



Parenting and Child Diabetes

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Multiple reports have shown that children and youth with type I diabetes have poorer glycemic outcome as assessed by glycosylated hemoglobin levels than do adults with this disease.¹ From a medical perspective, issues of glycemic control are most often approached from the perspective of medical management.²⁻⁴ This leaves unexamined the impact of parent-child interactions around diabetic control. Examining these interactions is particularly critical in view of the fact that adolescents with chronic illness are at high risk for engaging in unhealthy weight-loss practices (binge eating, frequent dieting, and purging practices).⁵ Adolescents with diabetes have many traits characteristic of eating disorders, and there is a significant association between eating disorders symptomology and less-frequent blood glucose monitoring, elevated HbA1c, and increased risk of retinopathy.^{6,7}

A review of the literature on parenting and diabetes gives hope for a more positive outcome. Clear differences emerge when contrasting parenting attitudes and behaviors between children^{8,9} and adolescents¹⁰⁻¹⁵ with good control^{1,3,5,10-13,16} and those with poor control.^{1,11-13}

This literature uses many different models and inventories to examine family functioning, and describes that functioning from various perspectives using varying language.

However, these patterns translate readily into the authoritative-authoritarian-permissive-neglectful models of parenting¹⁷ defined by Baumrind¹⁸ and amplified by Maccoby.¹⁹ Successful parenting with diabetes is likely to be authoritative parenting,²⁰ whereas poor control

Parents of children and adolescents with good control maintain clear leadership at the same time as they give the child warmth and respect, responsibility-based scope for independence, and realistic mastery opportunities and expectations. Family conflict and conflict around diet is low.

Parents of children and adolescents in poor control are either domineering or neglectful, take greater responsibility for diabetes management and have greater fear of hypoglycemia, find diabetes management to be oppressive, and put pressure on children to manage their own diabetes. Family conflict is high, particularly around diet.

The Division of Responsibility in Feeding is authoritative parenting

According to Satter, optimum feeding provides both leadership and autonomy and is an authoritative approach to parenting.²¹ The parent takes leadership by taking responsibility

for the *what*, *when*, and *where* of feeding and gives autonomy by allowing the child to be responsible for the *how much* and *whether* of *eating*. The Figure illustrates patterns of feeding characterized by these patterns of parenting.

In making the distinction among patterns of parenting and feeding, it is important to define the term “autonomy” as used in the context of parenting. Autonomy implies connectedness and attentiveness to the child. Authoritative parents *give* autonomy in the context of providing for children and giving opportunities for mastery. At the same time, parents remain attentive to children’s needs, capabilities and wishes. Authoritarian parents provide leadership, but they give little consideration to children’s ~~need~~ capabilities and wishes. Permissive parents are ruled by children’s needs, capabilities and wishes and provide little leadership. Neglectful parents are uninvolved: They provide neither leadership nor connectedness and expect the child to fend for him- or herself.

Figure: Patterns of feeding		
	High leadership	Low leadership
High autonomy	Authoritative: “Here is what we have to eat. You may eat it or not. You may eat again at snack time.”	Permissive: “What would you like? When would you like it?”
Low autonomy	Authoritarian: “Here is your food. Eat it.”	Neglectful: “Don’t bother me. Get it yourself.”

1. Kaufman FR. Searching for glycemic control in pediatric type 1 diabetes: a long way to go. *Journal of Pediatrics*. 2001;139(2):174-176.
2. Monaghan M, Hilliard ME, Cogen FR, Streisand R. Supporting parents of very young children with type 1 diabetes: Results from a pilot study. *Patient Educ Couns*. 2010.
3. Naughton MJ, Ruggiero AM, Lawrence JM, et al. Health-Related Quality of Life of Children and Adolescents With Type 1 or Type 2 Diabetes Mellitus: SEARCH for Diabetes in Youth Study. *Arch Pediatr Adolesc Med*. 2008;162(7):649-657.
4. Cryer PE. Hypoglycemia in type 1 diabetes mellitus. *Endocrinology and metabolism clinics of North America*. 2010;39(3):641-654.
5. Neumark-Sztainer D, Story M, Resnick MD, Garwick A, Blum RW. Body dissatisfaction and unhealthy weight-control practices among adolescents with and without chronic illness: a population-based study. *Arch Pediatr Adolesc Med*. 1995;149(12):1330-1335.

6. Steel JM, Young RJ, Lloyd GG, Macintyre CCA. Abnormal eating attitudes in young insulin-dependent diabetics. *British Journal of Psychiatry*. 1989;155:515-521.
7. Tse J, Nansel TR, Haynie DL, Mehta SN, Laffel LM. Disordered eating behaviors are associated with poorer diet quality in adolescents with type 1 diabetes. *Journal of the Academy of Nutrition and Dietetics*. 2012;112(11):1810-1814.
8. Davis CL, Delamater AM, Shaw KH, et al. Parenting Styles, Regimen Adherence, and Glycemic Control in 4- to 10-Year-Old Children With Diabetes. *J. Pediatr. Psychol.* 2001;26(2):123-129.
9. Streisand R, Swift E, Wickmark T, Chen R, Holmes CS. Pediatric parenting stress among parents of children with type 1 diabetes: the role of self-efficacy, responsibility, and fear. *J Pediatr Psychol*. 2005;30(6):513-521.
10. Laffel LMB, Connell A, Vangsness L, Goebel-Fabbri A, Mansfield A, Anderson BJ. General Quality of Life in Youth With Type 1 Diabetes: Relationship to patient management and diabetes-specific family conflict. *Diabetes Care*. 2003;26(11):3067-3073.
11. Leonard BJ, Garwick A, Adwan JZ. Adolescents' perceptions of parental roles and involvement in diabetes management. *J Pediatr Nurs*. 2005;20(6):405-414.
12. Leonard BJ, Jang Y-P, Savik K, Plumbo MA. Adolescents With Type 1 Diabetes: Family Functioning and Metabolic Control. *Journal of Family Nursing*. 2005;11(2):102-121.
13. Anderson BJ, Miller JP, Auslander WF, Santiago JV. Family characteristics of diabetic adolescents: Relationship to metabolic control. *Diabetes Care*. 1981;4(6):586-594.
14. Burroughs TE, Harris MA, Pontious SL, Santiago JV. Research on social support in adolescents with IDDM: a critical review. *Diabetes Educ*. 1997;23(4):438-448.
15. Burroughs TE, Pontious SL, Santiago JV. The relationship among six psychosocial domains, age, health care adherence, and metabolic control in adolescents with IDDM. *Diabetes Educ*. 1993;19(5):396-402.
16. Patton SR, Dolan LM, Powers SW. Mealtime interactions relate to dietary adherence and glycemic control in young children with type 1 diabetes. *Diabetes Care*. 2006;29(5):1002-1006.
17. Satter E. Feeding is Parenting. 2014
18. Baumrind D. Current patterns of parental authority. *Developmental Psychology Monograph*. 1971;4(1 pt.2):1-103.
19. Maccoby EE, Martin JA. Socialization in the context of the family: parent-child interaction. In: Mussen PHe, ed. *Handbook of Child Psychology*. New York, NY: Wiley; 1983:1-101.
20. Greene MS, Mandleco B, Roper SO, Marshall ES, Dyches T. Metabolic control, self-care behaviors, and parenting in adolescents with type 1 diabetes: a correlational study. *Diabetes Educ*. 2010;36(2):326-336.
21. Satter E. The Satter Feeding Dynamics Model of child overweight definition, prevention and intervention. In: O'Donahue W, Moore BA, Scott B, eds. *Pediatric and Adolescent Obesity Treatment: A Comprehensive Handbook*. New York: Taylor and Francis; 2007:287-314.