

August 8, 2008

Carlos W. Davis, Jr. Ph.D., Director  
Timberlawn Research Foundation  
P.O. Box 270789  
Dallas, TX 75227-0789

Dear Dr. Davis:

We are enclosing a research grant application entitled "Parental Involvement in Diabetes Care among Latino and Caucasian Youth" to be directed by  
The sum of \$47,000 is requested for the period of November 1, 2008 through October 31, 2009.

We shall be pleased to furnish any additional information which may be required.

Sincerely,

Associate Dean for Research

NMJ:tag  
Enclosures: (1)

**Parental Involvement in Diabetes Care among Latino and Caucasian Youth**  
**July, 2008**

**Statement of Purpose**

The purpose of this pilot research project is to understand whether Latino and Caucasian families differ in how parents are involved in managing children's type 1 diabetes across the adolescent years, and whether these differences are associated with child well-being (i.e., depressive symptoms, family conflict, adherence, metabolic control). We examine three aspects of parental involvement that are crucial for adolescent diabetes management among Caucasian samples, but that are likely to work differently among Latino populations. First, we examine whether parents' *behavioral involvement* (i.e., extent to which parents complete diabetes management behaviors) shows different age-related declines across Caucasian and Latino samples, whether this reflects different developmental expectations for children's independence, and whether the differing patterns of behavioral involvement are associated with child well-being. Second, we examine differences in patterns of *appraised parental involvement* (i.e., children's appraisals of parents as uninvolved, collaborative, supportive or controlling), and in how these forms of involvement are associated with well-being. Finally, we examine whether the heightened *parental monitoring* that has been identified among Latino vs. Caucasian youth serves as a resource for Latino families when dealing with an adolescent's diabetes. Taken together, data will identify risk and resilience features of parent-child diabetes transactions that can guide effective interventions for ethnically-diverse adolescents with diabetes, data that may generalize to other pediatric conditions or life challenges.

**Background and Brief Literature Review**

Diabetes is a significant source of stress for patients of all ages, but especially during adolescence as families struggle with normal developmental challenges while managing a serious illness. Intensive management that maintains near-normal blood glucose levels reduces

the risk of severe long-term complications (e.g., blindness, renal failure; DCCT, 1994).

However, this demanding regimen places a tremendous burden on the developing child and family. For children with diabetes, adolescence is marked by heightened family conflict, increased psychological distress, poorer adherence, and deteriorating metabolic control (Anderson et al., 1999; Delamater et al., 1991; Jacobson et al., 1990; Northam et al., 1996; Wysocki, 1993). Understanding factors that contribute to the successful management of diabetes is crucial because patterns of serious nonadherence that emerge during adolescence are often maintained over time (Kovacs et al., 1992; Patterson & Garwick, 1998).

Difficulty in managing diabetes during adolescence is believed to emerge from the many changes that occur during this developmental period. Pubertal maturation alters the metabolic system that parents and children have come to understand, resulting in more frequent blood glucose dysregulation (Amial et al., 1986). Social-emotional developments occur such as differentiating from parents, developing autonomy, and identifying with peers (Grotevant & Cooper, 1998; Smetana, Campione-Barr, & Metzgar, 2006; Steinberg & Morris, 2000). As part of this process, adolescents begin to assume primary responsibility for managing their diabetes, and the important role that parents previously played in maintaining the regimen is altered (Anderson et al., 1999; Wysocki et al., 1996).

Decreased parental involvement in diabetes management occurs normatively across adolescence, but children whose parents remain involved in managing the illness have better diabetes and psychosocial outcomes. Decreased parental behavioral involvement during adolescence is associated with poorer adherence and metabolic control (Anderson et al., 1997; Wysocki et al., 1996), and interventions that maintain parental involvement minimize these declines (Anderson et al., 2000). The present study examines three aspects of parental involvement: (a) behavioral involvement, who performs the daily diabetes tasks, (b) appraised



involvement, the child's appraisal of how parents are involved in dealing with problems surrounding diabetes management (e.g., parent is uninvolved, collaborative, supportive, controlling), and (c) parental monitoring, the parent's monitoring and awareness of the child's activities. We explore whether successful diabetes adjustment across ages 10 to 15 is characterized by age-related declines in behavioral involvement together with maintaining the child's perceptions of the availability of the parent for collaboration and support, and the parents' awareness of the child's general and diabetes-management activities.

Although it is important for children to appraise parents as involved in dealing with diabetes, the form of this involvement must shift to reflect and support the child's autonomy and independent diabetes management. Children's appraisals of parents as too directive or controlling appear increasingly detrimental with age, presumably because such appraisals conflict with the adolescent's life task of developing autonomy. In a cross-sectional study of 10-15 year olds with diabetes, older children's appraisals of parental control were associated with poorer adherence (Wiebe et al., 2005) and higher depressive symptoms (Berg et al., 2007). Parents' well-intentioned but intrusive efforts to help their child may communicate not only a message of support, but also a message of control and low child competence (Pomerantz & Eaton, 2000). One alternative for parental involvement during adolescence is for parents and children to develop a more egalitarian and collaborative approach to dealing with diabetes problems; Wiebe et al. (2005) found that children who appraised mothers as collaborative displayed better adherence and metabolic control consistently across ages 10 to 15 than did those who appraised less collaboration. Another alternative is for parents to monitor their child's increasingly independent activities, thus enhancing their awareness of potential problems and more effectively targeting their efforts to support and scaffold their child towards higher



competence. Several recent studies indicate that parental monitoring is associated with better adherence and metabolic control among teens with diabetes (Berg et al., 2008).

Associations of parental involvement and adolescent diabetes management have been studied almost exclusively in Caucasian samples, despite evidence that cultural differences in parenting limit the relevance of this research to minority populations. The proposed research will examine associations of parental involvement and child well-being among Latino versus Caucasian adolescents. Latino and Caucasian parents may differ across each dimension of parental involvement shown to be important for diabetes management. For example, transfer of responsibility for diabetes from parent to child partially reflects parents' developmental expectations for independence, expectations that may differ across Latino and Caucasian families (Halgunseth, Ispa, & Rudy, 2006). Latino mothers have lower expectations for young children's capabilities, which may explain their tendency to engage in more direct physical guidance and verbal commands and less modeling to motivate the child's behaviors compared to Caucasian mothers. Among older children and adolescents, however, when Latino parents view the child as more capable, misbehavior (i.e., diabetes mismanagement) may be interpreted as violating the cultural code of interdependence and respect for family, and contribute to family conflict (Halgunseth et al., 2006). In the proposed study, we predict that Latino families will display smaller age-related declines in parental behavioral involvement, and in secondary analyses we will examine whether this reflects different expectations for independent diabetes care.

The Latino emphasis on interdependence and responsibility to family may enhance children's appraisals of support and collaboration with parents, but Latino parents also implement more rules and engage in more unilateral decision-making than do Caucasian parents (Blair, Blair, & Madamba, 1999; Halgunseth et al., 2006). Further, in contrast to the general pattern seen among Caucasian youth, such rule-setting and potentially controlling behaviors

appear to benefit or at least not harm Latino youth (Halgunseth et al., 2006). We predict that Latino adolescents will appraise parents as less uninvolved, more collaborative, and more controlling when dealing with diabetes stressors, but that appraised control will be less detrimental for child well-being compared to Caucasian adolescents. Latino parents are more protective and monitor their children more frequently than to non-Latino parents, and such monitoring may contribute to adolescent well-being (Halgunseth et al., 2006). We predict Latino adolescents to report and benefit from higher parental monitoring compared to Caucasian youth.

### **Method**

**Subjects.** Participants will include 75 Latino and 75 age- and sex-matched Caucasian children with type 1 diabetes, and their mothers. Equal numbers of boys and girls will be recruited through the Pediatric Endocrinology Clinics at Children's Medical Center during a routine clinic appointment. Eligibility criteria include: children 10 to 15 years of age, illness duration  $\geq 1$  year; living with mother; and able to read/write English or Spanish. We will recruit 10-15 year olds to capture key developmental transitions while maximizing the number of available participants. Participants will be eligible if mother and child live together because mothers are the primary caregivers of children with diabetes (Seifge-Krenke, 2001); step mothers will be recruited if they have been living with the child for the past year. Fathers will not be recruited given limited resources with this pilot project, but paternal involvement will be measured by child and mother report. In prior research, children's rather than fathers' reports of paternal involvement were related to diabetes management (Berg et al., 2008).

**Procedures.** Recruitment will begin at the time of a routine diabetes clinic appointment. Clinic staff will introduce potential participants to a research assistant who will explain the study in more detail, conduct initial screening, distribute informed consent/assent forms, and schedule interested participants for an assessment appointment. Participants will receive a packet of



questionnaires to be completed individually prior to this appointment. Data will be collected through a combination of questionnaires, interviews, and medical record reviews (parents provide authorization to access medical records). Participants can choose to complete measures in English or Spanish; all measures have been translated and back-translated into Spanish by bilingual, bicultural staff, and bilingual research assistants will be available to collect data.

*Parental Behavioral Involvement.* The responsibility items from the Diabetes Responsibility and Conflict Scale (Rubin et al, 1989) will be included to assess parents' and adolescents' perceptions of who is responsible for completing 25 aspects of diabetes management (e.g., who determines the insulin dose). For each item, participants provide separate ratings regarding the child's and parents' level of responsibility (1 = child does it alone; 3 = child and parent share responsibility; 5 = parent does it alone). This scale is sensitive to the declines in maternal involvement that occur during adolescence (Palmer et al., 2004; Rubin et al., 1989), shows high concordance between mother and child,  $r = .75$ ,  $p < .001$  (Palmer et al., 2005), and good reliability (alphas  $> .79$ ; Palmer et al., 2004; Rubin et al., 1989). Although not part of the primary aims, expectations for independence will also be obtained by asking parents and children at what age they believe children should be able to complete each task without help from parents.

*Appraised Parental Involvement.* To assess children's appraisals of how parents are involved when dealing with diabetes problems, the Diabetes Stress and Coping Interview (Palmer et al., 2005) will be conducted and taped for later transcription. Children will be asked to describe in detail the two most stressful episodes of the past week related to their diabetes. For each event, they will report three things they did to deal with the event and then categorize their mother's and father's involvement in each coping strategy as: mother/father was uninvolved (I handled it alone), supportive (parent provided emotional support, encouraged, changed plans), collaborative (parent and child worked together, discussed, brain stormed), or took charge



(parent told child what to do, acted as the boss, did the work for the child, controlled the child's actions). Children will be asked to elaborate their categorizations (e.g., describe why they chose specific categories; whether they tried to enlist help). Such qualitative data will enrich our understanding of cultural differences in children's appraisals of parents' involvement.

After children are interviewed, their permission will be obtained to share with mothers the stressful events and coping strategies that they had described (without categorization information). Mothers will indicate whether they were aware of the event and, if so, to categorize their own level of involvement as: uninvolved (I was not involved), supportive (I provided emotional support, encouraged, changed my plans), collaborative (I worked together with my child, discussed, brain stormed), or took charge (I told my child what to do, acted as the boss, did the work for my child, controlled my child). Mothers will also elaborate on their perceptions of the diabetes problem and their categorizations.

*Parental Monitoring.* Children and mothers will complete a measure of general and diabetes-specific monitoring based on Barber's (1999) work on parental monitoring. The scale asks participants to indicate how much parents really know about both general activities (e.g., who your friends are) and diabetes management (e.g., what your blood sugars are), using a 1 (doesn't know) to 5 (knows everything) scale. This scale has been shown to have strong reliability for parent and child reports ( $\alpha > .86$ ), and to relate to adherence and metabolic control among adolescents with diabetes (Berg et al., 2008).

*Child Well-being.* Four measures of well-being will be obtained. First, children will complete the Children's Depression Inventory (Kovacs, 1985) to indicate their depressive symptoms (e.g., disturbances in mood, self-evaluation, interpersonal behaviors). This 27-item scale has high internal consistency and test-retest reliability ( $rs > .71$ ), is sensitive to difficulties in managing diabetes (e.g., Kovacs et al., 1997), and is associated with appraised maternal

involvement (Berg et al., 2007) and adherence (Korbel et al., 2007). Second, mothers and children will individually complete the Self Care Inventory (La Greca et al., 1990) to assess adherence. Total scores on this scale have adequate internal consistency (alphas  $> .76$  for adolescent and parent reports; 2005), and correlate well with more time-intensive interview methods for measuring adherence (Greco et al., 1990). Third, children's glycosylated hemoglobin (HbA1c) levels will be obtained from medical records; HbA1c provides information on average blood glucose levels over the preceding three or four months, and is the current standard to index whether diabetes treatment goals are being achieved. Finally, family conflict around diabetes will be obtained with the conflict items from the Diabetes Responsibility and Conflict Scale (Rubin et al, 1989), which rates levels of parent-child conflict surrounding diabetes management tasks.

**Design.** A cross-sectional design comparing Latino and Caucasian children across ages 10 to 15 and their mothers will be used. Latino and Caucasian children will be matched on age and sex. Control variables to be examined as potential covariates include demographic (SES, family composition, and acculturation) and illness variables (illness duration, treatment regimen) reported by participants.

**Statistical Approach.** Hierarchical regression analyses will initially compare the age-related patterns of parental involvement across Caucasian vs. Latino families. Procedures outlined by Aiken & West (1991) will be followed to assess these Ethnicity X Age interactions predicting each domain of parental involvement. Similar procedures will determine whether each form of involvement is associated with child well-being differently across age and ethnicity (i.e., Ethnicity X Age X Involvement interactions predicting well-being). Covariates will be included if preliminary analyses demonstrate the need to statistically control for illness duration and regimen, level of acculturation, SES, and/or sex.



## **Human Rights, Ethical Considerations, and Informed Consent**

The Institutional Review Board at will approve all procedures. Eligible patients who are interested in participating in the research study will undergo informed consent procedures as follows. Parent and child will be provided detailed information regarding the purpose and procedures of the study. They will be provided the consent, assent, and parental permission forms to review several days before their assessment visit or be provided these forms during their assessment visit. The consent forms will discuss (1) the general overview of the questionnaires, interviews, and study protocols, (2) the length of time required to complete the protocol, (3) the confidentiality of the research data within the research team, (4) the information that will be obtained through the medical records, (5) the fact that the patient's medical treatment will not be affected by their decision to participate or from his or her later withdrawal from the study, and (6) the fact that they will be reimbursed for the study (\$20 for the interview, \$20 for questionnaires per participant) and should they withdraw from the study, they will receive partial compensation for their time. Parents and children will receive an explanation of the risks and benefits of participating in the research study and will be given as much time as needed to review the consent and assent forms and ask questions. Once questions and concerns have been sufficiently addressed, informed consent and assent will be documented by signatures on the Consent Forms (parent) and Assent Form (child), and witnessed by the research assistant.

## **Time Frame of Proposed Research**

The proposed research will take place across a two year period. We anticipate that subject recruitment and data collection will take at approximately 1.5 years. During the first 2 months, staff will be trained and all materials will be prepared. During months 3 to 21, participants will be recruited and data will be collected. Data will be continuously entered and checked as they



become available, facilitating analyses once data are collected. During months 21 to 24, we will finish remaining data collection, complete data analysis and write the results for publication.

### **Relationship to the Timberlawn Foundation's Areas of Primary Interest**

The proposed research is directly in line with the primary interest in understanding interpersonal relationships in psychological development. The research will enhance our understanding of how parent-child transactions affect the manner in which a child's chronic illness is managed during adolescence, a critical developmental period for families coping with diabetes and other pediatric conditions. By examining these processes across Latino and Caucasian families, the research will also provide basic information about cultural influences in parent-adolescent relationships and coping. The proposed research is thus related to two of the three interest areas targeted: 1) crucial aspects of interpersonal relationships (i.e., cultural issues in understanding parent-child relationships and adolescent development in a high risk context); and 2) connections between these interpersonal relationship characteristics and physical health.

### **Scientific Importance of the Project**

The study of ethnic differences in parenting and adolescent well-being supports recent trends for understanding relational and contextual aspects of adolescent development (Smetana et al., 2006). Research on diabetes management among Latino youth has been inconsistent, with some reports indicating poorer metabolic control among Latino versus Caucasian samples (Gallegos-Macias et al., 2003), and others showing no differences (Bulcroft, Carmody, & Bulcroft, 1996). The present study will begin to identify whether inconsistencies may reflect both risk and resilience processes among Latino parent-child relationships.

### **Practical or Applied Importance**

The knowledge to be gained by this study is potentially quite important. Adolescence is known to be a difficult time for diabetes management, but also the time for developing self-

management behaviors that extend into adulthood. The proposed research will provide insights into various parenting processes contributing to optimal and non-optimal diabetes management among Latino adolescents, insights that have direct implications for interventions. This is of relevance not only to families coping with type 1 diabetes, but potentially to other pediatric conditions or high stress contexts as well.

### **Detailed Budget**

**Personnel.** Money is requested to fund a full-time (i.e., 20 hrs/wk) bilingual graduate research assistant to recruit and interview participants in Spanish. Additional research assistants needed to complete the project will be funded through other sources. Funds are requested at the current research stipend plus benefits for graduate level research assistantships at

**Subject Reimbursement.** Participants will be paid \$40 each to complete the study protocol, which requires them to travel to a separate assessment appointment. We budgeted for 150 mother-child dyads (300 participants total).

**Other Funding Sources.** There are numerous additional costs associated with the current project (e.g., digital recording equipment, xeroxing, data storage, printer cartridges, telephone charges) that will be covered through basic laboratory functioning funds provided to the PI for startup costs when she joined the faculty.

Personnel	\$18,000
<u>Subject Payment</u>	<u>\$12,000</u>
TOTAL	\$30,000

### **Proposed Measures**

All measures were selected through careful consideration of reliability and validity issues for adolescents with diabetes. Specific information on the measures is reported in the Method

section, and copies are included in the Appendix. References detailing the psychometric properties of the instruments are asterisked in the general references section.

### **Dissemination of Results**

Results will be submitted for presentation at national conferences and for publication in peer-reviewed journals. In each case, careful attention will be paid to ensure that the results reach a multidisciplinary audience that has a theoretical and/or applied interest in the findings (e.g., pediatric psychology, developmental psychology, family psychology, diabetes care).

### **Institution Verification**

The [redacted] Dallas, where the PI is located and all procedures will occur, is a public institution as documented in the attached letter.

### **Research Team**

The proposed project brings together researchers with expertise in psychology and pediatric endocrinology who have not previously collaborated (see attached CVs). [redacted] (PI) has expertise in clinical health and pediatric psychology, and has been conducting research on families coping with chronic illness for several years. She has received federal funding for research about parent-child relationships and chronic illness management, but has not had the opportunity to examine these interpersonal processes across diverse samples. The proposed research will provide necessary pilot data to support a larger application to the National Institutes of Health. [redacted] (co-investigator) is chair of Pediatric Endocrinology, and has extensive research and clinical experience in type 1 diabetes management during adolescence.



## **APPENDIX**

1. Biosketches for Principal Investigator and Co-Investigator
2. Institutional IRS Determination Letter
2. References
3. Questionnaires

## References

\*\*Indicates references documenting the psychometric properties of the instruments to be used

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INTERNAL REVENUE SERVICE  
DISTRICT DIRECTOR

DEPARTMENT OF THE TREASURY  
1100 Commerce Street  
Dallas, Texas 75242

Date: OCT 03 1997

- > Person to Contact:  
Customer Service Division
- > Contact Telephone Number:  
1-800-829-1040
- > In Reply Refer to:  
Mail Code 4940 DAL

Dear Sir or Madam:

Our records indicate and all of its component institutions are still not subject to federal income taxation because they are agencies within the government of the state of Texas. Our National Office's letter dated March 20, 1984, is still in effect.

As agencies of the government of the state of Texas, and all of its component institutions are described in sections 170(b)(1)(A)(v) and 170(c)(1) of the Internal Revenue Code of 1986. Donors may make tax deductible contributions to the System and its components as provided by section 170 of the Code.

Code sections 2055(a)(1), 2106(a)(2)(A)(i), 2522(a)(1) and 2522(b)(1) all provide that bequests, legacies, devises, or transfers "to or for the use of the United States, any State, any political subdivision thereof, or the District of Columbia, for exclusively public purposes" can be deducted from the applicable tax returns. This is basically the same phrase as used in section 170(c)(1) of the Code which describes as mentioned above. As long as the is described in those sections and otherwise meets the applicable provisions of these Code sections when a donation or bequest, etc. is made, it will be a qualified receipt; however, the actual conditions or restrictions of the gift or bequest will have to be considered at that time to determine the amount deductible.

The status as tax exempt will, at all times, include the component institutions as set out under state law.

Based on the information submitted, the current components of

✓

This letter is not a determination letter, but an information letter describing the information contained in our records. If any changes are made in the operations of your organization and you desire a new "ruling" letter, you will need to contact our National Office as was done for the 1984 ruling letter.

If you have any questions, please contact the person referred to at the above number.

Sincerely,

*Ellen Murphy*

Ellen Murphy  
Acting District Director

cc: Mark A. Fankhauser  
Little, Pedersen, Fankhauser & Cox, LLP  
901 Main Street, Suite 5050  
Dallas, TX 75202



## DRS-C (Diabetes Responsibility)

**Instructions:** For each of the following parts of your diabetes care, circle the number that **best describes** the way **you handle things at home**.

- 1 = I do it alone  
 2 = I do most  
 3 = I share equally with my parents  
 4 = My parents do most  
 5 = My parents do it alone

	I alone	Mostly myself	Equally	Mostly parent	Parent alone
1. Who remembers when to give insulin?	1	2	3	4	5
2. Who decides to take more or less insulin according to results of blood sugar tests?	1	2	3	4	5
3. Who calculates the insulin or bolus (pump) dose?	1	2	3	4	5
4. Who gives insulin shots or boluses (pump)?	1	2	3	4	5
5. Who decides to rotate injection or pump sites?	1	2	3	4	5
6. Who remembers when blood sugar should be tested?	1	2	3	4	5
7. Who tests blood sugar?	1	2	3	4	5
8. Who keeps track of blood sugar results?	1	2	3	4	5
9. Who makes sure you carry sugar in case of a low blood sugar reaction?	1	2	3	4	5
10. Who notices early signs of a low blood sugar reaction?	1	2	3	4	5
11. Who's in charge of taking care of low blood sugar reactions?	1	2	3	4	5
12. Who decides what to eat at meals and snacks at home?	1	2	3	4	5
13. Who decides what to eat away from home (such as at school, movies, parties)?	1	2	3	4	5
14. Who figures out the number of carbohydrates in meals and snacks?	1	2	3	4	5
15. Who decides when you exercise?	1	2	3	4	5
16. Who talks to teachers or school personnel about your diabetes?	1	2	3	4	5
17. Who talks to friends about your diabetes?	1	2	3	4	5
18. Who talks to relatives about your diabetes?	1	2	3	4	5
19. Who makes sure you have supplies (such as insulin, syringes, testing, or pump supplies)?	1	2	3	4	5
20. Who checks expiration dates on insulin and supplies?	1	2	3	4	5
21. Who examines your feet and makes sure your shoes fit?	1	2	3	4	5
22. Who notices differences in health, such as weight changes or signs of infection?	1	2	3	4	5
23. Who remembers to make appointments with doctors and dentists?	1	2	3	4	5



**If you have an insulin pump, please answer the following additional items:**

	<i>I alone</i>	<i>Mostly myself</i>	<i>Equally</i>	<i>Mostly parent</i>	<i>Parent alone</i>
24. Who inserts the catheter?	1	2	3	4	5
25. Who changes pump batteries?	1	2	3	4	5
26. Who programs the pump basal and/or temporary basal rates?	1	2	3	4	5
27. Who refills the pump (fills the reservoir, hooks up the infusion set)?	1	2	3	4	5
28. Who checks to see how much insulin is left in the pump?	1	2	3	4	5

**Instructions:** Different parents know different things about their teenagers. We are interested in knowing how much **your mother knows about you**.

For each of the items, circle one number to indicate how much **your mother really knows about you**. Remember, there are no right or wrong answers, and your answers will be kept private. So, please tell us what you REALLY think.

- 1 = Doesn't Know  
 2 = Knows a Little  
 3 = Knows Something  
 4 = Knows a Lot  
 5 = Knows Everything

How much does your mother REALLY know...	Doesn't Know	Knows a Little	Knows Something	Knows a Lot	Knows Everything
1. Who your friends are?	1	2	3	4	5
2. Where you go at night?	1	2	3	4	5
3. How you spend your money?	1	2	3	4	5
4. What you do with your free time?	1	2	3	4	5
5. Where you are most afternoons after school?	1	2	3	4	5
6. What your blood sugar readings are?	1	2	3	4	5
7. What you have eaten?	1	2	3	4	5
8. How much exercise you get?	1	2	3	4	5
9. How much insulin you have given yourself?	1	2	3	4	5
10. When you take your insulin shots or boluses?	1	2	3	4	5
11. When you test your blood sugar?	1	2	3	4	5



**Instructions:** Now we want to know how much **your father** knows **about you**.

For each of the items, circle one number to indicate how much **your father really knows about you**. Remember, there are no right or wrong answers, and your answers will be kept private. So, please tell us what you REALLY think.

- 1 = Doesn't Know
- 2 = Knows a Little
- 3 = Knows Something
- 4 = Knows a Lot
- 5 = Knows Everything

How much does your father REALLY know...	Doesn't Know	Knows a Little	Knows Something	Knows a Lot	Knows Everything
1. Who your friends are?	1	2	3	4	5
2. Where you go at night?	1	2	3	4	5
3. How you spend your money?	1	2	3	4	5
4. What you do with your free time?	1	2	3	4	5
5. Where you are most afternoons after school?	1	2	3	4	5
6. What your blood sugar readings are?	1	2	3	4	5
7. What you have eaten?	1	2	3	4	5
8. How much exercise you get?	1	2	3	4	5
9. How much insulin you have given yourself?	1	2	3	4	5
10. When you take your insulin shots or boluses?	1	2	3	4	5
11. When you test your blood sugar?	1	2	3	4	5

## CDI *Children's Depression Inventory*

Kids sometimes have different feelings and ideas.

This form lists the feelings and ideas in groups. From each group of three sentences, pick one sentence that describes you **best** for the past two weeks. After you pick a sentence from the first group, go on to the next group.

There is no right answer or wrong answer. Just pick the sentence that best describes the way you have been recently. Put a mark like this **X** next to your answer. Put the mark in the box next to the sentence that you pick.

Here is an example of how this form works. If you read books a lot, you would probably check the first sentence, like this.

Example:

- |                                     |                               |
|-------------------------------------|-------------------------------|
| <input checked="" type="checkbox"/> | I read books all the time.    |
| <input type="checkbox"/>            | I read books once in a while. |
| <input type="checkbox"/>            | I never read books.           |

***Remember, in each box, pick out the one sentence that describes you best in the PAST TWO WEEKS.***



**IN THE PAST TWO WEEKS: (Check one for each item).**

**Item 1**

- ☐ I am sad once in a while.
- ☐ I am sad many times.
- ☐ I am sad all the time

**Item 2**

- ☐ Nothing will ever work out for me.
- ☐ I am not sure if things will work out for me.
- ☐ Things will work out for me O.K.

**Item 3**

- ☐ I do most things O.K.
- ☐ I do many things wrong.
- ☐ I do everything wrong.

**Item 4**

- ☐ I have fun in many things.
- ☐ I have fun in some things.
- ☐ Nothing is fun at all.

**Item 5**

- ☐ I am bad all the time.
- ☐ I am bad many times.
- ☐ I am bad once in a while.

**Item 6**

- ☐ I think about bad things happening to me once in a while.
- ☐ I worry that bad things will happen to me.
- ☐ I am sure that terrible things will happen to me.

**Item 7**

- ☐ I hate myself.
- ☐ I do not like myself.
- ☐ I like myself.

**Item 8**

- ☐ All bad things are my fault.
- ☐ Many bad things are my fault.
- ☐ Bad things are not usually my fault.

**Item 9**

- ☐ I do not think about killing myself.
- ☐ I think about killing myself but I would not do it.
- ☐ I want to kill myself.

**Item 10**

- ☐ I feel like crying every day.
- ☐ I feel like crying many days.
- ☐ I feel like crying once in a while.

**Item 11**

- ☐ Things bother me all the time.
- ☐ Things bother me many times.
- ☐ Things bother me once in a while.

**Item 12**

- ☐ I like being with people.
- ☐ I do not like being with people many times.
- ☐ I do not want to be with people at all.

**Item 13**

- ☐ I cannot make up my mind about things.
- ☐ It is hard to make up my mind about things.
- ☐ I make up my mind about things easily.



**IN THE PAST TWO WEEKS: (Check one for each item).**

**Item 14**

- ☐ I look O.K.
- ☐ There are some bad things about my looks.
- ☐ I look ugly.

**Item 15**

- ☐ I have to push myself all the time to do my schoolwork.
- ☐ I have to push myself many times to do schoolwork.
- ☐ Doing schoolwork is not a big problem.

**Item 16**

- ☐ I have trouble sleeping every night.
- ☐ I have trouble sleeping many nights.
- ☐ I sleep pretty well.

**Item 17**

- ☐ I am tired once in a while.
- ☐ I am tired many days.
- ☐ I am tired all the time.

**Item 18**

- ☐ Most days I do not feel like eating.
- ☐ Many days I do not feel like eating.
- ☐ I eat pretty well.

**Item 19**

- ☐ I do not worry about aches and pains.
- ☐ I worry about aches and pains many times.
- ☐ I worry about aches and pains all the time.

**Item 20**

- ☐ I do not feel alone.
- ☐ I feel alone many times.
- ☐ I feel alone all the time.

**Item 21**

- ☐ I never have fun at school.
- ☐ I have fun at school only once in a while.
- ☐ I have fun at school many times.

**Item 22**

- ☐ I have plenty of friends.
- ☐ I have some friends but I wish I had more.
- ☐ I do not have any friends.

**Item 23**

- ☐ My schoolwork is alright
- ☐ My schoolwork is not as good as before.
- ☐ I do very badly in subjects I used to be good in.

**Item 24**

- ☐ I can never be as good as other kids.
- ☐ I can be as good as other kids if I want to.
- ☐ I am just as good as other kids.

**Item 25**

- ☐ Nobody really loves me.
- ☐ I am not sure if anybody loves me.
- ☐ I am sure that somebody loves me.

**IN THE PAST TWO WEEKS: (Check one for each item).**

**Item 26**

- ☐ I usually do what I am told.
- ☐ I do not do what I am told most times.
- ☐ I never do what I am told.

**Item 27**

- ☐ I get along with people.
- ☐ I get into fights many times.
- ☐ I get into fights all the time.



**Instructions:** Please rate each of the items according to **how well you followed your recommended regimen for diabetes care in the past month**. Use the following scale:

- 1 = Never did it  
 2 = Sometimes followed recommendations; mostly not  
 3 = Followed recommendations about 50% of the time  
 4 = Usually did this as recommended; occasional lapses  
 5 = Always did this as recommended without fail  
 NA = Not applicable to my regimen

In the **past month**, how well have you followed recommendations for:

	Never	Sometimes	50%	Usually	Always	NA
1. Checking blood glucose with monitor?	1	2	3	4	5	NA
2. Glucose recording?	1	2	3	4	5	NA
3. Checking ketones in blood or urine when blood glucose level is high?	1	2	3	4	5	NA
4. Administering correct insulin dose?	1	2	3	4	5	NA
5. Administering insulin at right time?	1	2	3	4	5	NA
6. Adjusting insulin intake based on blood glucose values?	1	2	3	4	5	NA
7. Eating the proper foods or counting all carbohydrates eaten?	1	2	3	4	5	NA
8. Eating meals/snacks on time?	1	2	3	4	5	NA
9. Carrying quick-acting sugar to treat reactions?	1	2	3	4	5	NA
10. Coming in for appointments?	1	2	3	4	5	NA
11. Wearing a medic alert ID?	1	2	3	4	5	NA
12. Exercising regularly?	1	2	3	4	5	NA
13. Reading food labels?	1	2	3	4	5	NA
14. Treating low blood glucose?	1	2	3	4	5	NA
15. Counting carbohydrates correctly?	1	2	3	4	5	NA
16. Calculating insulin doses based on carbohydrate content of meals or snacks?	1	2	3	4	5	NA



## DCS-C (Part 1)

Diabetes Conflict  
Mother

**Instructions:** For each of the following parts of your diabetes care, circle the number that best describes how much you have argued or hassled with your **MOTHER** about it **DURING THE PAST MONTH**.

- 1 = Almost Never  
2 = Sometimes  
3 = Almost Always

During the PAST MONTH, I have argued with my MOTHER about...	Almost Never	Sometimes	Almost Always
1. Remembering to give insulin shots or boluses (pump):	1	2	3
2. Taking more or less insulin depending on results.	1	2	3
3. Remembering to check blood sugars.	1	2	3
4. Giving shots or boluses (pump).	1	2	3
5. Results of blood sugar monitoring.	1	2	3
6. Taking care of diabetes when away from home.	1	2	3
7. Meals and snacks.	1	2	3
8. Taking care of low blood sugar.	1	2	3
9. Taking care of high blood sugar.	1	2	3
10. Exercising.	1	2	3
11. Handling emotions (such as feeling mad or sad) related to diabetes.	1	2	3
12. Logging blood sugar results.	1	2	3
13. Rotating injection sites or infusion sites (pump).	1	2	3
14. Changes in health (like weight or infections).	1	2	3
15. Other areas of conflict? (please specify): _____			

## DCS-C (Part 2) *Diabetes Conflict Father*

**Instructions:** For each of the following parts of your diabetes care, circle the number that best describes how much you have argued or hassled with your **FATHER** about it **DURING THE PAST MONTH**.

- 1 = Almost Never  
2 = Sometimes  
3 = Almost Always

During the PAST MONTH, I have argued with my FATHER about...	Almost Never	Sometimes	Almost Always
1. Remembering to give insulin shots or boluses (pump):	1	2	3
2. Taking more or less insulin depending on results.	1	2	3
3. Remembering to check blood sugars.	1	2	3
4. Giving shots or boluses (pump).	1	2	3
5. Results of blood sugar monitoring.	1	2	3
6. Taking care of diabetes when away from home.	1	2	3
7. Meals and snacks.	1	2	3
8. Taking care of low blood sugar.	1	2	3
9. Taking care of high blood sugar.	1	2	3
10. Exercising.	1	2	3
11. Handling emotions (such as feeling mad or sad) related to diabetes.	1	2	3
12. Logging blood sugar results.	1	2	3
13. Rotating injection sites or infusion sites (pump).	1	2	3
14. Changes in health (like weight or infections).	1	2	3
15. Other areas of conflict? (please specify): _____			