

## The Diabetes Education Center's Developmentally Appropriate Diabetes Education (DADE) Project:

A look at the Developmental Characteristics of 13-15 year olds and how they impact diabetes education efforts.

Adolescence is a time when young persons with diabetes become increasingly responsible for their own health management (1,6). Unfortunately, research demonstrates that there is a significant decline in metabolic control during adolescence and this may lead to the onset of lifelong complications. (2,3). Certainly these findings are confounded by the many different physiological changes the adolescent is experiencing, however, poor personal health management cannot be overlooked as a contributing factor. (4).

The aim of behavioral interventions such as educational programs is to lead adolescents to better self-care and health management, making efforts to avoid disease complications and poor outcomes. Well-designed studies have shown us that educational and psychosocial interventions are beneficial and lead to better diabetes management outcomes. Also, the interventions that tend to yield the most substantial psychosocial benefits are conducted in specialized diabetes clinics (5).

With that being said, educators should feel empowered and excited about an opportunity to enable adolescents to make behavioral changes that will benefit them for a lifetime, especially when implemented at such a pivotal point in the young person's life. Unfortunately this is not always the case. Many diabetes education centers feel very confident about their ability to educate adults about their condition, but feel intimidated and uncomfortable educating young people. Certainly this apprehension is reasonable considering the adolescent is a very complex creature. As is well known, adolescence is a time of intense change involving complex interactions among several different areas of development. A growth spurt and a changing voice may lead to a new body image and a changing sense of identity. Fluctuations in metabolism may lead to restlessness, which may affect school performance straining relationships with teachers and parents. It is easy to see that physical, mental, and social changes do not occur independently of one another, and each change may have a very strong effect on an entirely different aspect of the adolescent's life.

When dealing with adolescents, and trying to offer them educational opportunities, it is vital to the educator to have a basic understanding of the developmental characteristics of the young person. In this way, education may be presented more efficaciously and with greater satisfaction for all parties concerned.

Developmental Characteristics of Thirteen to Fifteen year olds:

Many of the emotional and social developmental changes occurring in the young adolescent are directly related to changes in physical attributes. Thirteen to fifteen year

olds begin to struggle with their sense of identity and changing relationships with peers and adults. It is of the utmost importance for the young person to feel “cool,” accepted, and physically attractive, so acne, and changes in physique and voice are perceived as obstacles to gaining popularity and acceptance. Persons in this age group also desperately want to be normal, however they often feel unique in their emotions and experiences, as though no one has ever experienced the same worries, fears, and heartbreaks.

Young adolescents bore easily and may only be interested in learning how a concept will relate to their personal lives. They may also may be very sensitive to criticism and be resentful of negative feedback making things especially difficult for educators.

Risk taking behaviors are prevalent because the young adolescent does not often consider the long-term complications of their immediate experiences. There is also some degree of perceived invincibility where the adolescent may respond, “Oh, that cant happen to me!” As a result experimentation with alcohol, cigarettes, and other drugs is widespread in this age group.

Finally, these young people begin to question parental values and beliefs, and shy away from communicating with adults leading to strained relationships and misunderstanding. A probing question from an adult may lead to a monosyllabic response from the teen and a frustrated attempt at conversation.

Obviously, offering diabetes education to young adolescence is a challenging task. However, it can also be rewarding and effective leading to better outcomes for those young people with diabetes. As diabetes educators, you have already shown a strong interest in helping adults deal with the daily challenges of diabetes. Now, by having a better understanding of the developmental characteristics of young people you can begin to tailor your instruction to better suit the needs of the adolescent and realize that you are making a major positive impact on a young life that needs you.

\*Special thanks to the GCISD, Division of Instruction, from which this information was obtained:

Developmental Characteristics of 13-15 year olds:

Physical:

- **Worry about being normal physically**
- Feel awkward about body
- Eating patterns change
- Skin problems emerge
- Wide differences in the rate of physical growth among individuals
- High energy and need for physical exercise and snacking

- Experience fluctuations in basal metabolism leading to extreme restlessness and extreme lethargy
- Ravenous appetite and peculiar tastes
- Uneven coordination

Emotional:

- Concerned about physical attractiveness
- Struggle with a sense of identity; striving for independence
- One word answers to adult questions
- Feeling unique and at times alone
- **Peer pressure is significant; desire to be perceived as “cool”**
- **Extreme sensitivity to the norms of the peer group**
- Strong desire to be involved in decision making processes
- Relationships with parents are changing; question parental values and may complain that their parents interfere with their independence
- Increasing distractions (music, phone, dress, computer, video games)
- Rules and limits are tested
- **Resent criticism and insults even though they may use them themselves**
- Alternating between unrealistically high self-expectations and poor self-concept

Mental:

- **Short term thinking may take precedence over long term planning**
- Like to challenge answers
- Risk taking behaviors arise out of lack of cause and effect thinking; therefore, there may be experimentation with drinking, drugs, cigarettes, and sex
- Idealistic thinking with concerns about fairness
- Want to try new things but may be reluctant because of fear and self-consciousness
- **Become easily “bored”**
- Interested in technology and how things work
- Learn well in cooperative groups
- Learn best when they are actively involved with ideas connected to their personal lives
- **Feelings of omnipotence and invulnerability**
- Do not distinguish between what they are thinking and what others are thinking; assume that others are concerned about the same things they are concerned about

References:

1. Anderson BJ, Auslander WF, Jung KC, Miller JP, Santiago JV, Abraham C, Hampton SE: Assessing family sharing of diabetes responsibility. *J Pediatr Psychol* 15: 477-492, 1990.
2. Diabetes Control and Complications Research Group: Effect of intensive diabetes treatment on the development and progression of long-term complications in adolescents with insulin-dependent diabetes mellitus. *J Pediatr* 125: 177-188, 1994.
3. Amiel SA, Sherwin RS, Simonson DC, Lauritano AA, Tamborland WV: Impaired insulin action in puberty: a contributing factor to poor glycemic control in adolescents with diabetes. *N Engl J Med* 315: 215-219, 1986.
4. Johnson SB, Silverstein J, Rosenbloom A, Carter R, Cunningham W: Assessing daily health management of childhood diabetes. *Health Psychol* 9: 545-564, 1986.
5. Hampson SE, Skinner TC, Hart J, Storey L, Gage H, Foxcroft D, et al. Effects of educational and psychosocial interventions for adolescents with diabetes mellitus: a systematic review. *Health Technol Assess* 2001; 5: 10.
6. Ingersoll GM, Orr DP, Herrold AJ, Golden MP: Cognitive maturity and self-management among adolescents with insulin-dependent diabetes mellitus. *J Pediatr* 108: 620-623, 1986.