

Type 1 Diabetes and Mental Health: What Texas School Psychologists Need to Know

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1

Learning Objectives

Understand the impact of T1D on physical, educational, and mental health in children and adolescents.

Identify the barriers to support for students with T1D.

Strategies to provide effective assessments and support for students with T1D within the school setting.

Enhance collaboration among school staff to ensure comprehensive care for students with T1D.

2

Knowledge Check:
**Do you know
Type 1 Diabetes?**
True or False



3

**Them: "But type 1 diabetes and
type 2 diabetes are the same
thing"**

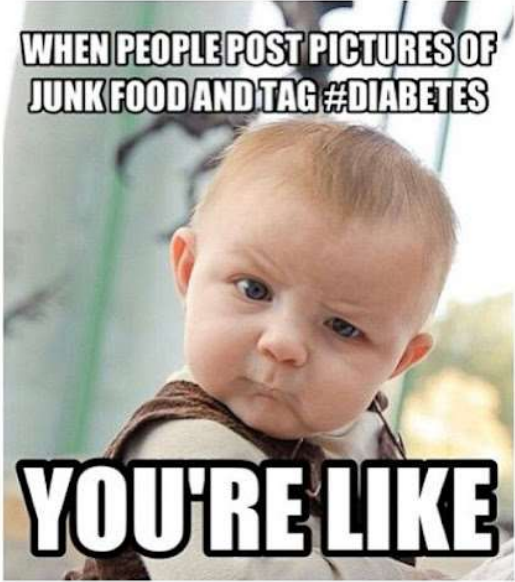
Me:



T or F
Type 1 and
Type 2
Diabetes are
the same
thing?

4

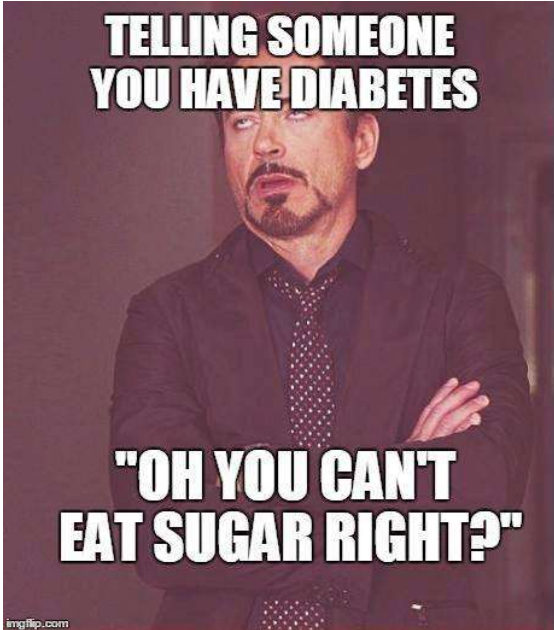
T or F
Eating "too much
sugar" will cause
Type 1 Diabetes?



WHEN PEOPLE POST PICTURES OF
JUNK FOOD AND TAG #DIABETES

YOU'RE LIKE

5



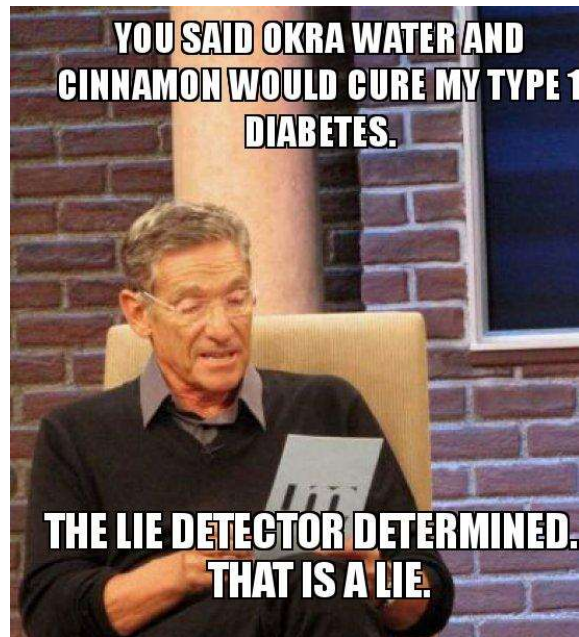
TELLING SOMEONE
YOU HAVE DIABETES

"OH YOU CAN'T
EAT SUGAR RIGHT?"

T or F
An Individual
with Type 1
Diabetes
cannot eat
sugar?

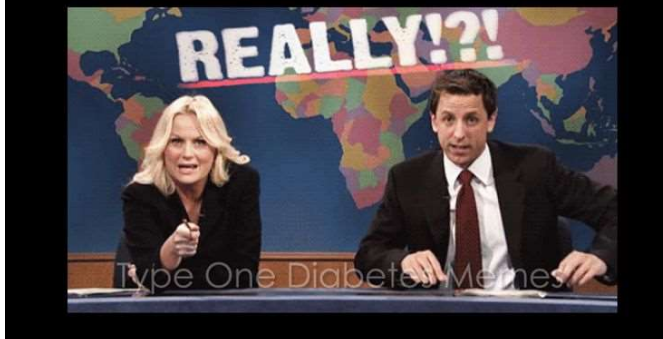
6

T or F
Diet, Exercise,
and Insulin are a
cure for Type 1
Diabetes?



7

When someone says..
"You have type 1 diabetes?
I thought only kids have that."



T or F
Children can
grow out of
Type 1
Diabetes?

8

what is type 1?

AUTO-IMMUNE DISEASE

**PANCREAS STOPS PRODUCING INSULIN,
A HORMONE NEEDED TO CONTROL
GLUCOSE IN THE BLOOD STREAM**

NOT CURRENTLY A CURE

NOT PREVENTABLE

NOT A LIFESTYLE DISEASE

FULL TIME BALANCING ACT

9

WHAT IS Type 1?

**BODY DOESN'T
MAKE INSULIN**

**MUST INJECT
INSULIN TO LIVE**

**AUTOIMMUNE
DISORDER. NOT
RELATED TO DIET
OR EXERCISE**

**DIAGNOSED AT
ANY AGE, BUT
50% ARE KIDS**

WHAT IS Type 2?

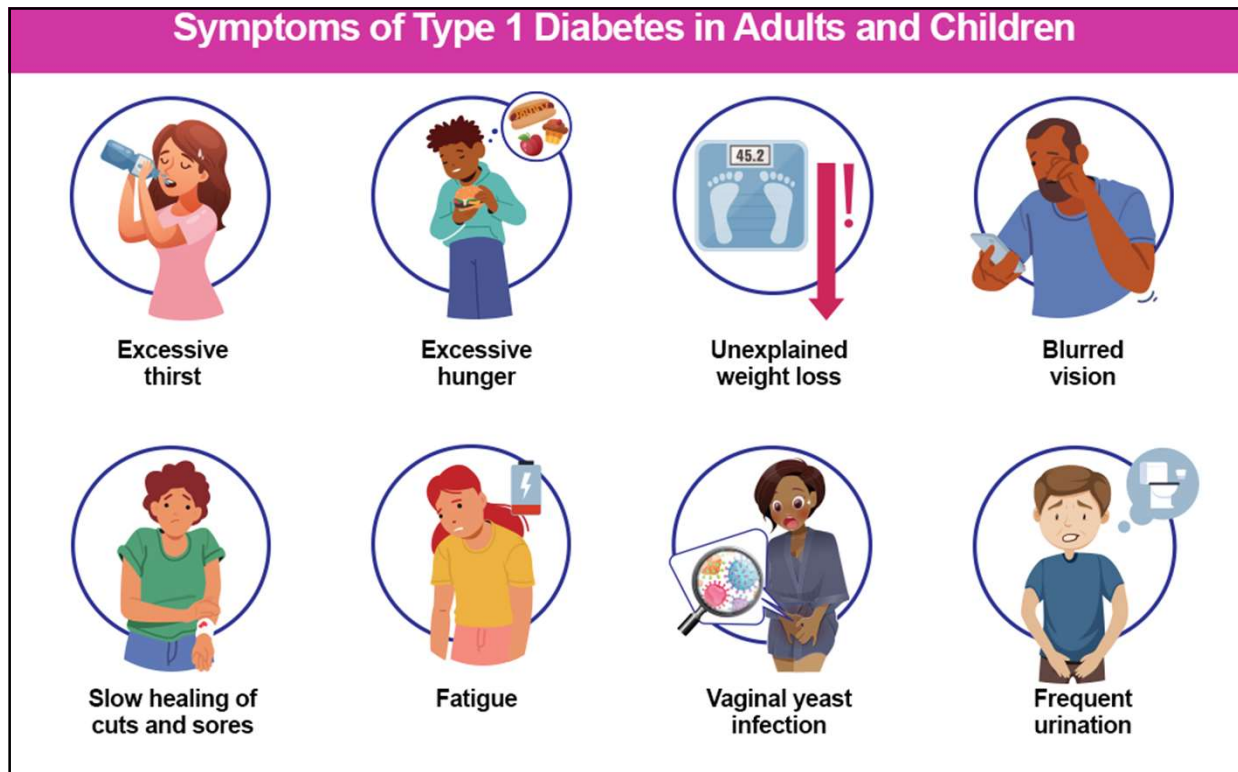
**BODY CAN'T USE
INSULIN PROPERLY**

**MANAGED THROUGH
DIET, EXERCISE, ORAL
MEDICATION AND
SOMETIMES INSULIN**

**INFLUENCED BY
DIET, EXERCISE
AND GENETICS**

**DIAGNOSED AT
ANY AGE**

10



11



12

Statistics

In the U.S. 304,000 youth under 20 have been diagnosed with T1D.

A 28% increase in T1D diagnosis during the COVID-19 pandemic.


(D'Souza et al., 2023; IDF, 2022; CDC, 2024)

13

Blood Sugar Levels

Low Blood Sugar (Hypoglycemia)

- Shakiness
- Sweating
- Hunger
- Dizziness
- Confusion
- Lethargy
- Irritability
- Changed Behavior
- Argumentative



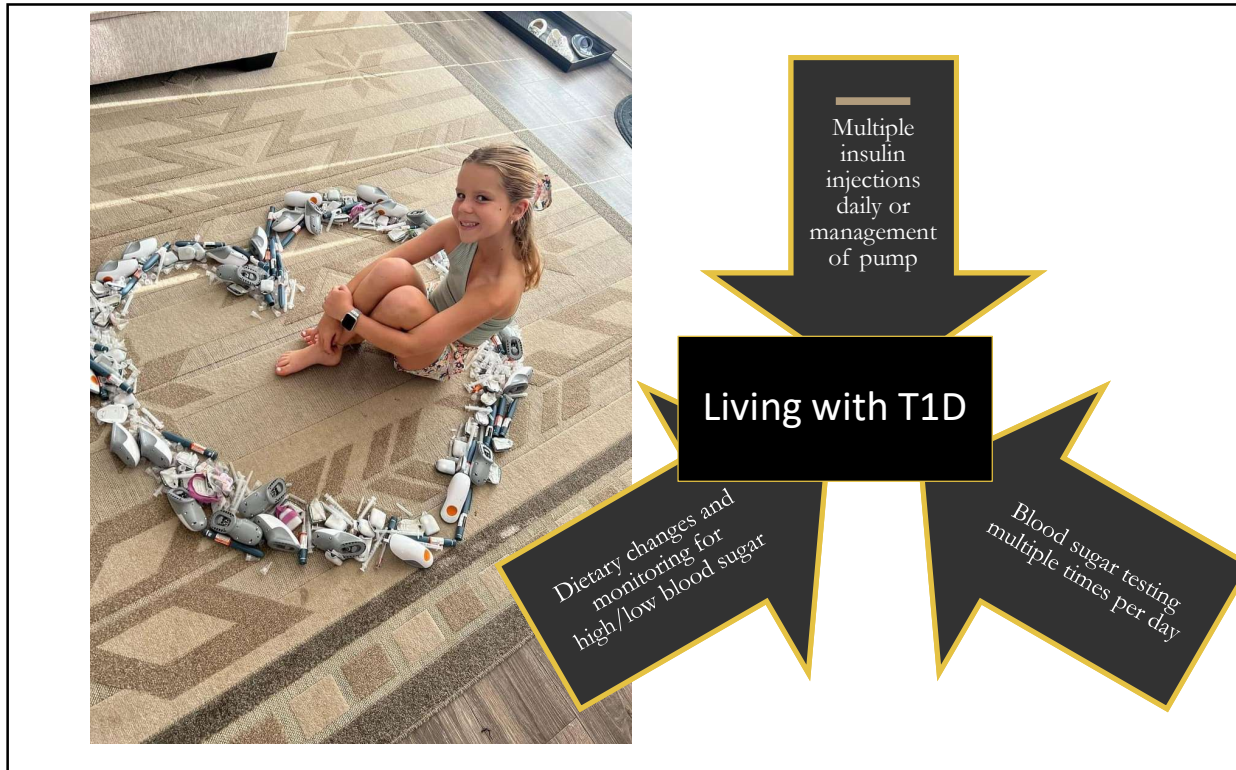
High Blood Sugar (Hyperglycemia)

- Increased Thirst
- Dry Mouth
- Frequent or increased Urination
- Fatigue
- Fruity Breath

Treatment
Candy, Juice, Glucose Tablets, Glucagon











Treatment
Insulin

14



15

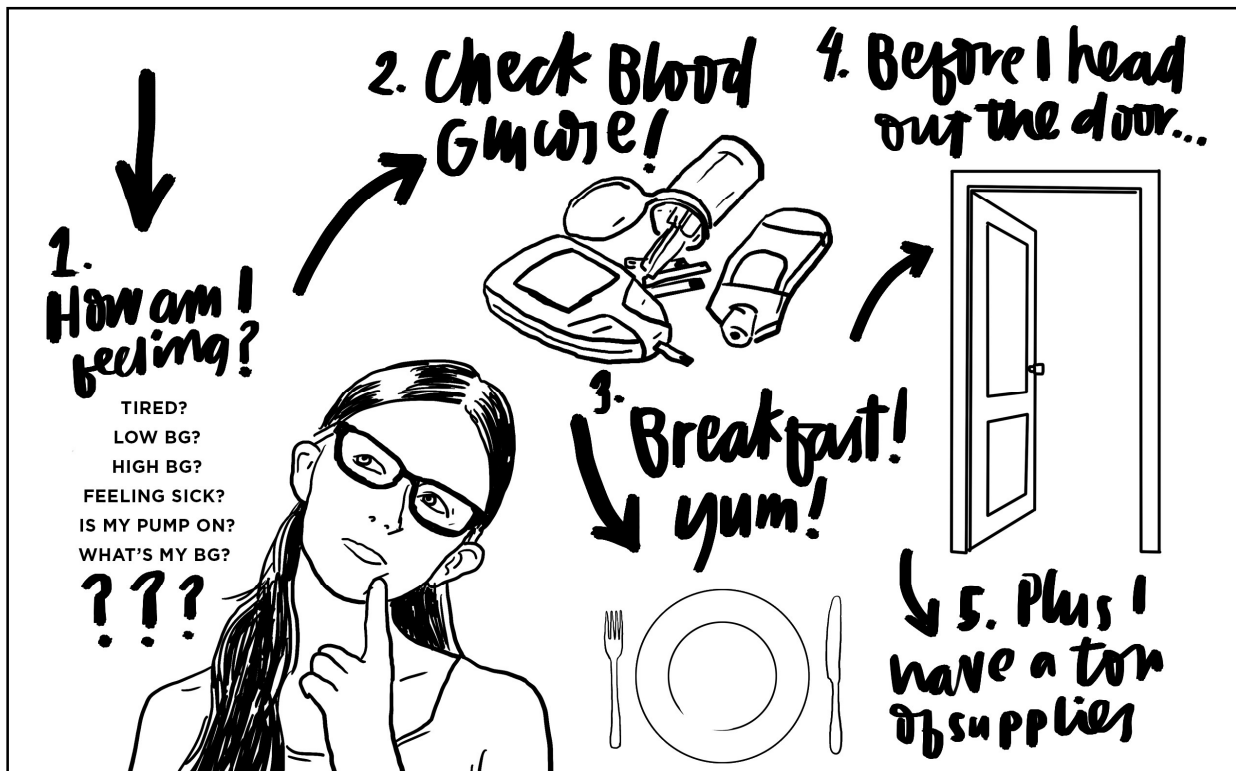
T1D Supplies

<p> INSULIN PUMP, PENS, OR SYRINGES</p>	<p> EXTRA BATTERIES AND/OR A CHARGER FOR METER/ PUMP/ CGM</p>
<p> CGM RECEIVER OR A PHONE THAT IS CONNECTED</p>	<p> EXTRA PUMP SITES IN CASE ONE RIPS OUT ACCIDENTLY OR STOPS WORKING</p>
<p> BLOOD GLUCOSE METER, TEST STRIPS, AND PRICKER</p>	<p> GLUCOSE TABLETS, CANDY OR JUICE</p>
<p> ALCOHOL SWABS TO CLEAN FINGERS BEFORE TESTING</p>	<p> AN EMERGENCY GLUCAGON</p>
<p> EXTRA NEEDLES FOR THE PRICKER</p>	<p> A MEDICAL ID TAG OF SOME KIND</p>

16

WELL, WHEN I GET UP IN THE MORNING,
HERE IS WHAT I HAVE TO DO:

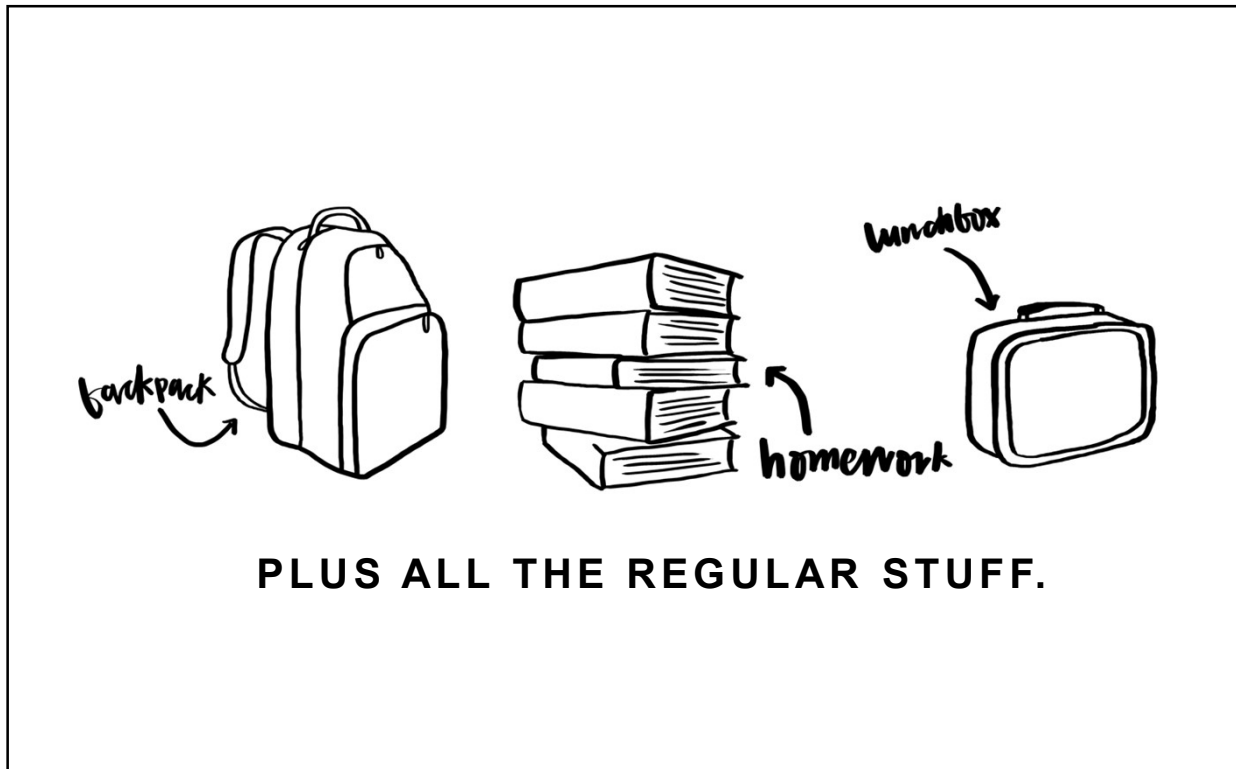
17



18



19



20

DURING THE SCHOOL DAY I HAVE TO DO SOME EXTRA STUFF TOO, LIKE...

TESTING MY BG BEFORE WE TAKE A TEST. IF IT'S TOO HIGH OR LOW, MY BRAIN DOESN'T WORK AS WELL AND I CAN'T TAKE THE TEST UNTIL IT RETURNS TO NORMAL RANGE.

BEFORE WE HAVE LUNCH OR A SNACK, I HAVE TO TEST MY BG AND CALCULATE THE AMOUNT OF CARBS IN THE FOOD, THEN CALCULATE HOW MUCH INSULIN TO GIVE MYSELF.

I MIGHT NEED TO GO TO THE NURSES OFFICE FOR HELP TREATING A HIGH OR LOW BG, OR BECAUSE I DON'T FEEL GOOD.

BEFORE SPORTS OR EXTRA - CURRICULAR ACTIVITIES AFTER SCHOOL, I NEED TO TEST MY BG.

I MIGHT HAVE TO SIT OUT OF P.E. BECAUSE OF A LOW BG WHILE I HAVE SOME SUGAR.

BEFORE GOING HOME, I NEED TO TEST MY BG.

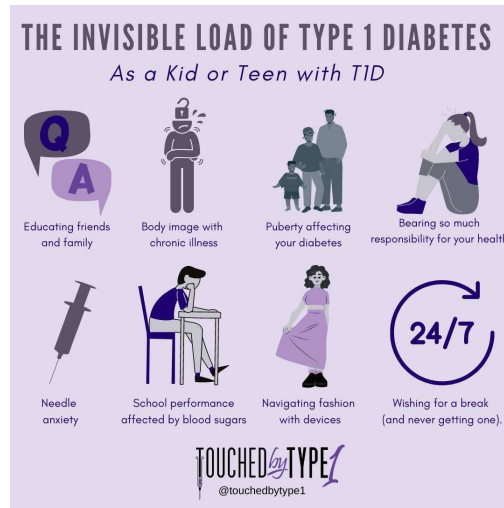
21

SOMETIMES I MIGHT NEED HELP

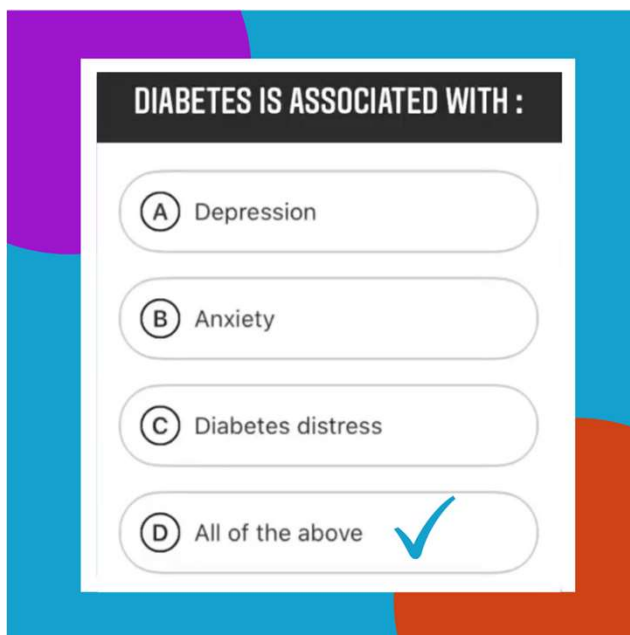
22



WE LOOK FINE ON THE OUTSIDE,
*but on the inside our bodies and minds
work just a bit differently.*




23

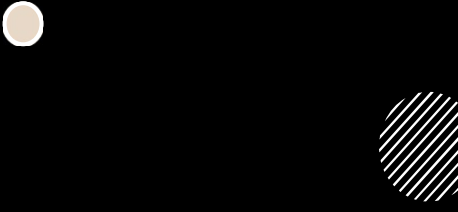



T or F
People with
T1D are at
higher risk for
mental health
disorders ?

24




Mental Health Implications of T1D






Research has shown that youth with T1D are about twice as likely to be diagnosed with a psychiatric disorder (CDC, 2024).



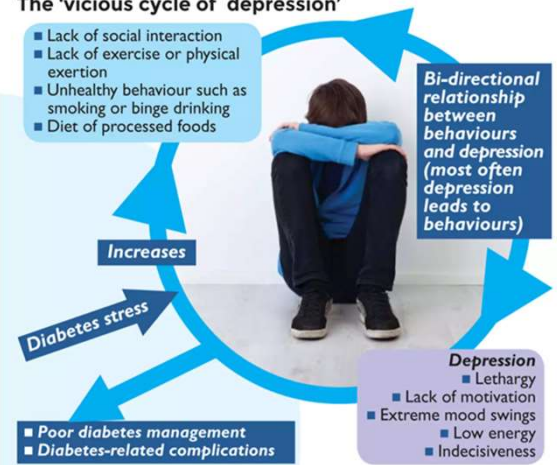
Depression – 8-27% youth report elevated depressive symptoms (Majidi et al., 2020).



Anxiety – 13-21.3% experience anxiety (Bernstein, Stockwell, Gallagher, Rosenthal, & Soren, 2013; Herzer & Hood, 2009; Kovacs et al., 1997).

25

The 'vicious cycle of depression'



Behaviours

- Lack of social interaction
- Lack of exercise or physical exertion
- Unhealthy behaviour such as smoking or binge drinking
- Diet of processed foods

Depression

- Lethargy
- Lack of motivation
- Extreme mood swings
- Low energy
- Indecisiveness

Diabetes stress

- Poor diabetes management
- Diabetes-related complications

Bi-directional relationship between behaviours and depression (most often depression leads to behaviours)

Increases

Mental Health Implications of T1D

Depression is more common in children and teens with type 1 diabetes (T1D) than in those without T1D (CDC, 2024).

Depression is more likely to occur in girls and in those who don't regularly monitor their blood glucose levels (Alassaf et al., 2023).

Depression can negatively impact health outcomes related to diabetes, such as glycemic control and diabetic ketoacidosis (DKA) admissions (CDC, 2024).

26

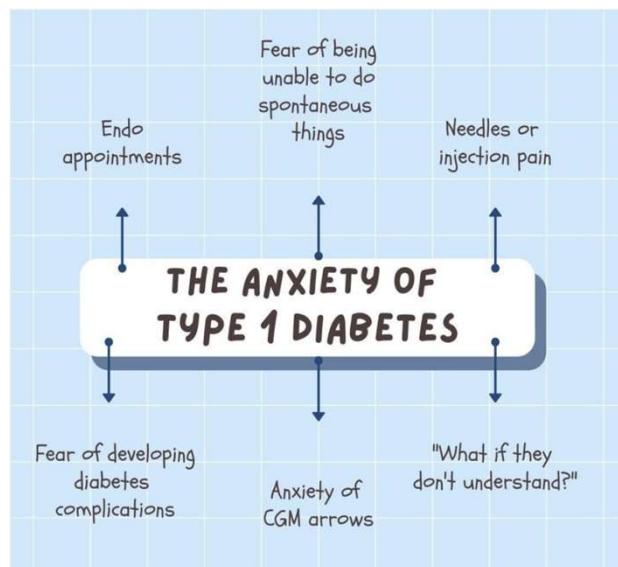
Mental Health Implications of T1D

Anxiety symptoms are prevalent in youth with T1D.

Anxiety symptoms were associated with higher glycosylated hemoglobin (HbA1c) levels, poorer self-management and coping behaviors, depressive symptoms, fear of hypoglycemia, and lower blood glucose monitoring frequency.

Girls were at a higher risk of anxiety symptoms than boys.

Rechenberg et al., 2017



27

2018 Diabetes Canada CPG – Chapter 18: Diabetes and Mental Health

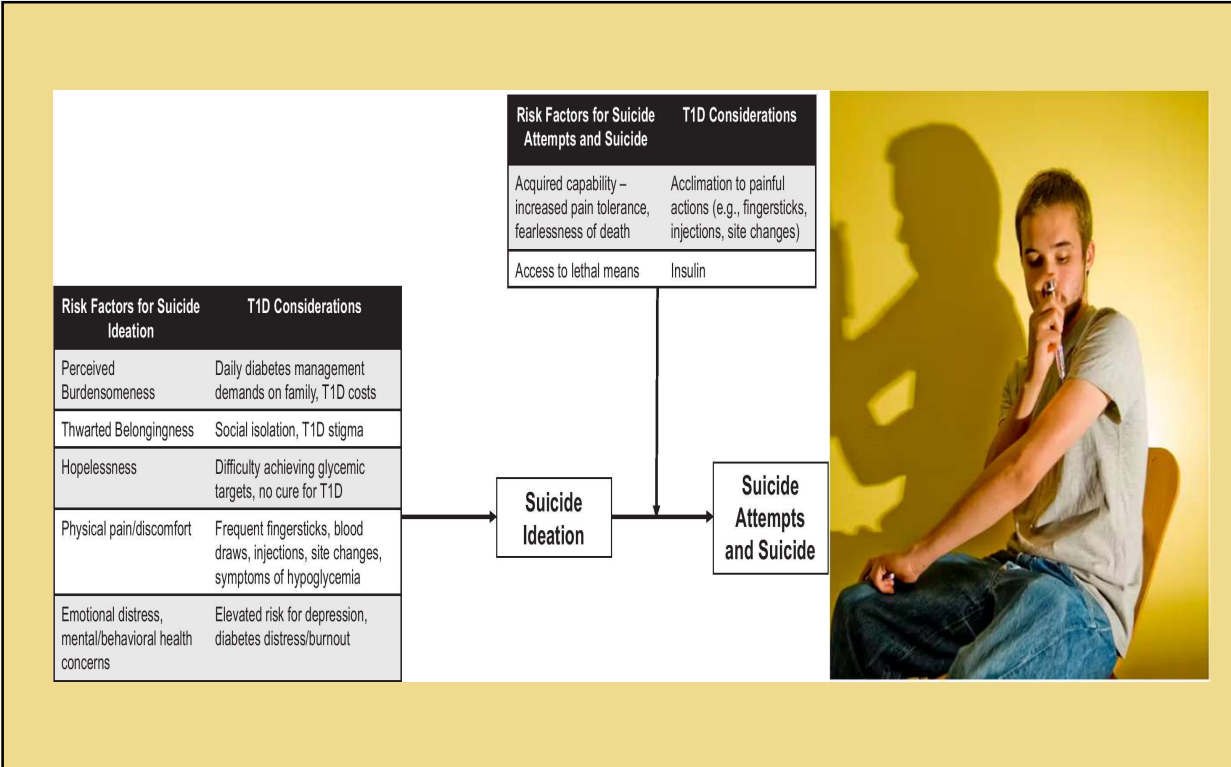
Other Psychiatric Associated with T1D

- Diabetes Burnout
- Diabetes Distress
- Feeding and Eating Disorders
- Schizophrenia and other psychotic disorders

28



29




30

Suicide is a leading cause of death among young people ages 20 to 24 in the United States, and the risk is even higher in individuals with type 1 diabetes. In fact, up to 7% of deaths in individuals with type 1 diabetes are a result of suicide. However, current screening tools for depression and suicide often miss individuals at risk of suicide and the risk among the type 1 diabetes patient population is greatly underestimated.

- **Increased Risk of Suicidal Ideation:**
 - Adolescents with T1D are 61% more likely to have suicidal thoughts (Fuller-Thomson & Sawyer, 2009).
 - T1D youth are 1.7 times more likely to attempt suicide (Butwicka et al., 2015).

31


Barriers to Mental Health Support



Lack of Awareness and Training

Many school psychologists (and other professionals) are not trained to recognize mental health issues linked to T1D.

Routine Diabetes appointments often do not address mental health.



Limited Access to Resources

Mental health services for students with T1D are often underfunded or underutilized.

No standard referral pathway for people with diabetes who struggle with mental health



Social Stigma

Fear of being treated differently can prevent students from seeking help.

32

Legal Protections Under Section 504 & IDEA 2004

- Students with T1D qualify for accommodations under Section 504 because diabetes a chronic condition that can substantially limit major life activities such as eating, caring for oneself, and, at times, learning.
- IDEA 2004 provides further protections for those whose T1D has a greater impact on their educational performance.

Other health impairment. A student with other health impairment is one who has been determined to meet the criteria for other health impairment due to chronic or acute health problems such as **DIABETES** as stated in 34 CFR, §300.8(c)(9).

33

School Psychologists' Responsibilities Related to Diabetes

1

Conduct assessments to identify needs.

2

Collaborate on creating Individualized Education Programs (IEPs) or 504 plans.

3

Advocate for appropriate accommodations (e.g., flexible class schedules, frequent breaks).

34

Strategies for Supporting Students with T1D

Assessment

- Include physical, educational, *and mental health components*.
- Implement mental health screenings for students with T1D.

Collaborative Care Plans

- Involve school nurses, counselors, and parents in the care plan.
- Ensure open communication between outside medical professionals and school staff.

35

Strategies for Supporting Students with T1D

Accommodations

- Blood Glucose Monitoring including Access to Cell Phone and Wifi
- Access to Snacks and Water
- Bathroom Access
- Insulin Administration
- Homework Accommodations
- Emergency Preparedness
- Field Trips and Extracurricular Activities
- Transportation
- Physical Education Modification
- Testing Accommodations (STAAR, TELPAS, PSAT, SAT, ACT, etc.)
- Absence and Tardiness Flexibility

<https://diabetes.org/advocacy/safe-at-school-state-laws/section-504-plan>

<https://www.breakthrough1d.org/t1d-resources/school/>

<https://www.touchedbytype1.org/resources>

36

How Type 1 Diabetes Affects Test Taking

Blood sugar fluctuations:

Both high blood sugar (hyperglycemia) and low blood sugar (hypoglycemia) can negatively impact cognitive abilities like focus, memory, and decision making, which are crucial for test taking.

Stress-induced changes:

The stress of exams can further exacerbate blood sugar fluctuations, making it even harder to maintain stable levels.

Physical symptoms:

High blood sugar can cause symptoms like thirst, frequent urination, and fatigue, which can distract during a test. Low blood sugar can lead to shakiness, sweating, confusion, and difficulty thinking clearly.

37

Reasonable adjustments

Schools are required to make reasonable adjustments for students with type 1 diabetes. These may include:

- Ensuring a student is informed of additional support available to them prior to an exam or assessment
- Allowing students to take drinks and snacks into an exam or assessment to use as necessary
- Allowing a student to use a mobile phone to monitor their glucose levels
- Ensuring students can take their insulin supplies into the exam or assessment for use as necessary, or wear their insulin pump in the examination room (pump should always be worn)
- Providing a student with additional time and rest breaks to treat a low or high glucose level
- Allowing students to check glucose levels before and during exam or assessment
- Allowing students to have unrestricted toilet access during an exam or assessment
- Consider changing assessments to another time if glucose levels are unstable
- Providing students with extra time to complete work if glucose levels are unstable
- Ensuring all exam supervisors are aware of the students' need to check blood glucose levels and that they may need to eat during the assessment

38

STAAR/TELPAS

Assistive Technology: Applications			
Accessibility Feature	Description	Allowed Examples	Not Allowed Examples
Use of an Electronic Device to Monitor a Health Condition	A student's electronic device may be used to monitor a health condition. Test security must be maintained.	During a test administration, a student places her mobile phone on her desk to monitor her glucose levels through an app on the phone. Because the phone is on the student's desk, the test administrator is able to monitor phone use.	A student is allowed to keep his mobile phone in his backpack and take it out periodically to monitor his glucose levels through an app. Because the phone is not continuously accessible, the test administrator is not able to monitor phone use.

<https://txassessmentdocs.atlassian.net/wiki/spaces/ODCCM/pages/2793210063/Accessibility+Features>

39

HB 699 requires school districts to excuse an absence and waive promotion requirements for students who are diagnosed with severe or life-threatening illnesses or are undergoing related treatments.

Riley's Rule: HB 699
 (May apply widely to students eligible under OHI/504)

A student's excused absences under Riley's Rule may not be considered in determining whether the student satisfies the requirement of attendance for at least 90 percent of the days class is offered in order to be awarded a final grade or credit for a class.

The changes under HB 699 began with the 2021-2022 school year.

<https://tea.texas.gov/about-tea/government-relations-and-legal/government-relations/2021-briefing-book.pdf>
<https://capitol.texas.gov/tlodocs/87R/billtext/html/HB00699E.htm>

40

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