Design and School Presentation

To accompany the research, this author created a family educational handout made for quick digestible evidence-based prevention tools (see Appendix C). The handout, titled “End the Mealtime Meltdowns and Battle of the Bites,” could be placed in pediatricians’ offices, schools, and community centers. In developing the handout, the guidelines set forth by the Academy of Nutrition and Dietetics (AND) and specifically the “Developing and Assessing Nutrition Education Handouts (DANEH) Checklist was utilized (see Appendix D) (*Developing and Assessing Nutrition Education Handouts - Academy of Nutrition and Dietetics Foundation*, n.d.). The constructs of the handout are categorized into five sections determined by AND with the content on “behavior focus; cultural sensitivity; written word; and organization/readability and overall content” (*Developing and Assessing Nutrition Education Handouts - Academy of Nutrition and Dietetics Foundation*, n.d.). The handout provides a tangible resource for individuals who may not have a phone or access to a QR code. The educational handout is a two-page product of the research that is a “quick bite” for families to take home. It includes the description of how food behaviors and beliefs are passed down and how a parent’s own upbringing shapes their child’s food environment. It then describes Satter’s Division of Responsibility and the message that it’s the parents’ responsibility to provide the structure and boundaries around feeding and the child decides how much they consume. This would potentially facilitate education for intuitive eating and help children develop trust and autonomy over their own hunger and fullness cues, and how a parent can respect a child’s appetite. It gives a brief description on how to speak to children regarding nutrition without moralizing food as good or bad. Lastly, the handout highlights how family meals serve as a powerful source of both

prevention and connection, while also offering strategies to make mealtimes enjoyable, family-centered, and focused on the fun of food.

Authors Personal Reflections

In addition to the handout, this author presented on the topic of, (Mealtime Meltdowns and Battle of the Bites), to a school on the Upper West Side of New York, with slides and information for parents (see Appendix H). A fellow female entrepreneur and owner of “Take Two Media” asked me to present at the “Parents as Partners” speaker series to present my research. There were 30-40 parents in person with numerous others on Zoom that attended the lecture. The presentation was an hour long and ended up being a very productive question and answer dialogue with many of the parents interested in their own food behaviors and biases and how they can provide the framework through the Division of Responsibility to have boundaries and a guide to feed their families. Most parents felt that dinnertime was chaotic and beyond their control, prompting questions about snacks, sensory sensitivities, balancing work with family meals, and how to structure a balanced plate. I spent the majority of time giving permission for families to set boundaries around food while making it fun without moralization or restriction. Several parents stayed after the lecture to ask questions, and as a result, I have been invited to speak at four additional organizations this fall. One parent stopped me on the street six months later and told me her dinner times have completely changed, and she looks forward to the time together. She mentioned that she uses DOR, and they developed a little mantra with her kids to make choices fun, while her husband is now on board and reached out to me to ask questions regarding his Italian grandmother and how to change habits of “cleaning his plate” and not pressuring his own children. Another attendee reached out about her children’s sensory

sensitivities, requested the slides for reference, and asked about the possibility of working with me as a clinician. One mother stayed to ask questions and was very curious how to grocery shop and include her child more in the process of cooking, so we had a conversation that left her feeling empowered and ready to try some different strategies.

In reflection of this lecture, I overprepared but developed around four talks that could branch off this event. I found a lot of questions surrounding sensory sensitivities, personal relationships with food, and how this affects their children, how to navigate picky eating and feelings of providing individualized meals for each child. Many questions around navigating scheduling and sitting down as a family 3-5 times per week, and how to be more creative and find fun around food. Many parents wrote to the organizer asking for a follow-up lecture and for the slides. I was told by the organizer parents appreciated the guidance on how to speak with their children about food without labeling certain nutrients as “good” or “bad.” Many families expressed uncertainty about how to discuss nutrition in a balanced and nonjudgemental way without moralization of food. Common phrases such as “sugar is bad” or “don’t eat that, it’s junk food”, were identified as examples that could be replaced with more constructive and educated conversations about food. I hope parents left the lecture with practical language to use at home and a better understanding on how to build a balanced plate without fear or restriction.

My goal is to use my degree to educate in school systems and help parents in these approaches, as even small shifts in how families speak about food can help foster healthier relationships and reduce the intergenerational transmission of disordered eating patterns and family history. These educational interventions represent a meaningful step towards cultivating a society that supports both physical and mental well-being, removing judgement around body size or food morality and fostering self-acceptance to prevent future disordered eating.

Further Research and Methodology

The implications and importance of childhood feeding practices and the resulting intergenerational food transmission to prevent eating disorders implicate future research that continues to explore how family-based strategies and prevention can work against diet culture and disordered eating preventative measures. For my PhD research, I plan to conduct a mixed-methods randomized control design trial. This would include the quantitative component of the randomized control trial and having an intervention group that works directly with me and other RDS's with the control group receiving basic nutrition knowledge. The qualitative component would be focus groups and interviews to gather more informed data across the population with deeper insight.

The goal of this study is to understand intergenerational food transmission and the process of understanding food and body messages received in childhood and in turn repeated as caregivers. Using The Division of Responsibility and responsive feeding techniques alongside the courses teaching in parental trust surrounding food, non-restrictive practices, awareness of inherited food “rules” and reducing moralizing food or discussing body-related talk and fostering language that supports intuitive eating and autonomy for the child (Lohse & Mitchell, 2021). Through the study, I hope to provide parents with an awareness to their own history and reduce the risk of future disordered eating while providing a framework for children to break family cycles and learn the joy of food and the connection with family during mealtimes.

Objectives

- 1) Analyze if a Division of Responsibility structured intervention reduces controlling feeding practices, disordered eating behaviors and body talk in the home compared with the control group.
 - a. Hypothesis:
 - i. Parents who participate in the Division of Responsibility based intervention group will report improved feeding practices, lower levels of controlling and moralizing food behaviors and higher modeling positive eating behaviors.
 - ii. Following the intervention, there will be a reduction in controlling feeding strategies from the intervention group based on the education from the 6-week course and dietitian session that will mitigate behavioral change rooted in the division of responsibility and intuitive eating patterns to change family patterns and effect change intergenerationally.
 - b. Instruments: I will utilize the Child Feeding Questionnaire (CFQ) (Appendix E) and the Comprehensive Feeding Practices Questionnaire (CFPQ) (Appendix F) (Palfreyman, 2013), Parental Modeling of Eating Behaviors Scale (PARM) (Appendix G) (Palfreyman, 2013), and the Eating Disorder Examination Questionnaire (EDE-Q), (Appendix I), (Palfreyman, 2013).
 - c. Statistics: descriptive statistics will be reported and to compare the control group to the intervention group I will use t-test and chi-square.

The intervention

The intervention group will receive 6 weekly online Zoom educational modules that can be self-paced, with the inclusion of one 60-minute live Zoom session with a registered dietitian. Each module will include a video, printable summary, and a brief script for parents to utilize with their children with the help of a meal plan.

The Module topics will include, as a sample of sequencing:

1. Introduction of Division of Responsibility (sDOR) and basic nutrition knowledge for building a plate. This will explain the role of parent and child responsibilities and provide language and tools for non-judgmental mealtimes and making food “just food”.
2. Meal Structures and Building a Plate around Routines: this will include how to include protein, fat fiber while understanding the role of the adult and child compared to Division of Responsibility. Understanding meal and snack timing and autonomy for the eater.
3. Battle of the Bites: picky eating and pressure: providing strategies such as a “no thank you bowl” to respond to neophobia and information on how to use the learned structures to help with food refusal without coercion, bribes or battles.
4. Modeling and Mealtime Connection: provide the research on the importance of family meals 3-5 times per week, avoiding any weight talk at the table and understanding the process of eating not the outcome of consumption as a gauge of success.
5. How to manage “treats”, restriction, and familiar rules based on societal weight stigma while providing alternatives to restriction and providing predictable treats and safe foods on the plate

6. Cultural Inclusion: Understanding grocery store strategies, conversations with family members and holding culture and relevance at mealtimes

The RDN Zoom intervention will be with an individual knowledgeable in Division of Responsibility or trained in Intuitive Eating. The goal of this session is the prevention of disordered eating and educating families in nutrition and building a balanced plate.

The control group will have six modules based on general childhood nutrition and building a “balanced plate”, meeting nutrient needs. The modules will be shorter with worksheets of summary information included but not mention of Division of Responsibility, responsive feeding, avoiding restrictive practices or understanding of intergenerational food messaging. As opposed to an individual Zoom with an RD they will receive an hour session to ask questions at the end of the modules.

This will require Institutional Review Board approval and informed consent by caregivers.

Recruitment:

Families will be recruited across New York City via pre-schools, pediatrician offices, community centers, and online parent forums. Due to the nature of living part time in the Midwest, this will also be utilized in Kansas. The study will be titled “Table Talk” How Parent Feeding Practices and Parental Food Messages Impact Behavioral Change Across Generations. Interested participants will complete an online form for consent and screening. Criteria for exclusion would be a parent or child receiving active eating disorder treatment, medical conditions such as PKU that require strict dietary monitoring and regimens, and caregivers who are not responsible for the regular daily feeding schedule. The participants

would be primary caregivers of minimum one child households in the age range of 1-10 years old with the goal sample size of 50 minimum participants in each cohort group. An example exit survey with the emphasis on food messages and non-restrictive practices would include:

1. How often did you notice a change in your language surrounding food since starting the course?
2. What phrase or messaging helped the most or have you utilized the most in the home?
3. Have you changed the way you discuss or do not discuss your own body, weight or food around your children?
4. What was the most challenging or areas that continue to be a struggle in using a neutral and non-restrictive positive approach around food in the home?
5. Would you recommend the course to other families and caregivers?

Reflection

The implications and importance of childhood feeding practices and the resulting intergenerational food transmission to prevent eating disorders implicate future research that continues to explore how family-based strategies and prevention can work against diet culture and provide disordered eating preventative measures. The goal of my future study and developing lecture series is to provide parents with an awareness to their own history and reduce the risk of future eating disorder behaviors while providing a framework for children to break family cycles and learn the joy of food and the connection of family during mealtimes. In reviewing the research, there needs to be a broader scope of inclusion into the family environment to encompass all living situations and genders, alongside caregivers and non-traditional family ecosystems. Intergenerational food transmission is cultural, emotional, psychosocial, and embedded in identity that ultimately determines food behaviors as an adult (Berge et al, 2018). There is a rise in body dissatisfaction and eating disorders, and specific need for this research to further explore the topic and provide preventative measures for parents, schools, clinicians, and physicians. The importance of this research is critical to better understand the cycle of food scarcity, the negative or positive impacts of parental modeling, and overall emotional attachment to food.

In the literary review, this author found that parental modeling in the absence of restriction and without moralization of food has a lasting impact on childhood eating behaviors. Much of this research was interpreted while providing nutrition education for the lecture at the Upper West Side school in New York City. Following the lectures “Mealtime Meltdowns, and Battle of the Bites,” this author has been invited by four New York City schools to speak at their parent organization meetings. This highlights the need for more guidance surrounding food

messages, The research supports that even well-meaning, parents often repeat the patterns taught by their caregivers (Fisberg et al., 2024). It is this author's opinion that what goes on the plate is equally as important as what is discussed around the plate. Pursuing my PhD to research this field and help to educate and encourage families is an important pursuit and one I feel privileged to continue.

Conclusion

Feeding practices shape how children see themselves, their bodies, and their place at the table. This literary review explores how food traditions, mealtime dynamics, and parental attitudes are passed down from one generation to the next, often unconsciously, yet with lasting impact. At the heart of this transmission is an opportunity to break harmful cycles and instead create a foundation for connection, trust, and nourishment.

Nutrition is not only about what we eat, but how and why. The research shows that early childhood feeding practices rooted in responsive frameworks, such as Satter's Division of Responsibility, can help children learn to tune into their hunger and fullness cues, make peace with all foods, and develop lifelong confidence and love of eating (Hale et al., 2023). When parents model intuitive eating and remove judgment around body size or food morality, they plant seeds of self-acceptance that can protect against the development of disordered eating (Tylka et al., 2015).

Shared meals, parental modeling, and positive food environments don't just reduce risk, they cultivate community (Mahmood et al., 2021). These simple, daily acts become powerful tools for prevention when practiced with intention. But to truly support the next generation, we must include a broader scope of the family environment. More inclusive longitudinal research that reflects the diversity of families across race, culture, gender, and socioeconomic background is essential to building meaningful, relevant interventions.

Food is a shared story we tell ourselves. The table is about comfort, culture, and community. By rewriting the story with compassion and respect for the body's natural intuition, families can reshape the legacy they pass on. It begins at the table, one meal, one moment, one memory at a time.

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Appendix A – Summary of DSM-5 Diagnostic Criteria for ED

Appendix A Table 1 Summary of DSM-5 Diagnostic Criteria for Eating Disorders

Diagnosis	Key Diagnostic Criteria
AN subtypes: Restricting type Binge-eating/purging type	• Restriction of energy intake relative to requirements, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health. • Intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight. • Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight.
BN	• Recurrent episodes of binge eating that are characterized by both of the following: ◦ Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than what most individuals would eat in a similar period of time under similar circumstances ◦ A sense of lack of control overeating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating) • Recurrent inappropriate compensatory behaviors to prevent weight gain (e.g., self-induced vomiting; misuse of laxative, diuretics, or other medications; fasting; or excessive exercise) • Self-evaluation is unduly influenced by body shape and weight
BED	• Recurrent episodes of binge eating (as defined above) • Binge eating is associated with: ◦ Eating more rapidly than usual ◦ Eating until feeling uncomfortably full

	◦ Eating large amounts of food when not feeling physically hungry ◦ Eating alone because of feeling embarrassed by how much one is eating ◦ Feeling disgusted with oneself, depressed, or very guilty afterward • Marked distress about the binge-eating episodes
Other specified feeding and eating disorder	• An eating or feeding disturbance that causes clinically significant distress or impairment but does not meet the full criteria for any of the disorders in this diagnostic class. This might include (but is not limited to): ◦ Atypical AN ◦ BN or BED of low frequency or limited duration ◦ Purging disorder ◦ Night eating syndrome
Avoidant/restrictive food intake disorder	• An eating or feeding disturbance (e.g., apparent lack of interest in eating or food, avoidance based on sensory characteristics of food, concern about aversive consequences of eating) associated with one or more of the following: ◦ Significant weight loss or failure to achieve expected weight gain or faltering growth in children ◦ Significant nutritional deficiency ◦ Dependent on enteral feeding or oral nutritional supplements ◦ Marked interference with psychosocial functioning

Abbreviations: AN=anorexia nervosa; BED=binge-eating disorder; BN=bulimia nervosa; DSM-5=*Diagnostic and Statistical Manual of Mental Disorders* (5th edition).

Appendix B – Nine Truths about Eating Disorders

Nine Truths about Eating Disorders

TRUTHS

- 1 Many people with eating disorders look healthy, yet may be extremely ill.
- 2 Families are not to blame, and can be the patients' and providers' best allies in treatment.
- 3 An eating disorder diagnosis is a health crisis that disrupts personal and family functioning.
- 4 Eating disorders are not choices, but serious biologically influenced illnesses.
- 5 Eating disorders affect people of all genders, ages, races, ethnicities, body shapes and weights, sexual orientations, and socioeconomic statuses.
- 6 Eating disorders carry an increased risk for both suicide and medical complications.
- 7 Genes and environment play important roles in the development of eating disorders.
- 8 Genes alone do not predict who will develop eating disorders.
- 9 Full recovery from an eating disorder is possible. Early detection and intervention are important.



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Produced in collaboration with Dr. Cynthia Bulik, PhD, FAED, who serves as distinguished Professor of Eating Disorders in the School of Medicine at the University of North Carolina at Chapel Hill and Professor of Medical Epidemiology and Biostatistics at the Karolinska Institutet in Stockholm, Sweden. "Nine Truths" is based on Dr. Bulik's 2014 "9 Eating Disorders Myths Busted" talk at the National Institute of Mental Health Alliance for Research Progress meeting.

Leading associations in the field of eating disorders also contributed their valuable input.

The Academy for Eating Disorders® along with other major eating disorder organizations (Families Empowered and Supporting Treatment of Eating Disorders, National Association of Anorexia Nervosa and Associated Disorders, National Eating Disorders Association, The International Association of Eating Disorders Professionals Foundation, Residential Eating Disorders Consortium, Eating Disorders Coalition for Research, Policy & Action, Multi-Service Eating Disorders Association, Binge Eating Disorder Association, Eating Disorder Parent Support Group, International Eating Disorder Action, Project HEAL, and Trans Folx Fighting Eating Disorders, and other organizations) will be disseminating this document.

Appendix C – Mealtime Meltdowns Handout



MEALTIME MELTDOWNS?

STOP THE "CLEAN PLATE CLUB"

DIVISION OF RESPONSIBILITY

Parenting is tough...meals shouldn't be the stress. Read for tools and strategies to end the struggle:

Mealtime meltdowns are a common struggle in households with young children but a science-backed and proven strategy helps reclaim calm at the dinner table and peace of mind for parents. Known as the Division of Responsibility and developed by renowned dietitian Ellyn Satter, this is an evidence-based approach that gives both parents and children defined roles and boundaries in feeding and during mealtime. It's transforming the way families eat together and bringing connection back to the dinner table.

Parents feel stuck in a cycle of bribing and battling over bites. The Division of Responsibility outlines that parents are responsible for the what, when and where of feeding, while the children are responsible for how much and IF they eat. Parents who embrace this structure can reduce the power struggles and food refusal, while also supporting connection at the table and developing confidence around eating and self-regulation.

The Division of Responsibility creates a foundation of trust and routine that helps parents develop boundaries and roles while helping children feel safe and in control without turning every mealtime into a standoff.



TIPS FOR GETTING STARTED

- Serve food and snacks at regular times without grazing in between, this typically looks like three meals at the same time of day and 2-3 snacks in between.
- Always offer one to two "safe" or familiar foods alongside a new "food adventure" item. It also may be helpful to offer the new food during breakfast or snack when a child is not at their most hungry, try to avoid dinner if new foods are a struggle.
- Avoid any pressure to get your child to eat, avoid phrases such as "just one more bite", and "clean your plate",
- Respect your child's appetite and trust when they are full, this is how they develop autonomy of eating even if it seems unpredictable and irregular.

PARENTAL MODELING

According to the research by (Mahmood et al.) actions speak louder than words when it comes to shaping a child's eating habits and behaviors. Parental modeling is the way an adult approaches food and mealtime alongside sharing family meals is studied to be a powerful influence in raising confident and adventurous eaters.

Family meals are an opportunity for parents to have genuine time to connect with their children resulting in kids learning to interact with food in a positive and relaxed environment. Parents modeling a variety of foods and showing a responsive attitude to hunger cues leads children to naturally observe and do the same. This also helps develop an understanding of satiety and fullness.

The benefits have been shown to include a higher intake of fruits and vegetables, a reduction of disordered eating and protective measures against binge eating as an adult resulting in stronger emotional connections with family.

This can look like 3-5 family meals per week that result in a lifelong impact into adulthood. PS 199 provides resources through the speaker series to address eating habits, developing healthy family connections and lifelong positive connections with food and body image.



BATTLE OF THE BITES? MAKE FOOD FUN!



**Develop healthy
family connections
that result in lifelong
positive feelings
around food and
body image.**

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Appendix D – Developing & Assessing Nutrition Education

Handouts (DANEH) Checklist



Developing & Assessing Nutrition Education Handouts (DANEH) Checklist

The Developing & Assessing Nutrition Education Handouts (DANEH) checklist was created by the Academy of Nutrition and Dietetics Foundation as part of the Future of Food (FOF) project. The purpose of the DANEH checklist is twofold: 1) to screen existing nutrition education handouts in order to establish the inclusion/exclusion of important quality components, and; 2) as a tool to use in developing quality nutrition education handouts. The checklist incorporates 21 constructs identified as quality indicators to be included in nutrition education handouts, based on a literature review. The constructs are categorized into five main topic areas: content; behavior focus; cultural sensitivity; written word; and organization/readability.

Results of DANEH validation testing proved that DANEH is a valid tool and has good interrater reliability for handouts for a general low-income audience when RDNs are the reviewers. It is recommended that a score of 18 out of 21 possible points (86%) by two reviewers is the cutpoint for handouts to be considered high quality handouts. For handouts with a score of 17, it is recommended that a 3rd reviewer rates the handout using DANEH. It is recommended that handouts with a score of 16 or less are not considered high quality.

The DANEH checklist is used to vet nutrition education handouts for inclusion in the FOF Healthy Food Bank Resource Hub website for a target audience of people facing food insecurity. All handouts posted on www.healthyfoodbankhub.org have been approved using the DANEH checklist.

Behavior Focus:

One or two main themes

Yes ☐

Check "yes" if the handout contains no more than two main themes. For example, a handout with ten strategies to shop on a budget has one main theme, shopping on a budget.

No ☐

Check "no" if the handout contains three or more main themes. For example, a handout that covers tips for healthy snacks, physical activity, and bedtime routines contains three main themes.

Comments: _____

Specific examples of desired behavior

Yes ☐

Check "yes" if the handout clearly instructs a person what to do, and how to do it through specific examples. For example, "Play active games with your kids, like hide-and-go-seek, double Dutch jump rope, or tag."

No ☐

Check "no" if the handout provides vague recommendations without specific examples of desired behavior. For example, "Be more physically active."

Comments: _____

Total Behavior Focus Score _____
(2 possible 'yes' responses)

Cultural Sensitivity:

Culturally appropriate content for target audience

Yes ☐

Check "yes" if the handout is intended for a general audience and includes many cultural food and behavior practices. Check "yes" if the target audience is a specific culture, and the handout includes appropriate food and behavior examples for that culture.

No ☐

Check "no" if the handout is intended for a general audience and does not include culturally diverse food and behavior practices. Check "no" if the target audience is of a specific culture and the handout does not represent appropriate food and behaviors for that culture.

Comments: _____

Culturally appropriate images for target audience

Yes ☐

Check "yes" if the handout is intended for a general audience and includes images that respectfully represent many cultures, including the people, places and foods pictured. Check "yes" if the target audience is a specific culture, and the handout includes images of people, places, and foods from that culture.

No ☐

Check "no" if the handout is intended for a general audience and does not include images that respectfully represent many cultures. Check "no" if the target audience is of a specific culture and the handout does not include appropriate images representing that culture.

Comments: _____

Total Cultural Sensitivity Score _____
(2 possible 'yes' responses)

Written Word:

Simple, common words

Yes ☐

Check "yes" if simple, common words are used frequently, with limited use of abbreviations, acronyms, and technical jargon.

No ☐

Check "no" if complex and unfamiliar words are used frequently or if abbreviations, acronyms, and technical jargon appear excessively.

Comments: _____

Positive messages

Yes ☐

Check "yes" if messages focus mostly on the positive behavior desired, i.e. "do this."

No ☐

Check "no" if the messages focus mostly on the negative behavior to change, i.e. "don't do this."

Comments: _____

Active voice, second person (you/your), conversational tone

Yes ☐

Check "yes" if the handout refers to the second person (i.e. "you/your"), stays in the present tense, and uses a conversational/friendly tone. For example, "Offer healthy and tasty after school snacks for your kids, like grapes or cheese sticks."

No ☐

Check "no" if handout refers to the third person, uses the past tense, and/or is too formal. For example, "Parents need to provide nutrient-dense foods in-between meals for their children and adolescents."

Comments: _____

Repetition of key words and/or new concepts

Yes ☐

Check "yes" if key words and/or new concepts are repeated effectively for reinforcement, or if repeating key words is not necessary (i.e. for a very short handout).

No ☐

Check "no" if repeating key words and/or new concepts would be effective for reinforcement, but are missing.

Comments: _____

Total Written Word Score _____
(4 possible 'yes' responses)

Organization and Readability

Logical order, most important message first

Yes ☐

Check "yes" if the information is displayed in a logical order, with the most important messages listed first.

No ☐

Check "no" if information is disorganized, and/or the most important messages do not appear until later in the handout.

Comments: _____

Short paragraphs

Yes ☐

Check "yes" if each paragraph is short (60 words or less) and only contains one topic. Check "yes" if the handout does not contain paragraphs.

No ☐

Check "no" if each paragraph is long (over 60 words) and/or contains two or more topics.

Comments: _____

Space around headings and text

Yes ☐

Check "yes" if there is a ½ inch margin around the perimeter of the handout and has at least a double space before headings.

No ☐

Check "no" if the margins are less than ½ inch around the perimeter of the handout and/or there is little space before headings.

Comments: _____

Blocks of text are left-justified

Yes ☐

Check "yes" if blocks of text are left-justified.

No ☐

Check "no" if blocks of text are centered or right-justified.

Comments: _____

Bullets, numbers, and tables

Yes ☐

Check "yes" if bullets, numbers, and/or tables appear often.

No ☐

Check "no" if the handout contains mostly text, and few bullets, numbers, or tables.

Comments: _____

Several informative headings/subheadings

Yes ☐

Check "yes" if several headings/subheadings are present to help identify what the text will tell you next.

No ☐

Check "no" if few headings/subheadings are present, and/or if the headings/subheadings do not inform you what the text will tell you next.

Comments: _____

Easy to read font

Yes ☐

Check "yes" if font is at least 12 point, and is serif (with feet, like Times Roman) or sans serif (without feet, like arial).

No ☐

Check "no" if font is smaller than 12 point, and is fancy or curly.

Comments: _____

Important text is bolded or underlined if necessary

Yes ☐

Check "yes" if emphasizing text, bolding and underlining are used. Check "yes" if no emphasis of text is needed, (i.e. for a very short handout).

No ☐

Check "no" if emphasizing text uses all caps or italics.

Comments: _____

Purposeful and relevant images

Yes ☐

Check "yes" if images show instruction or the desired behavior, are placed near relevant text, and include captions when necessary to describe the behavior or emphasize a point.

No ☐

Check "no" if images do not show instruction or the desired behavior, are not placed near relevant text, or do not include captions as necessary.

Comments: _____

5th grade reading level

Yes ☐

Check "yes" if handout is written at or below a 5th grade reading level.

No ☐

Check "no" if handout is written at a 6th grade reading level or higher.

Three options for determining reading level:

Option #1: Word Readability Program

1. Set up readability program:

- a. Click Review
- b. Click Spelling & Grammar
- c. Click Options
- d. Select Show readability statistics

2. Select, copy, and paste text into Word. Fix any sentences that were separated when cutting and pasting from pdf to Word.

3. Under Review, click Spelling and Grammar Check.

4. Look for the FleschKincaid Grade Level of the bottom of the Spelling and Grammar box.

Option #2: Readability Score Website

1. Visit <https://readabilityscore.com/>.

2. Select, copy, and paste text into the online readability score tool. (No need to fix any separated sentences.)

3. Look for the FleschKincaid Grade Level at the right of the screen.

Developing and Assessing Nutrition Education Handouts (DANEH)

Option #3: Readability Formula By Hand

1. Select three samples of 100 word passages randomly.
2. Count the number of sentences in all three 100 word passages, estimating the fraction of the last sentence to the nearest 1/10th.
3. Count the number of syllables in all three 100 word passages. Make a table as follows:
Number of Sentences Number of Syllables
First 100 words _____
Second 100 words _____
Third 100 words _____
Total _____
Average _____
4. View <http://www.readabilityformulas.com/graphics/frygraph2lg.jpg> and enter the graph with Average Sentence Length and Number of Syllables. Plot where the two lines intersect. Area where dot is plotted signifies the approximate reading grade level of the content.
5. If you find a great deal of variability, you can put more sample counts into the average.

*(Source: Readability formulas.
<http://www.readabilityformulas.com/frygraphreadabilityformula>)

Comments: _____

Total Organization and Readability Score _____
(10 possible 'yes' responses)

Total Score _____

Overall Comments:

Approval

In my professional opinion, I consider this handout a quality nutrition education handout.

☐ Yes

☐ No

By: _____ Date: ____/____/____



Appendix E – The Child Feeding Questionnaire (CFQ)

The Child Feeding Questionnaire (CFQ)

**An Instrument for Assessing
Parental Control in Child Feeding**

**Leann L. Birch, Ph.D.
Susan L. Johnson, Ph.D.
Karen Grimm-Thomas
Jennifer O. Fisher, Ph.D.**

The Pennsylvania State University

INSTRUCTIONS:

Using the scale below, please circle one number for each question which best corresponds to your answer. **Please answer about your child who is in our study.**

	never	seldom	half of time	most of time	always
1. When your child is at home, how often are you responsible for feeding her?	1	2	3	4	5
2. How often are you responsible for deciding what your child's portion sizes are?	1	2	3	4	5
3. How often are you responsible for deciding if your child has eaten the right kind of foods?	1	2	3	4	5

Using the scale below, please indicate how you would classify your own weight at each of these 4 time periods listed below (Please circle ONLY ONE number for each time period)

	markedly underweight	underweight	average	overweight	markedly overweight
4. Your Childhood (5 to 10 years old)	1	2	3	4	5
5. Your Adolescence	1	2	3	4	5
6. Your 20's	1	2	3	4	5
7. Currently	1	2	3	4	5

Using the scale below, please indicate how you would classify your child's weight at each of these 4 time periods listed below.
(Please circle ONLY ONE number for each time period)

	markedly underweight	underweight	average	overweight	markedly overweight
8. Your child during the first year of life	1	2	3	4	5
9. Your child as a toddler	1	2	3	4	5
10. Your child as a pre-schooler	1	2	3	4	5
11. Your child kindergarten through 2 nd grade	1	2	3	4	5
12. Your child from 3 rd through 5 th grade	1	2	3	4	5
13. Your child from 6 th through 8 th grade	1	2	3	4	5

Using the scale below, please circle one number for each question which best corresponds to your answer. Please answer about your child who is in our study.

	unconcerned	slightly unconcerned	neutral	slightly concerned	concerned
14. How concerned are you about your child <i>eating too much</i> when you are not around her?	1	2	3	4	5
15. How concerned are you about your child having to diet to maintain a desirable weight?	1	2	3	4	5
16. How concerned are you about your child becoming over weight?	1	2	3	4	5

INSTRUCTIONS:

Using the scale below, please circle one number for each question which best corresponds to your answer. Please answer about your child who is in our study.

	disagree	slightly disagree	neutral	slightly agree	agree
17. I have to be sure that my child does not eat too many <i>sweets (candy, ice cream, cake or pastries)</i> .	1	2	3	4	5
18. I have to be sure that my child does not eat too many <i>high fat foods</i> .	1	2	3	4	5
19. I have to be sure that my child does not eat too much of her <i>favorite foods</i> .	1	2	3	4	5
20. I intentionally keep some foods out of my child's reach.	1	2	3	4	5
21. I offer <i>sweets (candy, ice cream, cake, pastries)</i> to my child as a reward for good behavior.	1	2	3	4	5
22. I offer my child her <i>favorite foods</i> in exchange for good behavior.	1	2	3	4	5
23. If I did not guide or regulate my child's eating, she would eat too many <i>junk foods</i> .	1	2	3	4	5
24. If I did not guide or regulate my child's eating, she would eat too much of her <i>favorite foods</i> .	1	2	3	4	5
25. My child should always eat all of the food on her plate.	1	2	3	4	5
26. I have to be especially careful to make sure my child eats enough.	1	2	3	4	5
27. If my child says "I'm not hungry," I try to get her to eat anyway.	1	2	3	4	5
28. If I did not guide or regulate my child's eating, she would eat much less than she should.	1	2	3	4	5

INSTRUCTIONS:

Using the scale below, please circle one number for each question which best corresponds to your answer. **Please answer about your child who is in our study.**

	never	rarely	sometimes	mostly	always
29. How much do you keep track of the sweets (<i>candy, ice cream cake, pies, pastries</i>) that your child eats?	1	2	3	4	5
30. How much do you keep track of the snack food (<i>potato chips, Doritos, cheese puffs</i>) that your child eats?	1	2	3	4	5
31. How much do you keep track of the high fat foods that your child eats?	1	2	3	4	5

Appendix F – Comprehensive Feeding Practices Questionnaire (CFPQ)

Appendix M

Comprehensive Feeding Practices Questionnaire (CFPQ) and coding

Instructions: Please answer the following questions as honestly as possible with **your child** in mind.

	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
1. I model healthy eating for my child by eating healthy foods myself.	1	2	3	4	5
2. I try to eat healthy foods in front of my child, even if they are not my favourite.	1	2	3	4	5
3. I try to show enthusiasm about eating healthy foods.	1	2	3	4	5
4. I show my child how much I enjoy eating healthy foods.	1	2	3	4	5

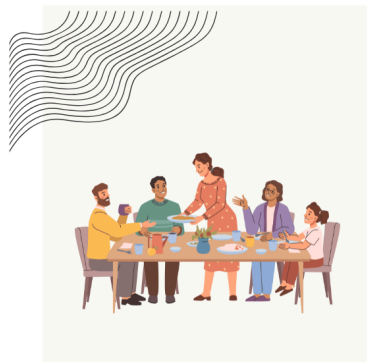
Appendix G – Parental Modelling of Eating Behaviors Scale (PARM)

Appendix L
Parental Modelling of Eating Behaviours Scale (PARM) and coding

Instructions: Please respond to the following statements about food-based interactions with your child to indicate how much you agree or disagree with them.

	Strongly Disagree			Neutral			Strongly Agree
1. I make comments on my healthy eating behaviours / food choices when I am with my child (e.g. "I'll be healthy and have vegetables").	1	2	3	4	5	6	7
2. If I intentionally emphasise certain eating behaviours / food preferences my child is more likely to copy them.	1	2	3	4	5	6	7
3. When I show my child I enjoy fruits or vegetables, he/she tries them.	1	2	3	4	5	6	7
4. The eating behaviours of other family members influence what my child eats.	1	2	3	4	5	6	7
5. My child has picked up eating behaviours from me which I have not intentionally encouraged him/her to adopt (e.g. having tomato sauce with most meals, or eating vegetables first).	1	2	3	4	5	6	7
6. My child is more likely to try or eat new foods if I eat the new foods with him/her.	1	2	3	4	5	6	7
7. I try to influence my child's food preferences by verbally stating my own (e.g. "I love carrots, they're one of my favourites").	1	2	3	4	5	6	7
8. My child is more likely to try new foods he/she has seen me eating.	1	2	3	4	5	6	7
9. I verbally encourage my child to copy my eating behaviour.	1	2	3	4	5	6	7
10. My child has picked up eating behaviours from me which I had tried to hide from him/her (e.g. avoiding certain foods).	1	2	3	4	5	6	7
11. My child has adopted eating behaviours from me which I did not previously realise I did (e.g. eating certain foods first).	1	2	3	4	5	6	7
12. I make comments when I am with my child about unhealthy foods (e.g. "I shouldn't be eating this").	1	2	3	4	5	6	7
13. My child asks to try foods from my plate which he/she sees me eating.	1	2	3	4	5	6	7
14. I try to encourage my child to eat new foods by stating my food preferences (e.g. "I love peas, why don't you try them?").	1	2	3	4	5	6	7
15. I explain my food choices verbally to my child (e.g. "I think I'm going to have some fruit for my pudding as I like it and it's good for me").	1	2	3	4	5	6	7

Appendix H – End the Mealtimes Meltdowns and the Battle over Bites Lecture



Who Sits at your Table?

What were your food messages as a child?

HOW WE WERE RAISED

Direct and indirect food messages impact how we raise our children





Body Dissatisfaction

“Children develop beliefs regarding their body size which leads to an awareness of dieting to achieve a smaller shape, and specifically a “desire for thinness emerges in girls at around age 6.”

Lowes and Tiggemann, 2003



REWIRE Parental Modeling



- No negative self-talk
- No “good” or “bad” foods
- Model eating new foods
- Family Meals
- Nutrition Ed vs Weight Talk



**When it comes to food,
what is your role vs your child's role?**



ROLES

Division of Responsibility (Ellyn Satter)

Parents Role	Child's Role
 • WHAT: food is offered • WHEN: meals and snacks are served • WHERE: eating occurs	• IF: they choose to eat • HOW MUCH: they eat

The Root Origins of the Struggle

- Emotional Atmosphere
- Craving Control
- Pressure to Eat = Resistance
- Unpredictability... Children need a schedule
- Sensory sensitivities or dysregulation

RAISING OUR CHILDREN

Connection and Communication

Ask open ended questions:

“What do you notice...?”

“What can you tell me about this....?”

RAISING OUR CHILDREN

“This all sounds great... but my child really only wants chicken nuggets.”

Meal Tips

- Have “FUN”---create a character
- No Thank You Bowl
- Dip Night
- Family Shopping and meal prep
- Living room picnic
- Look at cook books together
- Prepare food together



Meal Tips

- 15-20 tries of a new food
- Put it all on the plate--yes the treats
- The Great Food Adventure--make it fun
- It's JUST food
- Give Choices
- Doesn't have to look pretty
- Try Nights

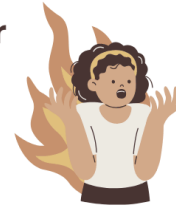
Meal Tips

- Muffin tin snacks
- “the kitchen is closed”
- It’s okay to give a timeline
- Hunger and Fullness cues
- Safe foods--protein/fat/fiber
- Timing and Exposure is the victory



Picky Eating

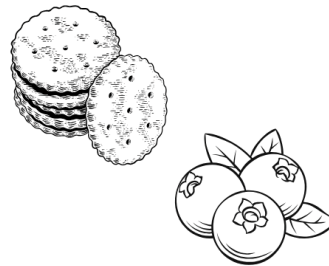
- Put it on the plate and walk away doesn’t work!
- Touch, Taste, Smell, Sight even Hear
- Yes, it’s EXHAUSTING
- When to ask for help...ARFID



“Sensory Diet”

Pre and Post Meal

- Ritz vs. Blueberry
- Pre-meal Sensory Diet
- How to regulate schedule
- Transitions before meals
- We are our children’s “emotional tutors”



Cultural Considerations

- All food is good food and healthy for our body
- No food is negative
- Families eat different things



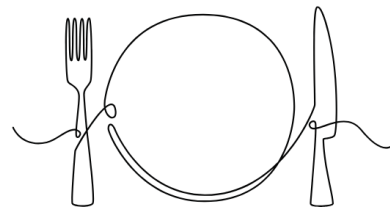
Dealing with Allergies or Autoimmune

- Having snacks at the ready
- Explain and Communicate



How to Create a Healthy Eating Environment

- 2-3 meals per week as a family
- no screens
- talk about your day not the food
- no commenting on what to eat
- no “treat days”--put sweets on the plate
- no commenting on things we can’t change in 30 seconds--safe space for your child...no body talk



Support your child for who they are and growing to be



5-9 (K-3)

- Building Self-confidence
- Food exposure is important
- VALIDATE
- Zero food shame
- Positive mealtime experiences
- Balance of protein, fat, fiber, carbs

9-12 (3-5 GRADES)

- Be prepared for increased eating
- Caterpillar effect
- "Unconditional love and support for your child's body"

NUTRITION TALK

Daily values by age group



PROTEIN

1-3yrs: 13g
protein daily
4-8: 19g daily
9-13: 34g



FAT

1-3: 30-40% total
calories around
30-40g
4-18: 25-35%
around 40-70g
depending on
age and activity
level



FIBER

1-3yrs: 19g
4-8: 25g
9-13 Girls: 26g
9-13 Boys: 31g



CARBS

1-3: 130g
4-8: 130g
9-13: 130g
14-18: 130g

*~45-60% daily
calories at all
ages*

FOOD SOURCES FOR SNACKS



PROTEIN

chicken
salmon
eggs
cheese
Greek yogurt
milk
turkey
beef



FAT

nut butters
avacado
trail mix
dairy
eggs
fish
olive oil
chai/flaxseeds



FIBER

fruits with skin
raspberries
bananas
carrots
sweet potato
broccoli
lentils
chai/flaxseeds



CARBS

whole wheat
bread or pita
oatmeal
pasta
bananas
apples
dried fruits
brown rice

Snack Ideas



PROTEIN

eggs, cheese stick,
energy bar, bagel
with cream cheese,
nut butter, energy
bites, smoothies,
meat roll ups



FAT

avocado, peanut
butter, dairy, yogurt



FIBER

greens, fruits with
skin, raspberries,
sweet potatoes,
whole grains, chia
seeds and flaxseeds

What are the Benefits from using the Division of Responsibility and Creating a Healthy Eating Environment at Home?

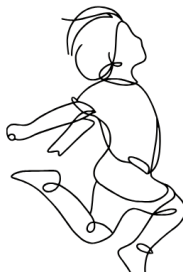


- Build Autonomy and Trust
- Reduces Stress for Parents
- Less Disordered Eating
- More Adventurous Eaters
- Positive Relationship with food

WHAT DEFINES SUCCESS?

Provide not
Persuade

Food Autonomy



Stucture and Trust

Family Meals =
Foundation

SOURCES

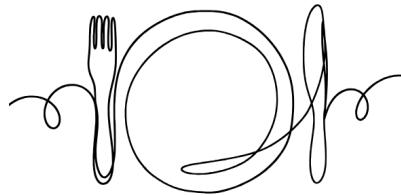
INSTAGRAM

Dr. Taylor Arnold
@growing.intuitive.
eaters
@feedingtinybellies
@kids eat in color
@DrJessicaKnurick
(nutrition scientist)



BOOKS

- Raising Intuitive Eaters (Brooks and Sevenson)
- End the Mealtime Meltdowns
- Gentle Nutrition
- Celebrate Your Body
- Fat Talk



Let's Chat!

What questions do you have?

Appendix I – Eating Disorder Examination Questionnaire (EDE-Q)

Appendix O Eating Disorder Examination Questionnaire (EDE-Q) and coding

Instructions

The following questions are concerned with the PAST FOUR WEEKS ONLY (28 days). Please read each question carefully and circle the appropriate number on the right. Please answer all the questions.

ON HOW MANY DAYS OUT OF THE PAST 28 DAYS	No days	1-5 days	6-12 days	13-15 days	16-22 days	23-27 days	Every day
1. Have you been deliberately <u>trying</u> to limit the amount of food you eat to influence your shape or weight?	0	1	2	3	4	5	6
2. Have you gone for long periods of time (8 hours or more) without eating anything in order to influence your shape or weight?	0	1	2	3	4	5	6
3. Have you <u>tried</u> to avoid eating any foods which you like in order to influence your shape or weight?	0	1	2	3	4	5	6
4. Have you <u>tried</u> to follow definite rules regarding your eating in order to influence your shape or weight; for example, a calorie limit, a set amount of food, or rules about what or when you should eat?	0	1	2	3	4	5	6
5. Have you wanted your stomach to be empty?	0	1	2	3	4	5	6
6. Has thinking about food or its calorie content made it much more difficult to concentrate on things you are interested in; for example, read, watch TV, or follow a conversation?	0	1	2	3	4	5	6
7. Have you been afraid of losing control over eating?	0	1	2	3	4	5	6
9. Have you eaten in secret? (Do not count binges.)	0	1	2	3	4	5	6
10. Have you definitely wanted your stomach to be flat?	0	1	2	3	4	5	6
11. Has thinking about shape or weight made it more difficult to concentrate on things you are interested in; for example read, watch TV or follow a conversation?	0	1	2	3	4	5	6
12. Have you had a definite fear that you might gain weight or become fat?	0	1	2	3	4	5	6
13. Have you felt fat?	0	1	2	3	4	5	6
14. Have you had a strong desire to lose weight?	0	1	2	3	4	5	6
15. On what proportion of times that you have eaten have you felt guilty because of the effect on your shape or weight? (Do not count binges.) (Circle the number which applies.)	0 – None of the times 1 – A few of the times 2 – Less than half the times 3 – Half the times 4 – More than half the times 5 – Most of the times 6 – Every time						

Appendix O

Eating Disorder Examination Questionnaire (EDE-Q) and coding

OVER THE PAST FOUR WEEKS (28 DAYS) (PLEASE CIRCLE THE NUMBER WHICH BEST DESCRIBES YOUR BEHAVIOUR.)		NOT AT ALL		SLIGHTLY		MODERATELY		MARKEDLY
29.	Has your weight influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	6
30.	Has your shape influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	6
31.	How much would it upset you if you had to weigh yourself once a week for the next four weeks?	0	1	2	3	4	5	6
32.	How dissatisfied have you felt about your weight?	0	1	2	3	4	5	6
33.	How dissatisfied have you felt about your shape?	0	1	2	3	4	5	6
34.	How concerned have you been about other people seeing you eat?	0	1	2	3	4	5	6
35.	How uncomfortable have you felt seeing your body; for example, in the mirror, in shop window reflections, while undressing or taking a bath or shower?	0	1	2	3	4	5	6
36.	How uncomfortable have you felt about others seeing your body: for example, in communal changing rooms, when swimming or wearing tight clothes?	0	1	2	3	4	5	6