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THE BAHAMAS chapter



Alcohol Use, Diabetes, and Mental Health: Risks, Intersections, and Care

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IMPORTANT *Initiative!*



Health & Wellness



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Conflict of Interest Disclosure

I have no **financial
interests** to declare.





OUTLINE



Alcohol Use Disorder (AUD)



The connection between **mental health** and diabetes



**Drinking Alcohol and Diabetes:
Do They Mix?**

Closing Remarks





INTRODUCTION



MENTAL HEALTH



Caring for Our Mental Health

Many individuals may place an emphasis on **physical well-being**, but fail to adhere to their *mental well-being*.

Definitions

Health

- Health means the absence of both physical and mental diseases.

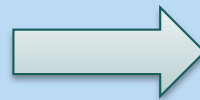
Wellness

- Wellness, on the other hand, is the state of living a healthy lifestyle.



(WHO, 2026)

What is Mental Health?



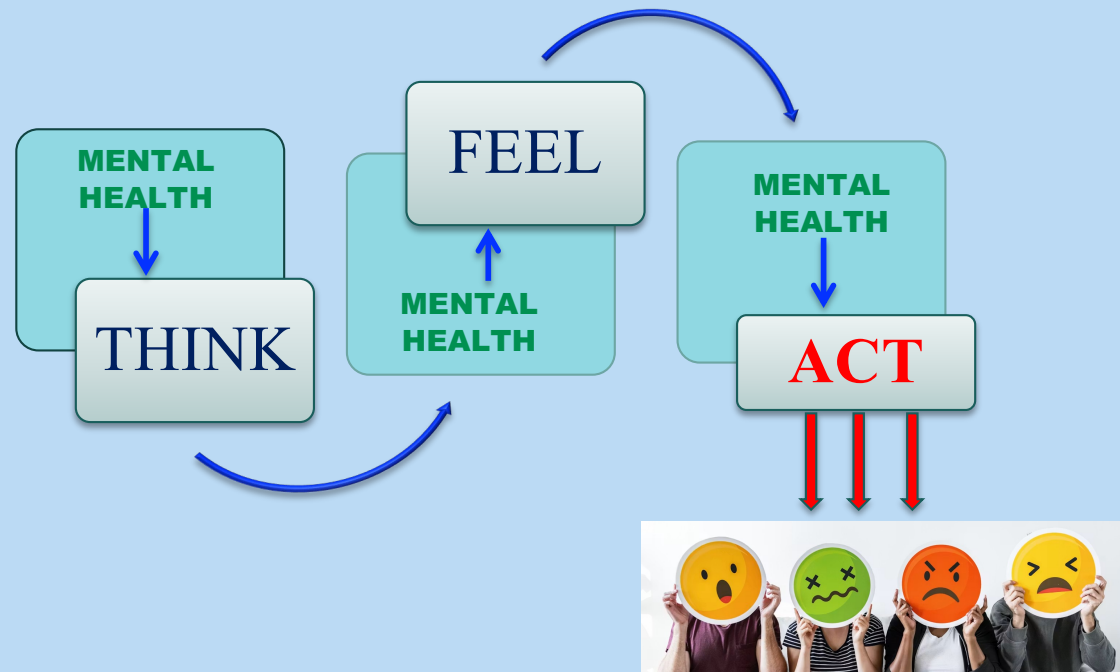
A state of **well-being** in which the individual:

1. **Realizes his or her own abilities**,
2. **Can cope with the normal stresses of life**,
3. **Can work productively and fruitfully, and**
4. **Is able to make a contribution to his or her community**

(WHO, 2022)



Why is Mental Health Important?



Mental Health - Mental Illness Continuum



(University of Michigan, n.d.)

World mental health report



Mental health conditions

1 in **7**

people in the world live with a **mental health condition.**





Mental health problems affect 10–20% of children and adolescents.

Mental health challenges often **begin early in life.**

Many signs in children are quietly missed.



About 1 in 7 children and adolescents live with a mental health condition.



Many mental health conditions begin during childhood and adolescence



Half of all lifetime cases begin by age 14

(Kieling et al, 2011; WHO, 2025)

Mental health is an essential indicator of a society's overall **well-being**.

Mental health interacts **closely** with **physical health**: *people with chronic physical conditions often also have mental health issues.*



Top 2 Mental Health Issues

Depression

- Sadness
- Hopelessness
- Loss of interest in hobbies/activities
- Low energy
- Lack of focus/concentration
- Appetite or weight change



Anxiety

- Pounding or rapid heartbeat
- Shortness of breath
- Dizziness
- Sweating
- Numbness
- Nausea



(WHO, 2025)

**THERE IS NO HEALTH WITHOUT
MENTAL HEALTH**



**Your mental health is
just as important as your
physical health.**



YOU &
YOUR
CHILD



What is your addiction?

Addiction

- An **emotional state** and sometimes a **physical state** caused when a person takes a drug or engages in an activity
- Specific abnormality of the **brain's reward system (limbic system)** producing **repetitive use despite negative consequences**
- Characterized by an **uncontrollable impulse** with a person **rationalizing** and being in **denial**

Addiction (cont.)

- A **chronic brain disease** that involves **cravings and** has the potential for both **recurrence (relapse)** and **recovery**
- A **primary, chronic disease** of **brain reward, motivation, memory,** and **related circuitry**
 - **Dysfunction** in these circuits is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors
 - **Dopamine** heightens **salience** or **motivational pull**



(ASAM, n.d.)

Addiction (cont.)



*A [temporary] substitute satisfaction for
an essential **unmet need** and a
technique for **avoiding painful emotions***

- Dr. Lynn John Rambeck

5 FACTORS THAT CONTRIBUTE TO ADDICTION



Genetics



Mental Illness



Home &
Social
Environment



Stress



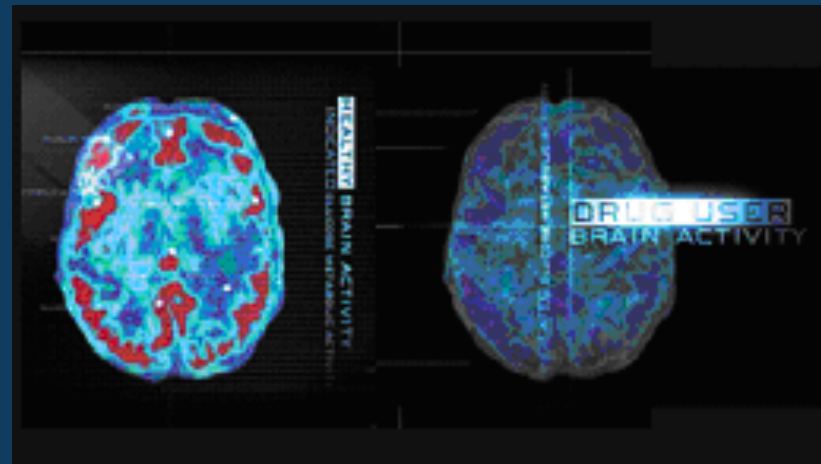
Trauma /
Abuse

(Mayo Clinic, 2025; NIDA, 2018)

What is Addiction?

- Characterized by **compulsive behavior**
- The **continued abuse of drugs** or doing a behavior despite **adverse consequences**
- **A chronic, potentially relapsing disorder**
- Substitute **satisfaction** for **unmet needs** and dealing with **painful emotions**

Addiction is a
“**Brain Disease**”



(ASAM, n.d.)



Types of Addictions

DEFINITIONS

□ DRUG

- Any substance that, once introduced into a person's body, **changes one or more of its functions** (emotions, intelligence, behaviors)



□ ILLEGAL DRUG USE

- Use of an **illegal substance** (marijuana, cocaine, heroin)
- Using a drug for a **purpose different from its original use** (using cough syrup for its stimulant effects)
- Using a substance that was **not originally created for use as a drug** (sniffing glue, inhaling gasoline)
- Using a substance that is **ordinarily socially acceptable BUT NOT in situations of responsibility** (a pilot flying a plane after consuming alcohol)



(NIH, n.d.)

DEFINITIONS (cont.)



☐ ALCOHOL

- **Ethanol** is the ingredient found in beer, wine, and spirits that can cause drunkenness
 - Formed when **yeast ferments** the sugars in different foods
 - **CNS depressant**
 - **Legal in the majority of countries**
- Local names: **Rum, spirits, beers, stouts, “cold ones”**
- **Alcohol intoxication:** Garrulous, slurred speech, uninhibited, “**red**” face, slow motor performance, decreased thinking ability, increased incoordination, increasing judgment errors, moody, impaired vital signs, vomiting, “**alcohol blackout**”
- **Chronic use:** Depressed mood, “**alcohol facies**”, poor dentition, absenteeism and under-productivity at work, tolerance, liver enlargement, fatty liver, alcohol hepatitis, cirrhosis of the liver
- **Alcohol withdrawal:** “Shakes,” seizures, **delirium tremens, sudden death**

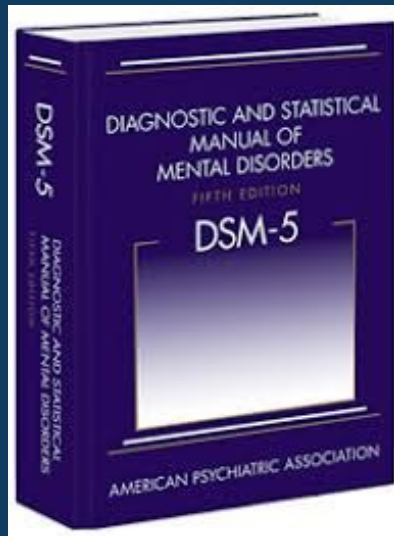
SPECTRUM OF ALCOHOL USE DISORDER



Alcohol use disorder (AUD) is a medical condition characterized by an impaired ability to stop or control alcohol use despite social, occupational, or health consequences. Considered a brain disorder, AUD can be mild, moderate or severe.

Definitions & Criteria

ALCOHOL USE DISORDER (AUD)



- To be diagnosed with an **AUD** must meet the criteria outlined in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)*
- Under DSM–5, anyone meeting **any two of the 11 criteria during the same 12-month period** receives a diagnosis of AUD
- Severity of an AUD—**mild, moderate, or severe**—is based on the number of criteria met.



(APA, 2013)

DSM-5 diagnosis criteria for alcohol use disorder*

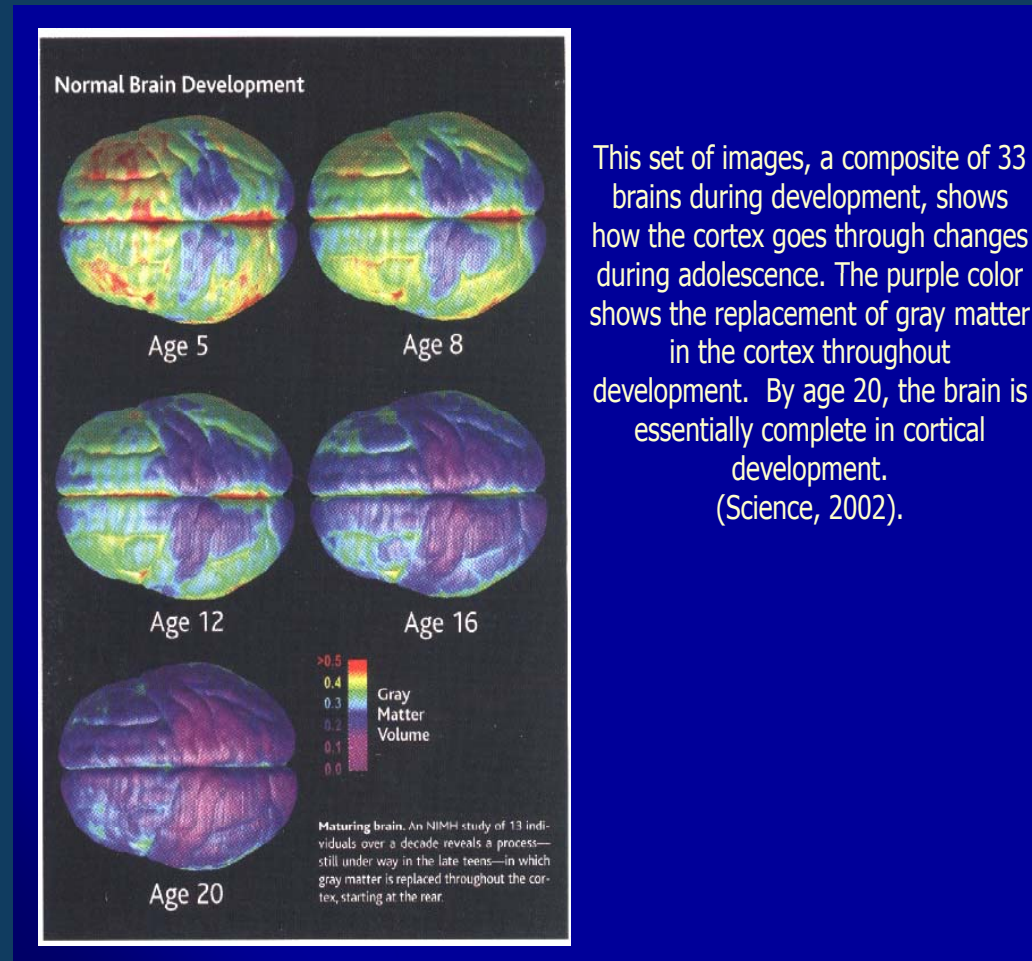
1. Alcohol is often taken in larger amounts or over a longer period than was intended
2. There is a persistent desire or unsuccessful efforts to cut down or control alcohol use
3. A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects
4. Craving or strong desire, or urge to use alcohol
5. Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home
6. Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol
7. Important social, occupational, or recreational activities are given up or reduced because of alcohol use
8. Recurrent alcohol use in situations in which it is physically hazardous
9. Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol
10. Tolerance, as defined by either of the following:
 - a. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect
 - b. A markedly diminished effect with continued use of the same amount of alcohol
11. Withdrawal or taking alcohol to relieve withdrawal

**(At least of 2 symptoms in past 1 year; mild disorder:2-3; moderate:4-5; severe disorder \geq 6)*



The Brain, Drugs, and Developmental Stages

- The brain's capacity to adapt to substance use is also very different depending on the **individual's age in the developmental cycle**
- The brain is constantly changing and even more so from birth to about **age 21-25**
- There are significant advances in the development of the higher cortical areas during adolescence, and **substance use before this last stage of major brain development has serious consequences for continued development**



Clinical Presentation (CP)

ALCOHOLISM SCREENING

"CAGE"

	DESCRIPTION	QUESTION
C	CONCERN by the person that there is a problem	Have you ever felt that you should CUT down on your drinking?
A	APPARENT to others that there is a problem	Have you ever become ANNOYED by criticisms of your drinking?
G	GRAVE consequences	Have you ever felt GUILTY about your drinking?
E	EVIDENCE of dependence or tolerance	Have you ever had a morning EYE OPENER to get rid of a hangover?

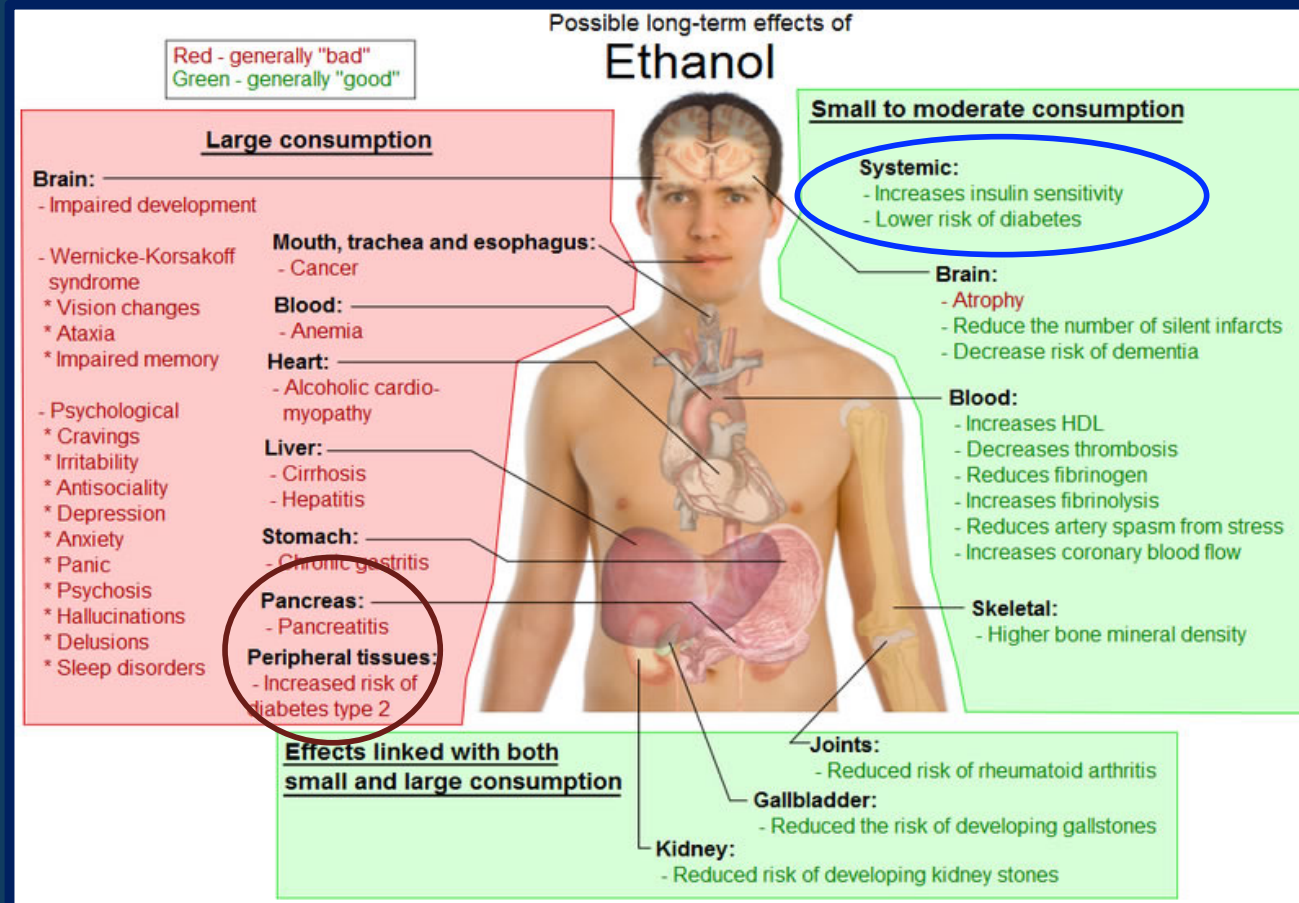
© 2015 Nurseslabs.com

LEARN MORE: [CAGE QUESTIONNAIRE](#)

CAGE questionnaire is a widely used and an extensively validated method of screening for alcoholism. Two "yes" responses indicate that the possibility of alcoholism should be investigated further.



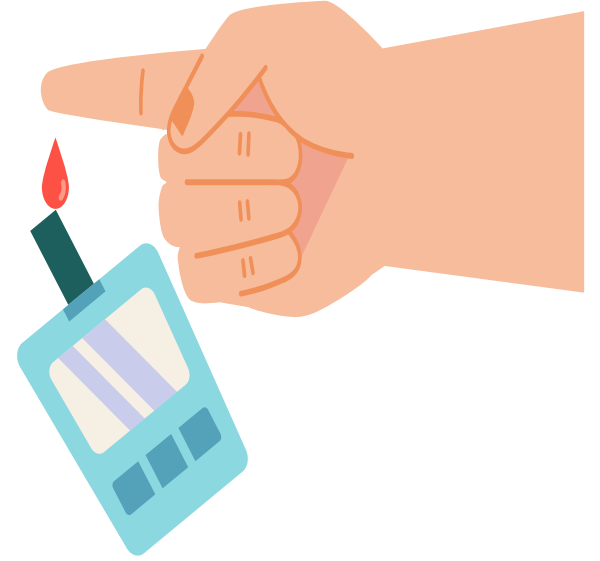
Complications



DIABETES



MENTAL ILLNESS



What is **diabetes**?



- ▶ **Diabetes mellitus (DM)** is a group of diseases characterized by **high levels of blood sugar (glucose)** resulting from defects in **insulin production, insulin action, or both**

According to the **World Health Organization ...**

- **Diabetes** is a **metabolic disorder**. . . characterized by chronic **hyperglycaemia** with **disturbances of carbohydrate, fat, and protein metabolism** resulting from defects in **insulin secretion, insulin action, or both**



(WHO, 2025)

What is **diabetes**? (cont)

- **Type 1 (Insulin-Dependent Diabetes Mellitus)**
 - Affects **5%– 10%** of all persons with diabetes
 - Body **no longer produces insulin** due to autoimmune destruction of pancreatic cells that produce it
 - Caucasians
- **Type 2 (Non-Insulin Dependent Diabetes Mellitus)**
 - Affects **80% – 90%** of all persons with the disease
 - **Not enough insulin is produced** or **insulin resistance**
 - **Blacks, Hispanics, Native American Indians**
 - **Increasingly being diagnosed in children and adolescents**
- **Gestational diabetes**
 - Affects about **5%**
 - **Diabetes in pregnancy**





GLOBAL PREVALENCE OF DIABETES



- **589 million adults (20-79 years) are living with diabetes (≈ 1 in 9)**
- This number is predicted to rise to **643 million** by **2030** and **853 million** by **2050**
- Over **3 in 4 adults** with diabetes live in **low- and middle-income countries**

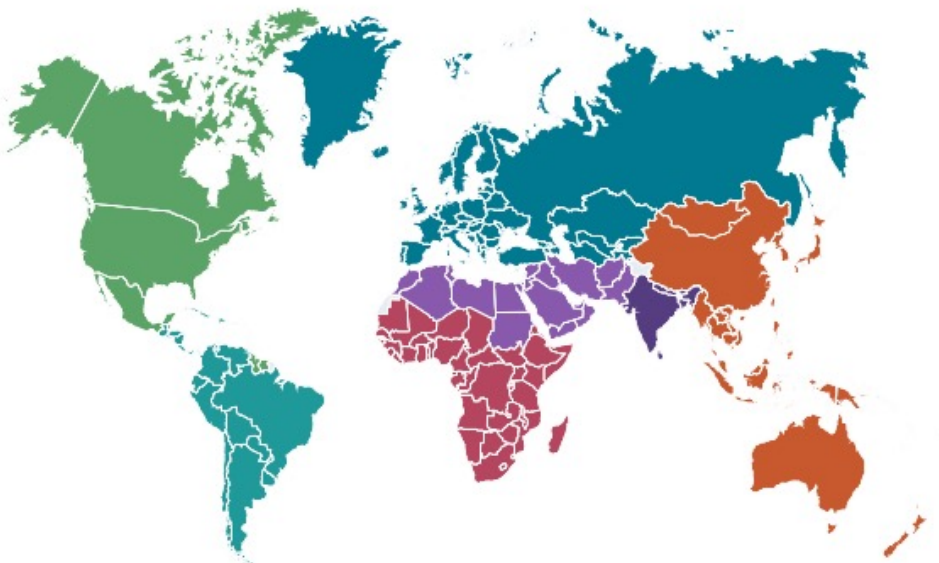


International
Diabetes
Federation



(2025)

Map 1 Number of people with diabetes worldwide and per IDF Region, in 2024–2050 (20–79 years)

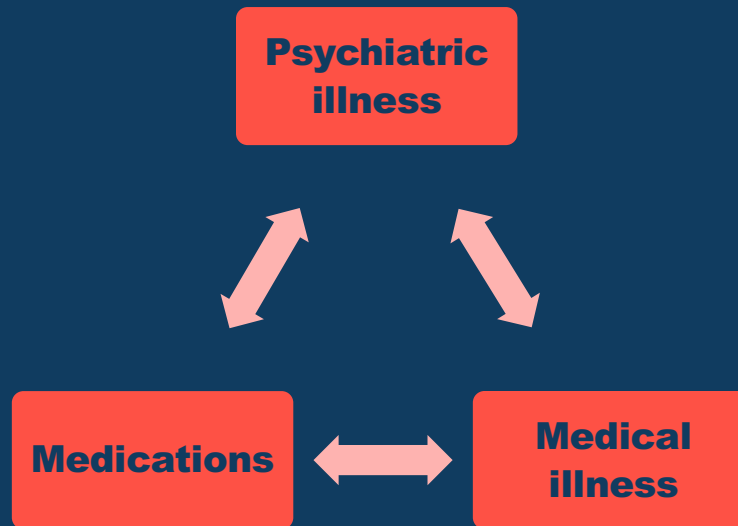


International
Diabetes
Federation

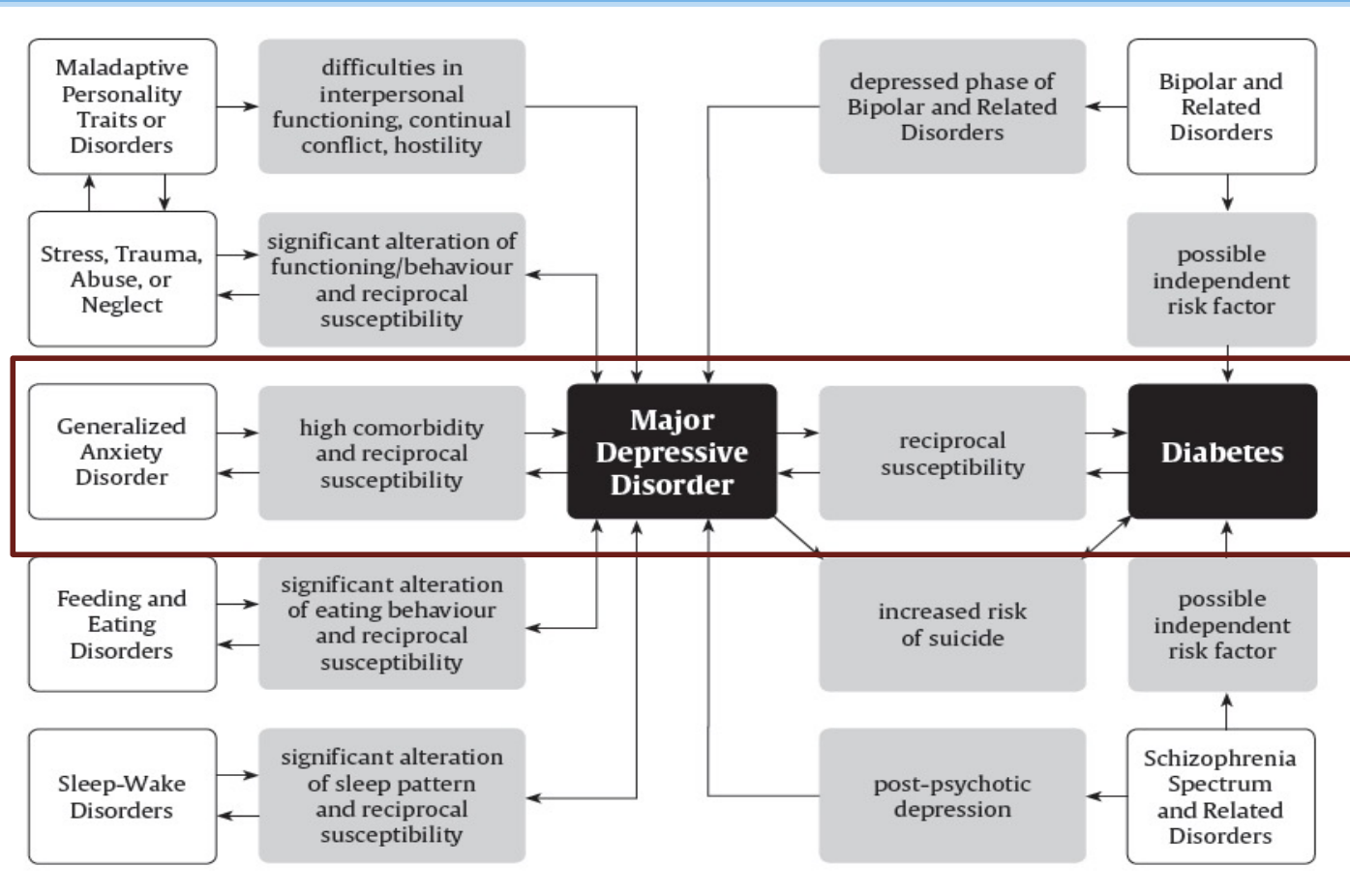
(2025)

Region	2024	2050	% Increase
World	588.7 Million	852.5 Million	45% increase
Africa (AFR)	24.6 Million	59.5 Million	142% increase
Europe (EUR)	65.6 Million	72.4 Million	10% increase
Middle-East and North Africa (MENA)	84.7 Million	162.6 Million	92% increase
North America and Caribbean (NAC)	56.2 Million	68.1 Million	21% increase
South and Central America (SACA)	35.4 Million	51.5 Million	45% increase
South-East Asia (SEA)	106.9 Million	184.5 Million	73% increase
Western Pacific (WP)	215.4 Million	253.8 Million	18% increase

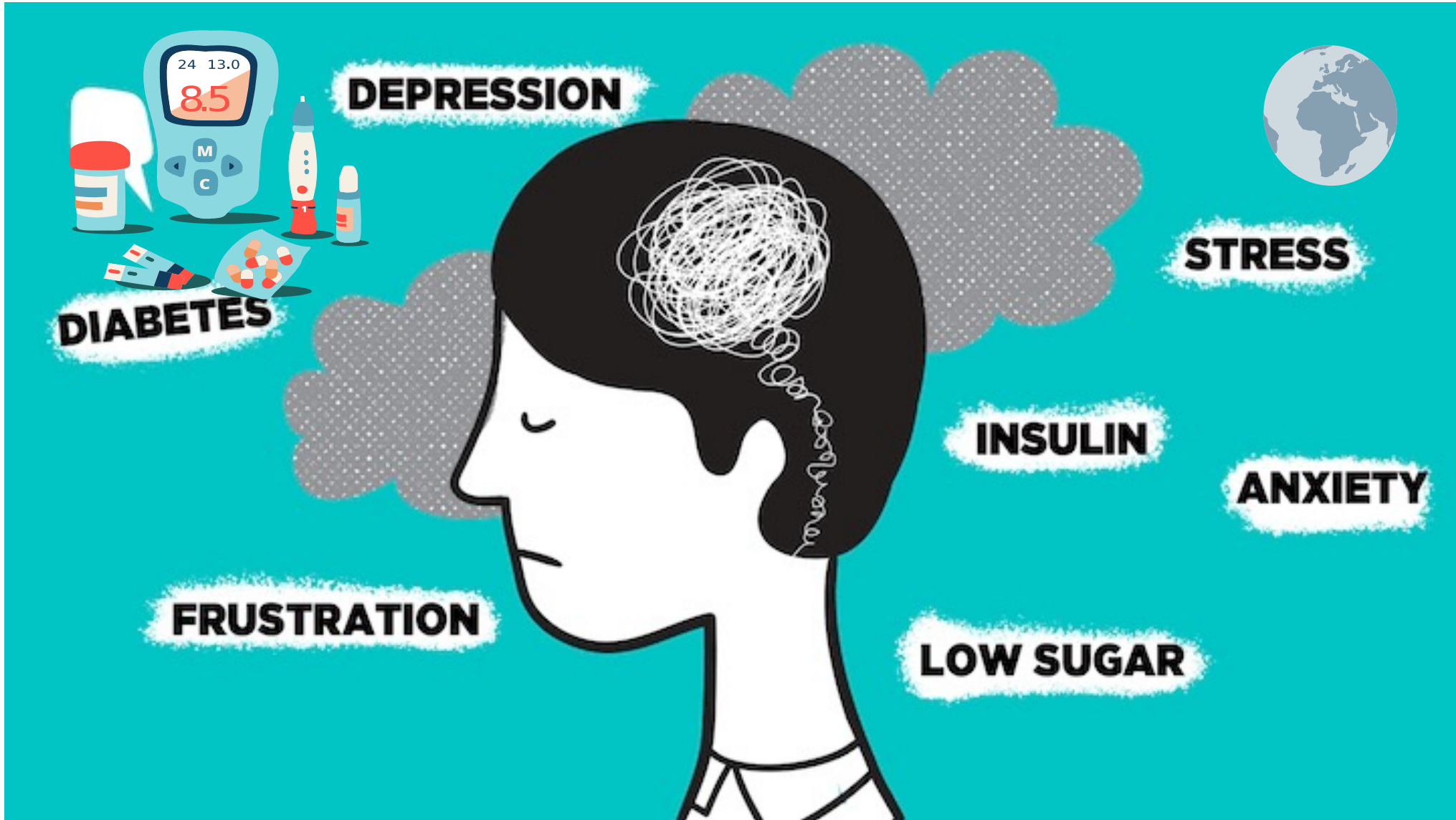
Medical-psychiatric interface



The **interplay** between **diabetes** and **psychiatric conditions**



(Robinson *et al.*, 2018)



DEPRESSION



STRESS

DIABETES

INSULIN

ANXIETY

FRUSTRATION

LOW SUGAR

PSYCHOLOGICAL CONDITIONS

The prevalence of psychological conditions is significantly higher among people living with diabetes

(Diabetes UK, 2010. Diabetes UK, 2019)

Mental health conditions are also risk factors for the development of diabetes

(Balhara, 2011)



PSYCHOLOGICAL ISSUES

- Diabetic regimen and dietary considerations
- Blood sugar monitoring
- Insulin injection
- Fear of hyperglycemia
- Fear of hypoglycemia
- Fear of “sticking yourself”
- Decrease in quality of life



You have diabetes.



(2024)

Three in five

people living with diabetes experience emotional or mental health problems as a result of their condition.

Diabetes & Mental Health



People with diabetes
experience higher
rates of mental
health issues





Diabetes & Mental Health



- The **Association of Diabetes Care and Education Specialists (ADCES)** recognizes **mental and emotional health** as a critical pillar of diabetes management.



(2021)






Diabetes & Mental Health



- The most common **behavioral and psychological challenges** faced by individuals living with diabetes include:
 - **Diabetes Distress:** Affecting **33% to 50%** of people with diabetes
 - **Depression:** Individuals with diabetes are **2 to 3 times** more likely to experience depression compared to those without the condition.
 - **Anxiety:** Rates of anxiety are up to **20% higher** in people with diabetes, often stemming from the fear of **hypoglycemia** or the **stress of maintaining glycemic targets**
 - **Eating Disorders:** Disordered eating and clinical eating disorders are **disproportionately more common** in individuals managing both type 1 and type 2 diabetes



(2021) 

DIABETES & MENTAL HEALTH

A global survey (2024) conducted by the International Diabetes Federation (IDF) revealed:

- **77% of people living with diabetes** have experienced **anxiety, depression**, or **another mental health condition** because of their diabetes.
- The **fear of developing complications** (83%) was the most common factor impacting mental well-being.
- Other factors include **daily diabetes management** (76%), **stigma and discrimination** (58%), and **fear of needles** (55%).





DIABETES & MENTAL HEALTH



- The survey also highlighted a **clear call for better support**, with 3 in 4 people living with diabetes seeking increased support for their emotional and mental well-being from their healthcare providers
- Although diabetes doesn't always lead to mental health challenges, **a significant 79% of participants** report experiencing **diabetes burnout**, primarily due to the emotional strain and demands of daily management
- Alarmingly, **3 in 4 of those affected by burnout admitted to stopping or interrupting their diabetes treatment** due to stress or feeling overwhelmed.





Diabetes can have a greater impact on young people

- Diabetes drastically multiplies the risk of **depression, self-harm, and suicidal ideation** in young people, who are **two to three times** more likely to experience these mental health challenges than their peers without diabetes.
- The **relentlessness of diabetes self-management** can severely overwhelm adolescents and young adults during an already tumultuous developmental period.

Depressive symptoms are present in 30 - 35% of people with diabetes

- **Major depressive disorder** (also called clinical depression) occurs in 15% of people with Type 2 diabetes, which is **double** the rate in the general population
- **Co-morbid depression worsens clinical outcomes in type 2 diabetes**; possible explanations are:
 - Lower levels of physical fitness
 - Reduces medication adherence



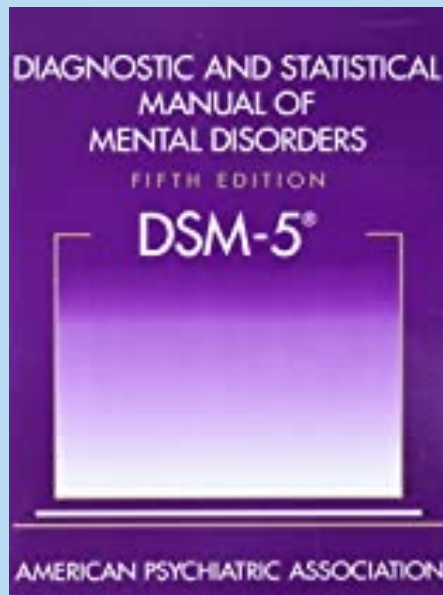
(Holt, 2025)

What is Depression?

Depression is a common mental disorder that causes people to experience depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration.



(APA, 2013)



(APA, 2013)

Major Depressive Disorder

Diagnostic Criteria

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

Note: Do not include symptoms that are clearly attributable to another medical condition.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful). (**Note:** In children and adolescents, can be irritable mood.)
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).
3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (**Note:** In children, consider failure to make expected weight gain.)
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.



Increased by **over 18%**
between 2005 & 2015

Currently the **#1**
cause of disability

Predicted to be the **#1**
global burden of disease
by 2030



(WHO, 2017)

The 'vicious cycle of depression'

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

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



Increases

Diabetes stress

- *Poor diabetes management*
- *Diabetes-related complications*

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



Diabetes Distress

- Despondency and emotional turmoil specifically related to **caring for diabetes**, the **need for monitoring and treatment**, **preoccupation with complications**, and **the effects on various relationships**
- Related to **poorer diabetic outcomes**



(ADA, nd)

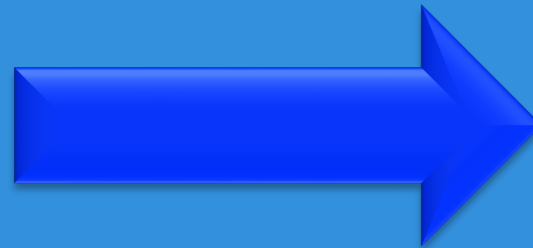
OTHER PSYCHIATRIC ASSOCIATIONS

- **Mood Disorders**
- **Anxiety Disorders**
- **Schizophrenia and other psychotic disorders**



Mental illness increases risk of **diabetes** and **diabetic complications**

Mental Illness



Type 2 Diabetes

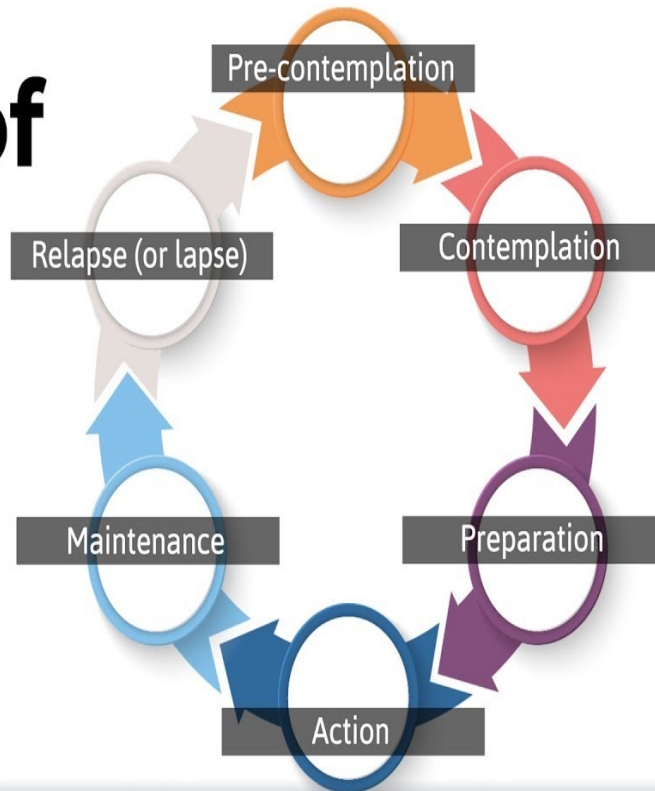
- Non-adherence to medication and self-care
- Functional impairment
- Adverse metabolic effects of many antipsychotic medications

Risk of early mortality

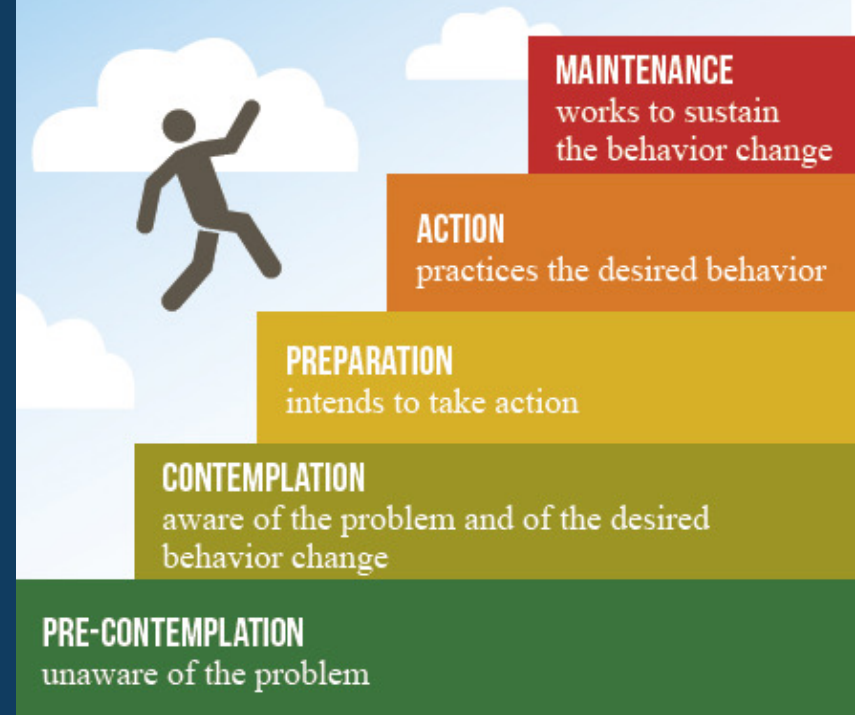
Major Depressive Disorder increases the risk of Type 2 diabetes by 60%!

TREATMENT

Stages of change



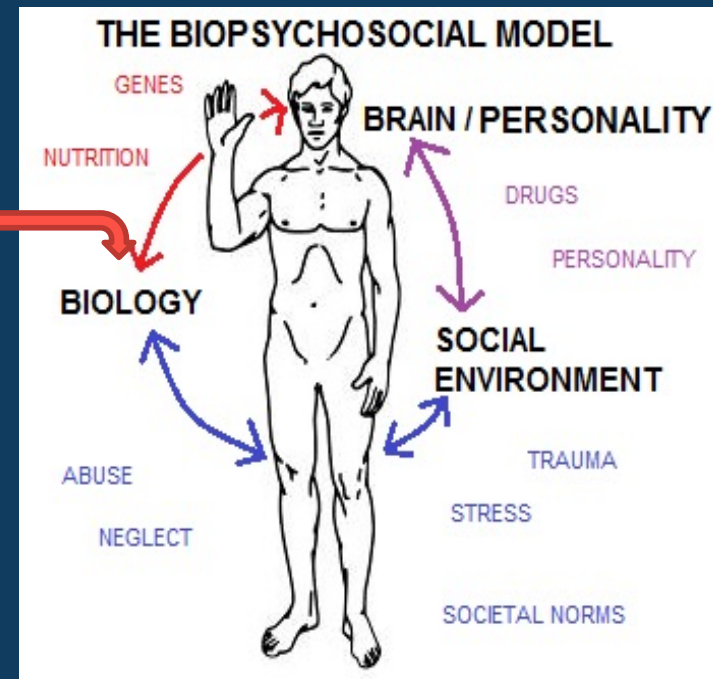
THE STAGES OF BEHAVIOR CHANGE



(Prochaska & DiClemente, 1983)

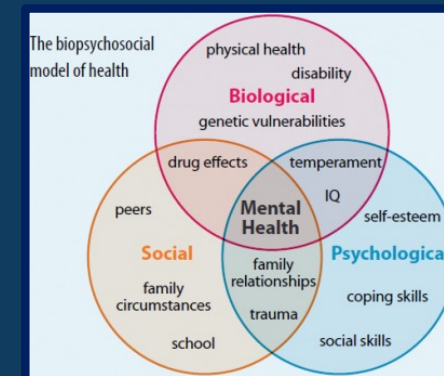
Treatment

BIOPSYCHOSOCIAL – SPIRITUAL MODEL



Treatment

- Approaches include:
 - **Behaviorally and psychologically** based treatments
 - Education
 - Group/individual therapy
 - Cognitive behavioral therapy
 - Self-help/spiritually-based treatments (e.g., Churches, Alcoholics Anonymous)
 - **Pharmacological**
 - Antidepressants
 - Involving **social (family) support**



Treatment (cont)

OPTIONS FOR WHERE TO TREAT



- **Hospitalization**
 - Drug OD, risk of severe withdrawal, medical comorbidities
 - Require restricted access to drugs, psychiatric illness with suicidal ideation
- **Residential treatment unit**
 - No intensive medical/psychiatric monitoring is needed
 - Require a restricted environment
 - Partial hospitalization
- **Outpatient Program**
 - No risk of med/psych morbidity
 - **Highly motivated patient**





TREATMENT (CONT)

- Manage intoxication and withdrawal
 - **Intoxication**
 - Ranges: euphoria to **life-threatening emergency**
 - **Detoxification**
 - **Outpatient:** "social detox" program
 - **Inpatient:** close medical and psychiatric care
 - **Preparation for ongoing treatment**

Treatment (cont)

PHARMACOLOGICAL INTERVENTION

- Treat co-occurring **psychiatric disorders**
 - 50% will have another psychiatric disorder
- Treat associated **medical conditions**
 - Cardiovascular, cancer, endocrine, hepatic, hematologic, infectious, neurologic, nutritional, GI, pulmonary, renal, musculoskeletal

+ Management: + ● COGNITIVE BEHAVIORAL THERAPY



WHAT IS CBT?

CBT FOCUSES ON
UNDERSTANDING THE THOUGHT
PROCESS THE PATIENT IS
GOING THROUGH

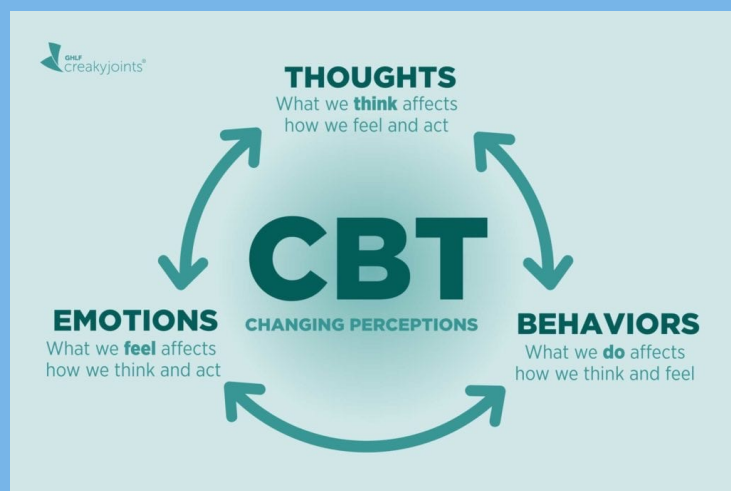
PATIENTS LEARN HOW TO
AUTOMATICALLY IDENTIFY
NEGATIVE THOUGHTS

THEY LEARN TO RECOGNIZE
HOW THESE THOUGHTS
AFFECT THEIR BEHAVIOR

IT'S A HIGHLY PRACTICAL
FORM OF THERAPY

PATIENTS ARE GIVEN
EXTENSIVE HOMEWORK

(Mayo Clinic, 2025)



Cognitive-Behaviour Therapy for Managing the Fear of Hypoglycemia

Determine the actual vs. perceived frequency and severity of hypoglycemic episodes

Ask the person about his or her concerns in developing hypoglycemic episodes, both during the day and night

Normalize the fear response, empathize with the individual, and ask for permission to look at the possibility of reducing fear as a means of improving diabetes control

Ask the person how fear/anxiety has been successfully managed in other circumstances

Determine the person's comfort zone for glucose levels (both high and low)

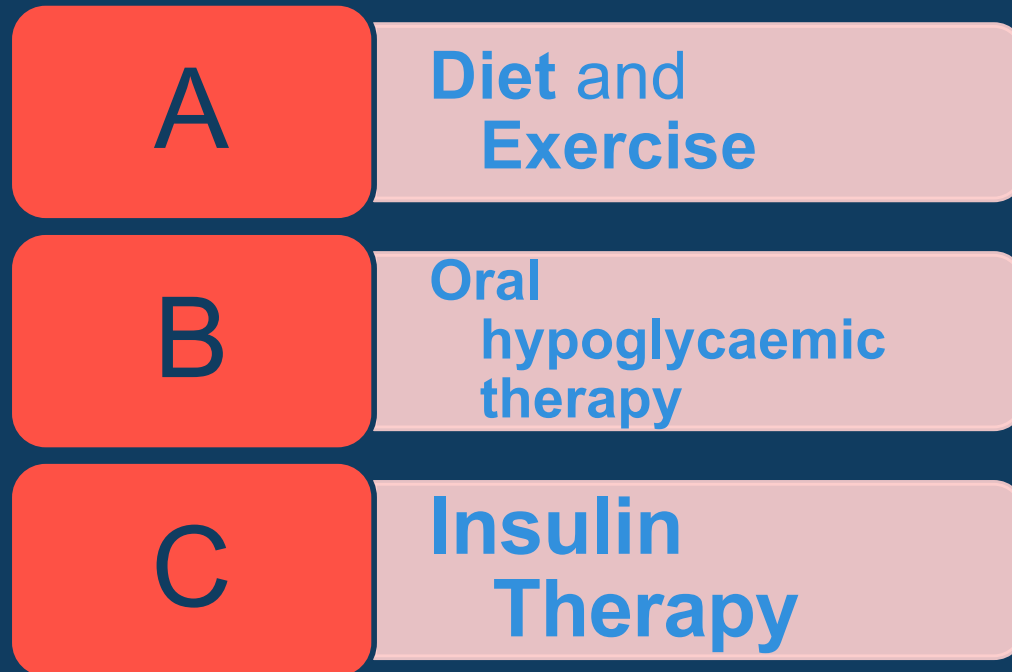
Use a gradual approach to nudge the psychologically safe glucose zone to the medically safe zone by staying at the person's comfort zone for an agreed upon period of time followed by incremental changes at a regular frequency

Features of **CBT** that can be applied to **diabetes** treatment

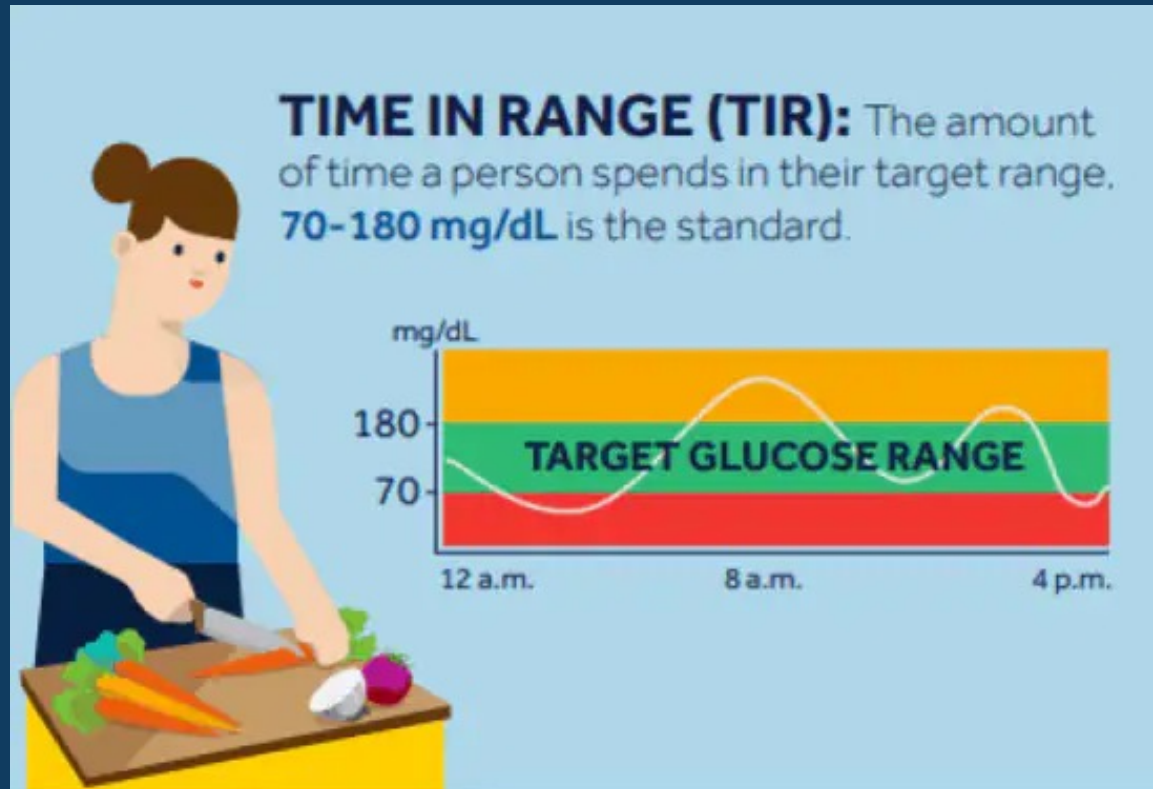
Cognitive Component	Behavioral Component
<p>Record keeping to identify distressing automatic thoughts</p> <p>Understanding the link between thoughts and feelings</p> <p>Learning the common “thinking errors” that mediate distress (e.g., all-or-nothing thinking, personalization, magnification, minimization, etc.)</p> <p>Analyzing negative thoughts and promoting more functional ones</p>	<p>Strategies to help get the person moving (behavioral activation)</p> <p>Scheduling pleasant and meaningful events.</p> <p>Focusing on feelings of mastery and accomplishment</p> <p>Learning problem-solving strategies</p> <p>Exposure to new experiences</p>

MANAGEMENT OF DM

- The major components of the treatment of diabetes are:



(ADA)



**3.9 – 10.0
mmol/L**

The American Diabetes Association recommends that adults with **diabetes** should have an **A1C of less than 7%**. This translates to an average blood sugar of **154 mg/dL**.

(ADA, 2022)

People taking high-risk psychiatric medications need regular metabolic screening

Parameter	Base-line	1 mo	2 mos	3 mos	Every 3-6 mos	Annually
Weight (BMI)	X	X	X	X	X	
Waist circumference	X			X		X
Blood pressure	X	X	X	X	X	X
Fasting plasma glucose and/or A1C	X			X	X	
Lipid profile	X			X	X	
Personal history of alcohol, tobacco, recreational drug use	X			X		X
Family history	X					X

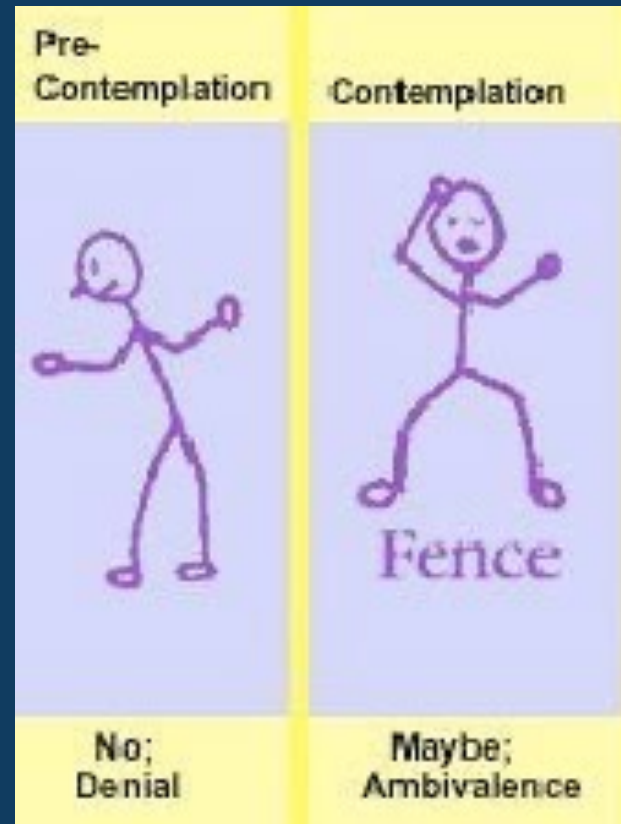
Drinking Alcohol and Diabetes: Do They Mix?





Can I
drink
alcohol if
I am a
diabetic?





As a general rule, there is no need to avoid alcohol because you have diabetes.

(ADA)

Consider the following questions when deciding what is best for you.

	Yes	No
1 Is my diabetes under control?	<input type="checkbox"/>	<input type="checkbox"/>
2 Am I free from health problems that alcohol can make worse such as disease of the pancreas, eye disease, high blood pressure, high triglycerides, liver problems, nerve damage or stroke?	<input type="checkbox"/>	<input type="checkbox"/>
3 Do I know how to prevent and treat low blood sugar?	<input type="checkbox"/>	<input type="checkbox"/>

If you answered “no” to any of these questions, you should speak to your diabetes educator or health-care professional before drinking alcohol.

If you answered “yes” to all of these questions, it is OK to drink alcohol in moderation.

Moderate alcohol intake is limited to 2 standard drinks/ day or less than 10 drinks/ week for women; and limited to 3 standard drinks/ day or less than 15 drinks/ week for men.

This recommendation is the same for people without diabetes. For people with high blood pressure, alcohol should be limited to 1 drink/day for women and 2 drinks/day for men.

(ADA)

What is a "standard drink"?

**1 standard drink
(10 g of alcohol):**



Wine

142 mL (5 fl.oz) of wine
(12% alcohol)



Beer

341 mL (12 fl.oz)
of regular strength beer
(5% alcohol)



Spirits

43 mL (1.5 fl.oz) of spirits
(40% alcohol)

(ADA)



BEFORE drinking alcohol

Eat regular meals, take your medication(s), and check your blood sugar levels frequently (keep your blood glucose meter with you).

- Always have a treatment for low blood sugar with you (such as 3 glucose tablets or 150 mL regular pop or 6 Life Savers®).
- Wherever you are, make sure someone with you knows your signs and symptoms of low blood sugar and how to treat it so they can help you.
- Be aware that glucagon, a treatment for low blood sugar, will not work while alcohol is in the body. Because of this, make sure that someone knows to call an ambulance if you pass out.
- Wear diabetes identification such as a MedicAlert® bracelet.

WHILE drinking alcohol

- Eat carbohydrate-rich foods when drinking alcohol. (ADA)

How to Drink Safely With Type 2 Diabetes



Pack snacks just in case

Test your blood sugar

Wear your medical ID bracelet in case of an emergency

Eat before or while consuming alcohol

Alternate between your drink and a glass of water

Risks for people with diabetes

Alcohol can:

- affect judgement
- provide empty calories that might lead to weight gain if taken in excess
- increase blood pressure and triglycerides
- cause damage to liver and nerves including brain and sexual organs
- contribute to inflammation of the pancreas
- dehydrate the body which is very dangerous in someone with high blood sugar
- worsen eye disease

Carbohydrate and calorie content in some common alcoholic beverages and mixes

(The amounts listed are a general guide only)

Beverage	Standard serving size	Energy (kcal)	Carbohydrate content (g)
Beer:			
regular	341 mL (12 fl.oz)	147	12
light	341 mL (12 fl.oz)	99	6
non-alcoholic*	355 mL (~12 fl.oz)	40-80	9-17
low carb*	341 mL (12 fl.oz)	96	3
Spirits/Hard liquor	43 mL (1.5 fl.oz)	98	0
Liqueurs & Cordials	43 mL (1.5 fl.oz)	155-190	10-25
Wine:			
regular	142 mL (5 fl.oz)	106-127	2-4
dessert	142 mL (5 fl.oz)	233-243	18-21
non-alcoholic	142 mL (5 fl.oz)	9	2
Cooler:			
regular	355 mL (12 fl.oz)	178-258	21-38
light*	330 mL (12 fl.oz)	100	1
Mixes:			
Sugar free pop	250 mL (8 fl.oz)	0	0
Regular pop	250 mL (8 fl.oz)	107	28
Club soda	250 mL (8 fl.oz)	0	0
Tonic water	250 mL (8 fl.oz)	88	23
Orange juice	250 mL (8 fl.oz)	118	27
Tomato juice	250 mL (8 fl.oz)	44	9
Tomato and clam juice	250 mL (8 fl.oz)	123	28

Reference: Canadian Nutrient File, 2018; USDA Food Composition Databases, 2018; *Actual Label
The caloric and carbohydrate content may vary by brand, be sure to check the labels

➤ 12 SIMPLE LOW CARB ALCOHOL CHOICES ◀

CARBS IN ALCOHOL



0g

GIN



0g

WHISKEY



0g

TEQUILA



0g

VODKA



2g

CHAMPAGNE
per 5 oz serving



3g

WHITE WINE
per 5 oz serving



4g

RED WINE
per 5 oz serving



5g

LIGHT BEER (COORS LIGHT)
per 12 oz serving



0g

VODKA + SODA
add lime



0g

WHISKEY + DIET COKE
add lemon



0g

TEQUILA + SODA
add lime



0g

GIN + DIET TONIC
add lime

MORE INFO AT: WWW.THELITTLEPINE.COM

When to say NO

It may be wise to drink less or avoid alcohol all together if you:

- are overweight
- have poor blood glucose control
- have high blood pressure
- have high triglycerides (fat) levels
- have eye disease caused by diabetes
- have nerve damage in the arms or legs.

Drinking alcohol can make all of these conditions a lot worse.



**PLEASE TAKE
YOUR
PRESCRIBED
MEDICATIONS!**



GET INVOLVED



ACTIONS



PREVENTION



Concluding remarks



No Health *without*
Mental Health

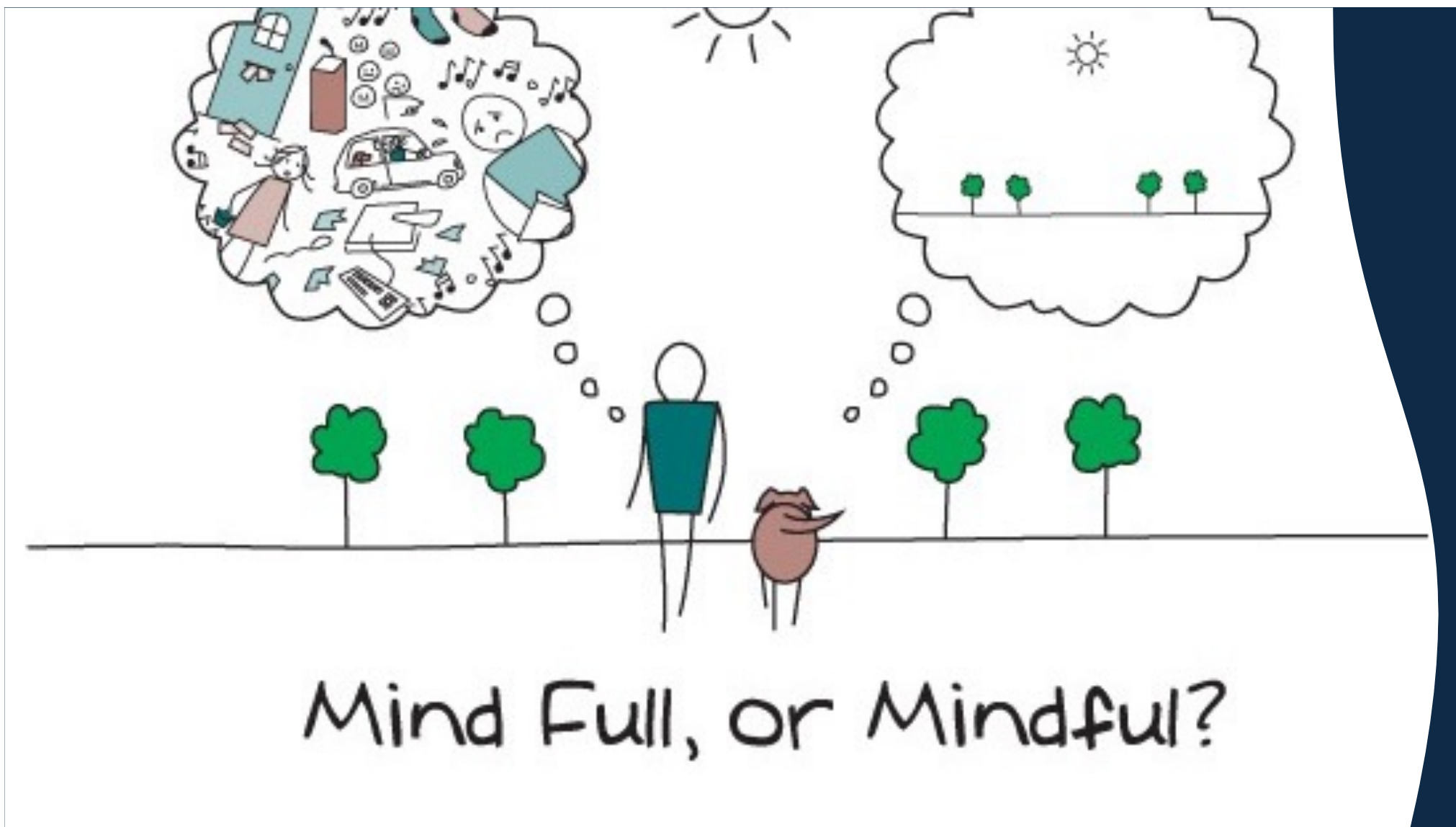




Take care of
your health

Taking Care of Yourself and Each Other





Mind Full, or Mindful?

150 mins per week

Exercise reduces the risk of developing:

- Heart disease
- Osteoarthritis
- Osteoporosis
- Stroke
- Diabetes
- Alzheimer's disease
- Stress
- Depression
- Dementia



Exercise boosts:

- Self-esteem
- Mood and happiness
- Sleep quality
- Memory and concentration
- Sugar and cholesterol control
- Physical fitness
- Proper digestion.
- Weight control
- Bone and muscle strength
- Cardiovascular health



7 to 9 hours per day

Diet is vital....





Healthy Body

+



Healthy Mind

=



Happy Human

**TAKE CARE OF
YOUR BODY.
IT'S THE ONLY
PLACE YOU HAVE
TO LIVE IN.**





“God, grant me the *Serenity* to accept the things
I cannot change, *Courage* to change what I can,
and the *Wisdom* to know the difference.”

- Reinhold Niebuhr

References available upon request



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QUESTIONS?





ALCOHOL USE, **DIABETES**, AND MENTAL HEALTH: RISKS INTERSECTIONS, AND CARE



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