#### **Screening for Type 2 Diabetes**

If you think that your child/adolescent has risk factors or warning signs for type 2 diabetes have him/her see his/her healthcare provider. The healthcare provider may do a blood test to see if your child's blood sugar is higher than normal. The healthcare provider may also order other tests such as:

**Glycated hemoglobin (A1C) test:** a blood test that measures the average blood sugar level in your child's blood over the last two to three months.

**Fasting blood sugar test:** a blood test that measures the amount of sugar in your child's blood after the child has not eaten for 8-12 hours before the blood test.

**Oral glucose tolerance test:** a test that measures your child's blood sugar after the child has had a sugary drink. Several blood tests are taken over the next few hours.

**Urine ketone test:** a test that measures the amount of ketones in the body.

## **Treatment for Type 2 Diabetes**

In meeting with your child/adolescent healthcare provider he/she may recommend that your child's type 2 diabetes be treated by doing the following:

Checking your child's blood sugar levels several times each day.

**Eating healthy foods** that include whole foods like fruits, vegetables, and whole grains and avoiding processed or "fast" foods.

**Exercising daily** which will help your child's body use sugar and insulin better. If your child is overweight or obese, exercise will also help your child lose weight. It is recommended that children exercise 60 minutes daily.

Taking medicine if the healthcare provider said that it is necessary: Some children with type 2 diabetes need to take pills or insulin shots to keep their blood sugar at normal levels.

**Visiting your child's healthcare provider frequently:** It is important that your healthcare provider monitors your child's blood sugar levels and helps with lifestyle changes.

#### Resources

California Department of Education:

http://www.cde.ca.gov./ls/he/hn/diabetesmgnt.asp Centers for Disease Control and Prevention:

http://www.cdc.gov/diabetes/index.htm

Kids Health:

http://kidshealth.org/parent/diabetes basics/what/type2.html#

Mayo Clinic:

http://www.mayoclinic.com/health/type-2-diabetes-in-children/DS00946

U.S. Department of Agriculture:

http://www.mypyramid.gov/

Web MD:

http://diabetes.webmd.com/guide/skin-problems



California School Nurses Organization-CSNO 1225 8th Street, Suite 500, Sacramento, CA 95814 Phone: 916-448-5752-Toll Free: 888-268-2766-Fax: 916-448-5767 Email: csno@csno.org-Website: www.csno.org

# Type 2 Diabetes



# What Every Parent Should Know



A parent friendly supplemental guide supporting Education Code 49452.7

# What is Type 2 Diabetes?

Type 2 diabetes is a long term disease that is caused by high blood sugar levels in the blood. In a person without diabetes, insulin is released throughout the day and after eating. The insulin opens up the cells in the body so that glucose, a type of sugar formed from the breakdown of food, can be used for energy. In type 2 diabetes, the cells do not respond to the insulin (insulin resistance) or require higher amounts to be released. Eventually, the glucose ends up in the bloodstream, not the cells, and the person develops symptoms related to the high sugar amounts in the blood. These symptoms are mild at first and often go unnoticed. High blood sugar in the blood over time causes lasting damage to many body systems.

# **Risk Factors of Type 2 Diabetes**

Risk factors are factors that may increase the risk for developing type 2 diabetes These risk factors include:

Overweight: The number one risk factor for type 2 diabetes is being overweight Being overweight increases the body's resistance to insulin. A person with fat around the waist has a higher risk of developing diabetes

Unhealthy eating habits (poor food choices)

Not being active or not getting enough exercise

**Cholesterol:** Having an HDL cholesterol of less than 35 mg/dL or triglyceride level greater than 250 mg/dL

Race/ethnicity: African Americans, Asian/Pacific Islanders, Hispanics/Latinos, and Indigenous (Native) Americans all have high rates of diabetes

History of parent or sibling with type 2 diabetes

Puberty-Hormonal influences during puberty may cause insulin resistance

#### Warning Signs associated with Type 2 Diabetes

People who have type 2 diabetes may have one or more symptom(s), which include:

Increased thirst
Increased hunger
High blood pressure
Longer healing time for sores and cuts
Headaches
Frequent urination

Unexplained weight changes

Feeling weak and tired

Blurred or decreased vision

Irregular periods, no periods and/or excess facial

and body hair growth in girls.

Tingling or numbness in the hands or feet



**Acanthosis nigricans:** a thickening and darkening of the skin that may be related to diabetes or insulin resistance. It is usually seen in skin folds in the neck, under the arms and/or breasts. It often looks like the area is dirty.

Photographs used with permission from the ANTES Project, University of Texas

#### **What Health Professionals Know:**

According to the Centers for Disease Control and Prevention (CDC), being overweight is a serious health concern for children and adolescents. Over the past 20 years, the rate of children being overweight has tripled among adolescents and doubled among children ages 6 to 11. Being overweight is associated with many health-related problems, such as type 2 diabetes, high blood pressure, and high cholesterol. The onset of type 2 diabetes in children and adolescents can result in health problems such as heart disease, kidney failure, and impaired vision.



#### Why Should Parents be Concerned?

Type 2 diabetes is being diagnosed at an alarming rate among children and adolescents. Being overweight, making unhealthy food choices (poor diet), not being active (lack of exercise) and having a family history of diabetes places children at risk for a disease once thought to effect only adults. There is no cure for type 2 diabetes. Prevention, early detection and diagnosis are extremely important as type 2 diabetes can be prevented, managed and controlled with healthy lifestyle choices and medication, if needed. Preventing and managing type 2 diabetes may prevent long term damage to the blood vessels in the heart, kidneys, eyes and nerves.

#### **Preventing Type 2 diabetes**

A healthy lifestyle may help prevent your child (and you) from getting type 2 diabetes. A healthy lifestyle includes:

**Eating healthy, whole foods:** Eating mostly whole foods such as fruits, vegetables, whole grains, and avoiding processed or "fast" foods is important. **Exercising regularly:** The CDC recommends 60 minutes of daily exercise for chil-

dren and adolescents. Exercise will help your child's body use sugar and insulin better. If your child is overweight, exercise will also help your child lose weight. **Losing weight, if overweight:** Eating the right sized food portions as recommended by the U.S. Department of Agriculture. http://www.mypyramid.gov/