19.1 ADA Glucose Goals for Children and Teens

	Toddler Preschoolers (0-6 yrs)	School Age (6-12 yrs)	Adolescents/ Young Adults (13-19 yrs)
A1c (%)	≤ 7.5%	< 8%	< 7.5%*
Before meal glucose	100 - 180 mg/dl (5.5-10 mmol/L)	90-180 mg/dl (5-10 mmol/L)	90-130 mg/dl (5-7.2 mmol/L)
Bedtime/overnight glucose	110-200 mg/dl (6.1-11.1 mmol/L)	100-180 mg/dl (5.5-10 mmol/L)	90-150 mg/dl (5-8.3 mmol/L)

The International Society for Pediatric and Adolescent Diabetes (ISPAD) recommends an HbA1c of less than 7.5% for all age groups. In Sweden, the recommendation is for this group to get as close to 7.0% as possible without problematic hypoglycemia.

19.2 When Is a Child Ready for Self-Care?

Children differ greatly in the age at which they can manage the self-care required on a pump. After acquiring a skill, relapses may occur, but the desire to manage the pump on their own is often reintroduced by the desire to stay overnight at camp or a friend's house.

When is a child ready to:

count carbs:	about 9 years
test blood sugar:	about 10 years
give a bolus:	about 10 years
insert an infusion set :	about 12 years
determine a carb bolus:	about 12 years

19.3 Needles and Kids

When inserting an infusion set or pod, or giving an injection or drawing blood from young children, remember that their imagination can be vivid. Reassurance may be needed.

Let them know that an infusion needle will not affect their heart or puncture a large blood vessel or cause bleeding, and their bodies easily replenish the small amounts of blood removed for blood tests. Encourage them to ask questions to allay their fears.

19.4 Prevent Afternoon Highs

A common problem among school age children and teens is a high glucose in the late afternoon or before dinner. This is often a result of neglecting to take boluses for after-school snacks. A parent can often follow the paper trail of wrappers and containers in the trash, then compare these with the history of boluses actually delivered.

If afternoon highs are a problem, review bolus history regularly and provide guidelines for bolusing for each snack. Label each food container with how many grams it contains, matched with a bolus dose. To cover lunches or afternoon snacks when a child or teen forgets to take carb boluses raise the afternoon basal rate. A pump can also be set up with a reminder to take a bolus at a certain time with a warning if a bolus was not taken.

19.5 Grams of Carbs for Lows in Children and Teens

Age	1-6 yrs	6-10 yrs	10 yrs-Adult
Grams of Carbs	**5-10 grs**	**10-15 grs**	**15-20 grs**
Glucose Tabs 5 grams each	1 - 2 tabs	2 - 3 tabs	3 - 4 tabs
Glucose Tabs 4 grams each	1 - 2 tabs	3 - 4 tabs	4 - 5 tabs
Orage Juice 1/3 cup = 10 grams	1/4 - 1/2 cup	1/2 - 3/4 cup	3/4 - 1 cup
Apple Juice 1/3 cup = 10 grams	1/4 - 1/2 cup	1/2 - 3/4 cup	3/4 - 1 cup
Table Sugar 4 grams per tsp.	2 tsps.	3 tsps.	4-5 tsps
Regular Soda 3 grams per oz	2 - 3 ozs	4 - 5 ozs	5 - 6 ozs
Lifesavers 3 grams each	2 - 3	4 - 5	5 - 7
Milk 8 oz = 12 grams	4 - 5 ozs	6 - 7 ozs	8 - 10 ozs

Adapted from Understanding Diabetes, 10 ed., by H. Peter Chase, M.D., 2002

19.6 What to Keep in Your School or Sleep-over Kit

- Insulin
- An insulin pen and pen needles
- Spare infusion sets, reservoirs and any tape or related supplies
- Glucose and ketone testing supplies
- Fast-acting carbs for lows
- Glucagon and glucose gel for severe lows
- Crackers and cheese, granola bars, or other snacks to cover exercise and activity
- Extra batteries or a spare charger
- Emergency contact phone and information