

Parental Socialization of Healthy Eating Habits among Children



**Children's Nutrition
Research Center**

Department of Pediatrics
1100 Bates Street
Houston, Texas 77030-2600
713-798-7000
713-798-7098 Fax

Sheryl O. Hughes, PhD
Associate Professor at Baylor College of Medicine

Thomas G. Power, PhD
Professor at Washington State University



WASHINGTON STATE
UNIVERSITY

Conflict of Interest Disclosure

- This presentation was funded in part by Danone Institute International. There is no conflict of interest for the research presented.

A woman with dark hair tied back, wearing a blue and white striped shirt, is leaning over a counter. She is smiling and looking at a young girl with brown hair in a ponytail, wearing a blue tank top. The girl is also smiling and looking up at the woman. They are in a kitchen, and there is a large wooden bowl filled with green leafy vegetables on the counter. The woman is holding a green vegetable, and the girl is holding a green vegetable. There are other vegetables, including red and yellow bell peppers, on the counter. The background is bright and out of focus, suggesting a window or a bright light source.

Parents socialize their children by encouraging them to internalize goals and values that parents deem important.

A photograph of a family of four sitting together and smiling. The mother is on the left, the father is in the center, and two children are in the foreground. The image is semi-transparent, allowing the text to be clearly visible over it.

The goal of this socialization process is to help children make appropriate choices in their daily lives as they grow older and become more autonomous.



When it comes to *healthy eating*, the parenting environment remains an important and fundamental context in which children's eating behaviors are socialized.

Eating socialization: ways in which children adopt norms practiced in their culture and accepted in the family.

- The socialization process used with younger children is different from that used for older children
- **During earlier years**, more guidance is needed as children learn about appropriate eating practices, food preferences, and eating self-regulation
- **Elementary school** aged children experience a wider range of food environments and have more autonomy in their eating practices
- **During adolescence**, parents continue to guide their youth in different ways with the hope that their youth have internalized the goals and values accepted within the family and culture

Child eating socialization is characterized by two different constructs in the feeding literature:

- **Food parenting practices** – goal oriented behaviors used by parents to get the child to do something specific such as eat fruit and vegetables
- **Feeding styles** – a broader, more general attitude, and approach used by parents in their socialization process and includes the emotional climate a parent creates with their child during eating episodes

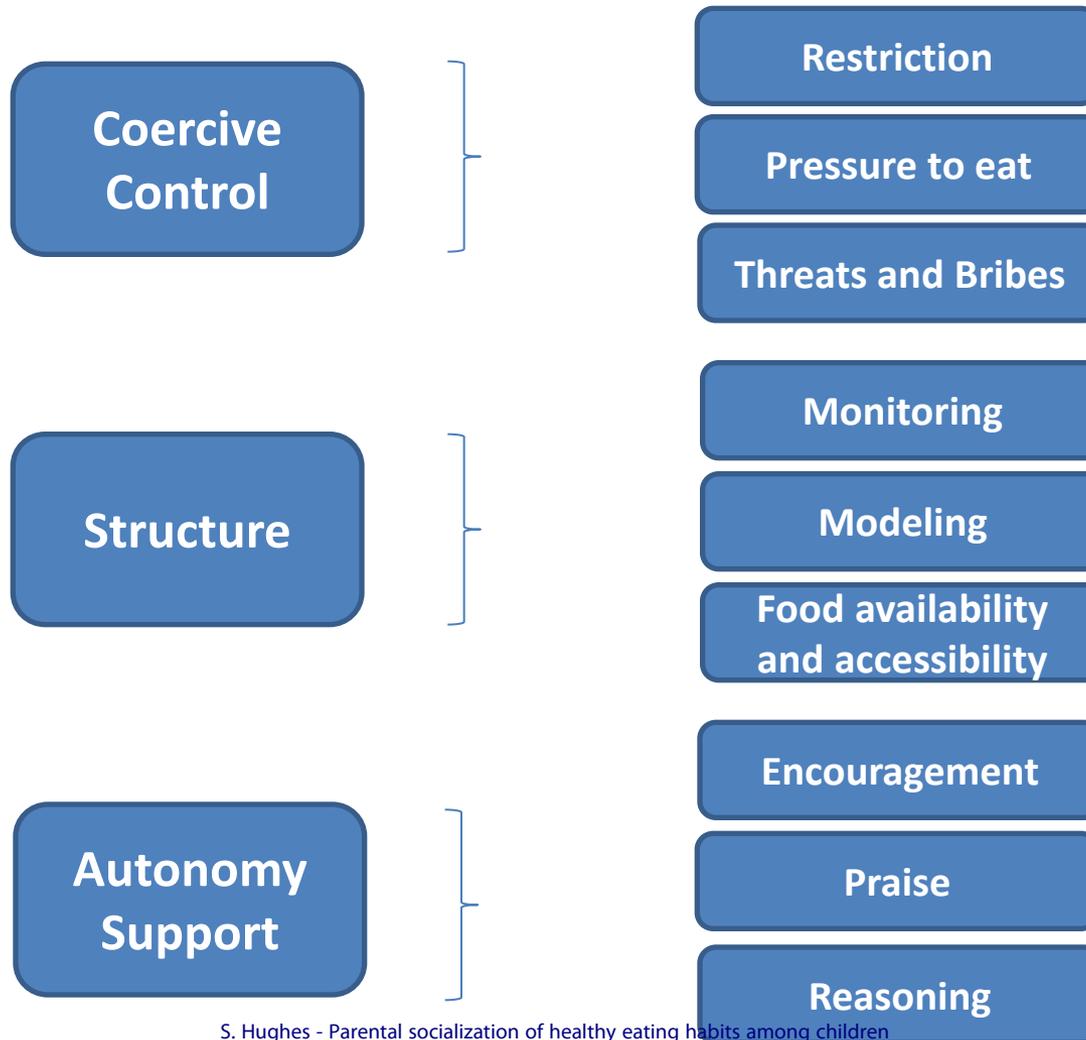
Food Parenting Practices



Three broad areas of food parenting practices have been conceptualized:

- **Coercive control** – parental directives that reflect domination, pressure, and/or attempts to impose their will on the child
- **Structure** – parental organization of the environment to facilitate the child's healthy eating
- **Autonomy support** – providing sufficient support to nurture children's capacity to self-regulate without being overly dominant

Conceptual Model of Food Parenting Practices





Younger Children
Ages 5 and 6



Elementary School Aged Children
Adolescents



Coercive Control

(Food Parenting Practice)

- Coercive control is defined as parental directives that reflect domination, pressure, and/or attempts to impose their will on the child.
- Parental use of restriction, pressure to eat, and threats and bribes (coercive type practices) have been studied extensively in 5 and 6 year olds.
- Less research has been conducted with older elementary school aged children and adolescents.

Coercive Control

Practices	Definition	Results
Restriction	Enforcement of rigid limits on access to foods or opportunities to consume those foods— usually palatable foods such as those high in fat and sugar	Restricting high fat/sugary foods leads to preference for those foods. <u>Consistent</u> links with <i>unhealthy eating</i> such as higher intake of junk food and sweets as well as eating in the absence of hunger mostly in 5 year olds.
Pressure to Eat	Insistence or demands to eat more food such as insisting on cleaning the plate, providing repeated prompts to eat, or physically struggling with or forcing the child to eat	Links to <i>lower dietary quality</i> in 5 to 6 year olds; links to higher levels of pickiness in later childhood
Threats and Bribes	Using food or other items to manage or shape eating behaviors such as increasing vegetable intake or decreasing intake of junk food	Using sweets as a bribe increases preferences for sweets and makes it difficult to develop preferences for the targeted healthy food; links to dietary intake in younger children but not in 10 to 12 year olds

Coercive Control

- Consistent links between coercive control (restriction and pressure to eat) and child dietary intake in 5 and 6 year old children
- Research with older elementary school aged children have produced mixed results or no associations at all
- For example, the use of restriction was not associated with fruit, vegetable, snack, or sugar sweetened beverages in children ages 7 to 11

Structure

(Food Parenting Practice)

- Structure is defined as parental organization of the environment to facilitate children's competence regarding healthy eating including maintenance of dietary boundaries.
- Parental use of monitoring, modeling, and food availability and accessibility (which are common structured practices) have been studied in kindergarteners and older elementary school aged children.
- Little research has been conducted with adolescents.

Structure

Practices	Definition	Results
Monitoring	The extent to which parents <i>keep track</i> of children’s consumption of various foods such as sweets, snacks, and other high-fat foods	Results are somewhat mixed—some showing an association with healthier child dietary intake while others showed no association (ages 5 to 7). In older elementary school age children, no associations were found.
Modeling	Both parental intake of healthy food and the extent to which parents eat healthy food and demonstrate the benefits in front of the child	Positive relationship with healthy eating across multiple studies with younger children. A recent review with elementary school aged children showed links to healthy child intake across 87% of reviewed studies.
Food Availability and Accessibility	The presence or absence of foods in the home and the ease with which children can consume those foods (i.e., cut up fruit)	Consistent links with fruit and vegetable intake in elementary school aged children.

Autonomy Support

(Food Parenting Practice)

- Involves providing sufficient support to nurture children's capacity to self-regulate.
- Autonomy support practices include the use of encouragement, praise, and reasoning.
- As with the other aspects of food parenting, more research has been conducted with younger children compared to older children.

Autonomy Support

Practices	Definition	Results
Encouragement	Ways that parents positively, gently, and supportively inspire children to adopt healthy eating habits	Links to healthier eating among preschoolers. Encouragement has not been examined widely among older children, perhaps because this practice tends to decrease as children age.
Praise	Positive reinforcement through verbal feedback	Consistently linked to healthy eating in children ages 5 to 7. No significant associations with healthy foods in older children.
Reasoning	Parental use of logic as a way of persuading children to change their eating habits	Little research in younger children. Some evidence of associations with child fruit and vegetable intake in older children.

Adolescents

- Adolescents spend less time eating with their parents.
- Adolescents make more food choices on their own – eating with friends, buying snacks at convenience stores, and eating outside their homes.
- When at home, parents spend less time engaged in specific food parenting practices with their adolescents.

Adolescents

- Most studies are school based using child-report of parental food parenting practices.
- Structured practices (modeling, food availability and accessibility) are the strongest correlates of healthy food consumption.
- A narrower range of practices have been examined possibly because coercive strategies (pressure to eat, threats and bribes) are uncommon with older children.
- Parents may use more indirect practices with adolescents due to their developing autonomy.

Conclusions

- **Coercive type** food parenting practices (restriction; pressure to eat; threats and bribes) are commonly used with young children ages 5 and 6 and show detrimental outcomes; mixed or no associations with older children.
- Some **structured type** food parenting practices (modeling and food availability) are linked to healthier eating in younger children, older children, and adolescents. Monitoring has produced mixed results.
- **Autonomy support type** practices (encouragement and praise) are linked to healthier eating in young children. No associations in older children and adolescents. Reasoning has not been studied in younger children but shows associations in older children.

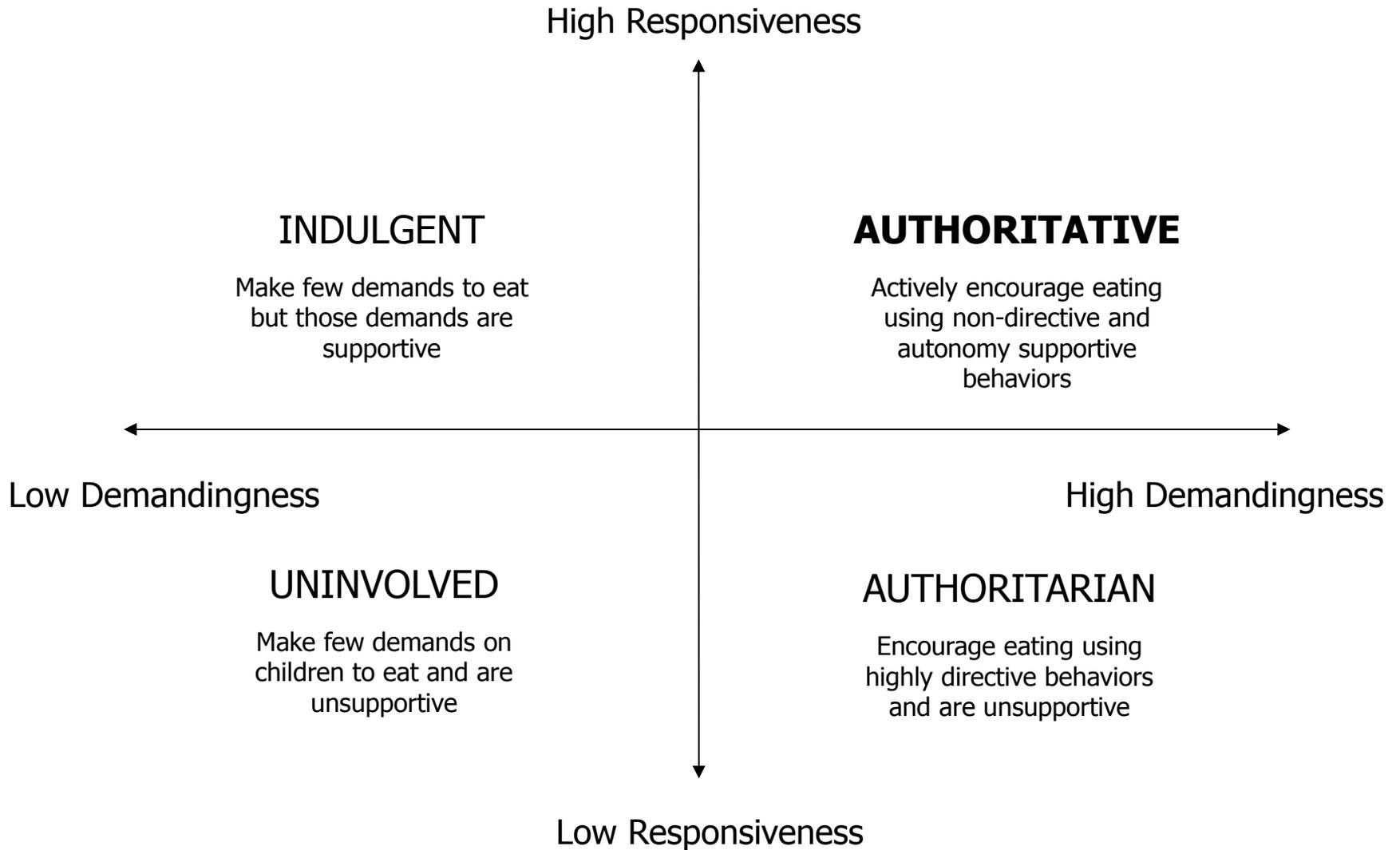


Feeding Styles



Feeding Styles

- In contrast to food parenting practices (goal oriented practices), the feeding style construct measures a broader approach to feeding children
- Feeding styles are based on two dimensions
 - Responsiveness – refers to **how** the parents encourage eating, that is, the level of nurturance parents use in directing their children's eating
 - Demandingness – refers to **how much** the parent encourages eating (that is – how demanding they are during the eating experience)



Authoritative Feeding Style

- Authoritative feeding has been associated with better child outcomes
 - lower child intake of low nutrient, energy dense snack foods
 - higher home availability of fruit and vegetables
- Children of authoritative feeders consumed a dinner with significantly higher Healthy Eating Index (HEI) scores compared to children of authoritarian, indulgent, and uninvolved feeding styles

Indulgent Feeding Style

- Indulgent feeding has been associated with poorer child outcomes
 - larger self-selected portion sizes
 - lower intake of fruit, vegetables, dairy, and whole grains
 - higher intake of low nutrient, energy dense snack foods
- Indulgent feeding has also been linked to higher child weight status across cross-sectional and one longitudinal study

Indulgent feeding style, child intake, and weight

Author	Sample	Results
Hughes et al. (2005)	231 (AA, H)	Higher child BMI z-score
Hughes et al. (2008)	718 (AA, H, W)	Higher child BMI z-score
Hoerr et al. (2009)	715 (AA, H, W)	Lower child intake of fruit, vegetables, and dairy; higher child intake of energy dense foods
Hennessy et al. (2010)	99 (AA, H, W)	Higher child BMI z-score
Hughes et al. (2011)	177 (AA, H)	Higher child BMI z-score (Hispanic boys)
Hennessy et al. (2012)	99 (AA, H, W)	Higher child intake of low-nutrient, energy dense snack foods
Tovar et al. (2012)	383 (Brazilian, Haitian, Latino)	Higher child BMI z-score
Fisher et al. (2013)	60 (AA, H, W)	Greater child self-served portions and higher child energy intake
Tovar et al. (2015)	313 (Brazilian, Haitian, Latino)	Lower child intake of whole grains (mothers in US < 5 years)
Hughes et al. (2016)	129 (H; longitudinal)	Increased child BMI z-score 18 months later

Overall Conclusions

- **Parents** are important figures in children's lives especially when it comes to healthy eating.
- **Structure** in the family eating environment is very important and is linked to better health outcomes across all ages.
- **Autonomy support** is also important and is linked to healthier child eating, but more research is needed with older children.
- **Coercive type** practices as well as indulgent feeding should be avoided as they are associated with negative child health outcomes.

Pediatric Recommendations

- Parents and caregivers are responsible for providing a variety of nutritious foods, defining the structure and timing of meals, and creating a developmentally appropriate mealtime environment that facilitates eating and social exchange.
- Children are responsible for participating in choices about food selection and should take responsibility for determining how much is consumed at each eating occasion.

Different parenting strategies are used at different ages to ensure healthier eating habits within the family structure and outside the home.

The goal is to establish healthy eating habits early in a child's life and maintain those habits into adulthood.

Thank you!